AN ACUPUNCTURAL DESIGN APPROACH TOWARDS SUSTAINABILITY

DESIGN HARVESTS

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D E S I G N H A R V E S T S

A design research project
in Chongming Island
by Studio TAO, Shanghai, China
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DESIGN Harvests: An Acupunctural Design Approach Towards Sustainability

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FOREWORD

The Xianqiao village on Chongming Island, not far from Shanghai, serves as an excellent example of pragmatic collaboration and joint intellectual and practical capacity building between villagers and international experts, including students, from Tongji University, Shanghai, and all over the world.

The documentation of the collaborative work and its results, based on a bottom-up approach, serves as a source for insight as well as inspiration when it comes to developing new modes and tools for sustainable urban development. A key focus is on new roles of design leading to social development.

Mistra Urban Futures, as a trans-disciplinary research institute, has a particular responsibility and a genuine interest in the dialog and dissemination of knowledge stemming from transformative thinking and groundbreaking projects, like the one in Xianqiao village.

Few people outside China have heard of this village, let alone visited it. Yet it is an excellent case, and the knowledge and experience are valuable in the development and improvement of sustainable urban processes. There is a clear risk of rapid sub-urbanization on Chongming Island, since the new bridge and tunnel now connects the island to downtown Shanghai with only a 30-min drive. This book strongly suggests strategic design as a tool to avoid suburbia and involve the village population.

A key idea is "acupuncture design" – small, focused interventions that can heal the whole society.

Mistra Urban Futures is proud and privileged to publish this book in the international arena, as an example of excellent and relevant knowledge for sustainable urban development. We are convinced it will contribute to best practice as well as academic research, and inspire!

Prof. Lars Reuterswärd
Director, Mistra Urban Futures

PROLOGUE: DESIGN INNOVATION INTO RURAL AREA

This book is a record of Studio TAO's five-year design and research work on the Xianqiao sustainable community project in Chongming Island, Shanghai. There are three motivations behind the project:

First is the concern over the mainstream paradigm of one-way urbanization in China. Chinese urbanization has just crossed the highly symbolic 50% threshold. If current ways of development can not be sustainable, we have to seek other options, and we do have options. According to China's traditional culture, the city and countryside were considered as two different ways of living, each with unique advantages and disadvantages. Focusing on imbalanced development between urban and rural areas, we suggest an approach that gives value to each way of living and develops them concurrently and interactively, rather than in isolation. We believe that sustainable settlement lies in the interaction and exchange between these two different ways of living in social, economic and cultural domains.

The second concern is the social responsibility of designers, as part of an intellectual community with certain knowledge, skills and ways of thinking. Following great thinkers such as LIANG Shumin and YAN Yangchu, development in rural areas has been closely connected with social and spiritual concerns in contemporary China. Design are both strategic and tactical; it focuses on finding solutions, exploring and overcoming problems. China being in a state of "developing" and "changing" is a useful context for developing and connecting communities with DESIS-related new knowledge. It is important that designers and designing societies become active agents in generating positive and fundamental social changes.

Thirdly, we focus on the development of the design discipline and subjects in the contemporary era. Nowadays we all recognize that 'design' is facing great transitions. An expanded meaning and the systemic role of 'design' enable this discipline to contribute strategically to society and the economy. Where there are problems, there is a need for design. The dynamic social context in China presents a great opportunity for the application and development of the 'new design'. As one of the key issues in today's China, design of rural development opens a large field for the design discipline itself, and challenges design contributions at system level. The rural system offers to our discipline the space for designing services, products, networks, culture, heritage, etc. It provides an ideal test-bed for the emerging design thinking and practice.

Based on these observations, Studio TAO, the design research unit of Studio TEKTAO , was founded in 2007. A pilot project on Chongming Island, DESIGN Harvests, was launched the same year. Through the project we hope to find a bottom-up way of sustainable development that integrates urban and rural resources and opportunities. Working with students, designers, researchers, entrepreneurs, industries, institutions and other experts from all over the world, as well as the local government,villagers, farmers, and entrepreneurs of Chongming Island, we set out to create an innovation network based on the philosophy of openness, connection and sharing. Using what we call the "acupuncture approach," we believe that, within the network of proactive agents, positive changes can come about by targeting specific areas that in turn influence the whole system.

This book shows the process of our research, from the very beginning of exploring the Chinese urbanization process, to the vision, solutions and strategies raised by designerly ways of thinking. Our research activities clearly go in the direction of an alternative proposal for contemporary urbanization that diverges from the traditional industrialized processes towards a service-based society in which heritage and resources are shared among different stakeholders. We pursued this as a concrete, factual, possible future horizon for Chinese development. We start from a small area in a rural suburb of Shanghai, aiming to enable the urbanite together with the local communities to give value to the territories. In the last five years we designed, we communicated, we failed and we tried again, as we searched for ways to conduct a proactive practice-based design research. Here we tell the story of our academic inspirations, practical experiments, future steps, and shared dreams.

LOU Yongqi
Professor, College of Design and Innovation, Tongji University
Founder, Studio TEKTAO

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NEW ERA NEW DESIGN

1.1

DESIGN IS CHANGING

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CHANGING THE CHANGE

Ezio Manzini

Something that we know very well about the present is that the world is changing, rapidly and profoundly. The only certain thing that we know about the future is that the current change must change direction. It must find a way to sustainability. Nobody is yet in a position to say how this can happen. However, many think that the greatest challenge we must face is this one: how to be an active, constructive part of this world transformation; and how to be able to interpret the way and the extent to which we are changing, recognizing the opportunities that are opening up, and the forces that generate this change. We should learn to use these same forces to "change the change" and promote a social learning process that can lead us towards a society based on networking, knowledge and sustainability. Contemporary design (seen as the community of all who operate in the design field in different ways) is deep in this turbulent process, both transforming it and being transformed by it. Given its nature it cannot but be like this. However, in this turbulence, we do not have, and cannot have, a clear vision of what is happening. What is design doing today? What could it be like in the future and how will it operate in this context of on-going transformation? What is it doing, or what could it be doing, to play a more incisive, critical and constructive role in the great twofold transformation underway? These are not new questions, but they must constantly be asked. Not only because the world is rapidly changing, but also because, despite the good intentions of many, design still continues to be far more "part of the problem" than "part of the solution"; serving more to accelerate unsustainable processes rather than promoting new ways of being and doing to help individuals and communities live better, reduce their ecological footprint and regenerate the social fabric.

DESIGN FOR A RESTORATIVE ECONOMY

John Thackara

Now we are living in a 'Doomsday Machine Economy' era, because we are addicted, as a culture, to a high-energy and resource-intensive concept of quality and performance. And design has been feeding this addiction. Most of the outcomes of our design work – products, web sites, media, buildings, and cities – involve the unsustainable waste of energy and natural resources.

Today's economy can only survive if it grows to infinity in a world whose carrying capacity is finite. The better the economy performs — faster growth, higher GDP — the faster we degrade the biosphere that is the basis of life and our only home. So how are we to decommission and replace this doomsday machine economy?

The best way to tackle this challenge maybe is to describe where we want to be – and work backwards from there. Where we want to be is in a new kind of economy that is not just centered on what humans need, but is centered on all forms of life, and the conditions that support life.

This economy is not crazed extraction of finite resources, but the restoration of ecologies and ecosystems. It is based on services, for the most part services carried out by people, not on the endless production of hard things. In other words, a restorative economy is also a social economy, or a solidarity economy. But a restorative economy does not mean "minimize adverse effects on nature." It means no adverse effects. Now this type of economy is already being created!

For a growing worldwide movement, life – not money (and not technology) – is the ultimate value. Designers have an important contribution to make in this movement. It's a new kind of design, no longer the creation of brands, new products, buildings, and large-scale infrastructure.

The new work for designers is to cast fresh and respectful eyes on a neighbourhood, or territory, to reveal material and cultural qualities that might not be obvious to those who live in them. This restorative design perceives the world as a complex of interacting, codependent ecologies that already exist: energy, water, food, and also information systems. A specific design tasks emerges from this picture: to map these "net present assets" that already exist as the basis for creative ways to restore and enhance them.

These assets can be hard or soft: natural assets – such as wind, sun, or rivers; indigenous materials, and the skills needed to use them; or abandoned spaces with the potential to be re-purposed. These asset maps need to take natural systems and ecologies as their starting point – with special emphasis on bio-regions, food sheds and watersheds. It's important to represent the interconnectedness and interdependence of natural, human and industrial systems.

This is where creative design skills and artistry will be so valuable. New forms of representation are needed to communicate energy and nutrient cycles - and to make visible the ways that healthy social systems depend upon, and are inter-twined with, healthy ecosystems.

As well as maps, a restorative economy needs new tools and platforms.

For example, tools are needed that enhance a community's capacity to share resources – where "resources" include energy, matter, time, skill, software, space, or food. A third design task is to connect people to each other, and help them learn from each other's other experience.

This people-connecting work is itself a form of innovation. They create a community-level to-do list, and organize the list into an order of priorities.

Now there is a kind of transition model that has been set up around the world. It brings people with different interests, agendas, and capabilities together from a single geographical area. But they are united in being dependent on, and committed to, the context in which they live. What's more, the transition model uses a process of setting agendas and priorities — the "open space" method — that is genuinely inclusive of all points of view. So the lesson for design here is that resource efficiency is a social process, not a technical one.

FROM DESIGN TO "SHÈ JÌ"

LOU Yongqi

Establishing a Strategy: the Original Meaning of "Shè Jì (design)" in Chinese

The original meaning of the Chinese word "shè jì (design)" was to "establish a strategy"; it originated from military affairs (Yang, 1997). The product of "shè jì (design)" is "jì", a strategy or solution. 'Jì' contains both "goal setting" and "process guiding". In ancient China, "shè jì (design)" was dominated by two different classes: the literati and the artisans. The former mainly worked on the level of 'Tao" (Philosophy, ideology), focusing on military, political, social and cultural purposes; the latter mainly worked on the level of "Qi" (materiality, functionality), covering the fields of technique, crafts and implementation. In Chinese culture, "Tao" also has a special significance for morals and ethics.

The dual structure of the "Tao" and "Qi" is integrated in various aspects of Chinese society and culture. Although this system has been operating successfully in China for thousands of years, the communication between the two levels has seldom been optimal. Furthermore, this situation has affected the development of the Chinese economy and technology. In the traditional value system of China, the difference between "Tao" and "Qi" is a common social consensus that the humanities, "Tao," are more important than technology, "Qi." The humanities were mainly disseminated and inherited by articles and books, while technology was mainly transmitted by personal demonstration and verbal guidance. The strategy of 'stressing agriculture but dampening business' over two thousand years has seriously impeded the development of commerce and industry, marking the foundation and context of the germination and development of contemporary design.

From “Shè jì” to ‘Design’: the Development of Chinese Contemporary Design

The military failures of the Opium War lit the fuse for the social and cultural revolutions that were to follow. A century of turbulence brought about the crash of traditional culture and social structures. As westernization and globalization, fuelled by reformation and the opening of the country starting in 1978, became the catalyst of myriad social changes and developments, the nation’s focus was increasingly on prosperity. As a part of the higher education system, design education in China was based on Western values instead of local traditional values and culture. From The Beaux-Arts to the Bauhaus, the introduction and dissemination of modern Western design education, practice and theory provided a shortcut to the development of modern design education and practice in China (Gu, 2007). At the same time, however, efforts to improve China’s own contemporary design system were stagnant (Wang, 2008).

From “shè jì” to design: this phrase sums up the still-developing processes of China’s modern design education and practice. During its development, the traditional notion of “shè jì” had been neglected as it was not sufficiently clear according to the standards of modern disciplines and was too ‘soft’ compared with standards in the West. At the same time, craftsmen were seriously marginalized due to a lack of adequate means to prosper. This situation was exacerbated due to changes of the ways of living and economic structures. As a result, the traditional ways of understanding “shè jì” were increasingly forgotten.

Sustainable Consideration: Transformation Towards a Common Future

In traditional Chinese ideology, humanity and nature have always been regarded as a whole; the human body and the outside world are both complicated systems sharing many common characteristics. This kind of understanding, together with respect for and love of nature, led the ancients to pursue a world of balance and harmony (the Chinese meaning of "sustainable") as the highest ideal.

Today, sustainable development is one of the few universal ethics in the world, but people are realizing that the pursuit of rapid economic change has only steered our world in the away from that goal. In today’s highly developed material-based civilization, we have to admit in shame that our ancestors lived far more sustainable ways than we currently do.

Nowadays, the whole world is looking for sustainable solutions for its salvation. China is no exception. Sustainability has already become the new criterion for re-evaluating the changes that are happening or have happened in our life and world. We need to pause and rethink our trajectory before taking further steps: to rethink the rationality of modern industrial civilization; to rethink and compare the present physical spaces, social-cultures, and lifestyles as compared to what they used to be; to rethink the positions, values, trends and possible social responsibilities of design education, design practice, and design research. The fact is that many discarded traditional ways of life are actually consistent with the principles outlined in modern sustainability.

The Renaissance of Chinese “Shè jì”

From a contemporary point of view, the core of the Chinese “shè jì” notion can be described as follows:

- Blurred and soft definition: ambiguity with higher applicability, focus on process rather than result, emphasis on state over material.;
- Systemic strategy: synthesis of the micro and the macro level, dual-structure of “Tao” and “Qi”;
- Involvement with decision makers: Collaborative work that functions from the top-down, integration with the social system.

The softer Chinese “shè jì” concept extends the application field of design and coincides with certain tendencies in today’s design fields, such as social design, system design, strategic design, etc. (Valtonen, 2007). Comparing Chinese “shè jì” to John Heskett’s definition, ‘Design is to design a design that will produce a design’ (Heskett, 2002), we can easily find a meeting point between East and West.

In the highly organized and top-down society of China, the renaissance of the traditional “shè jì” concept can easily gain support from ancestral social structures and decision-making systems. The advantages of China’s “shè jì” notion have become increasingly appropriate in the face of social change. The “shè jì” towards “Tao” is precisely the direction of sustainable development. Re-initiation of the notion of “shè jì” in China has positive significance, but it does not mean that Chinese design will diverge from what is happening in the rest of the world. It is a renaissance, not a restoration. Calling for “shè jì” means that a design strategy in China can be designed; as it is based on traditional culture, this understanding has an encompassing attitude, and resonates more easily with people.

Visions of China’s “Shè jì”

In this era of globalization, Eastern designers have a duty to put forward their views as ‘critical regionalists’ (Frampton, 1992). The quest for a ‘cultural consciousness’ indicates the opportunity for original Chinese design thinking to flourish.

In the process of realizing the renaissance of the “shè jì” system, the following trends can indicate the new characteristics and areas of future Chinese design:

- Close relation to major issues of societal and economic change;
- Integration of top-down socio-political patterns with bottom-up social innovation processes;
- Active intervention in political, economic, social, and cultural fields;
- Use of design through strategic and systematic tools to achieve Chinese social, economic, and cultural sustainability;
- Focus on folk wisdom with emphasis on a sustainable way of life;
- Redesign of the contemporary Chinese lifestyle without losing local cultural essence;

In light of these missions, the rethinking of “shè jì” is not only needed at the level of science and technology, but also at systemic and strategic levels. To adapt to the changing of the era, we need to “shè (set up)” an appropriate “jì (vision and strategy)” for our future that enables people to live as they like in a sustainable way (Manzini, 2006). These goals are not restricted to the design discipline itself, but also for the goal of humanity as a whole for inclusive wellbeing.

FROM CREATION TO INNOVATION

LOU Yongqi

Creation and Innovation

In the context of globalization, unprecedented crises have faced this era of rapid change – climate change, population explosion, economic decline, and resource shortages. At the same time, digitalized ways of living and flattened social and economic structures, while de-structuring many organizational principles, have brought new possibilities. With the rise of China's economy, the call for transforming "made in China" to "created in China" has become more heated. The terms of creativity and innovation are always being mentioned. Innovation is different from creativity and because it is not only based on creativity but also on the shift from creation to implementation. In this process, the selection, development and commercialization of creation are all key factors determining the success of an innovation. In a sense, innovation is equivalent to the application and commercialization of creation (Stamm, 2008). However, the fact that business and technology have been overlooked in traditional culture hinders the development of innovation in China.

Innovation has three key elements: creativity, technology, and business. Only through the integration of these three can innovation be successfully achieved. In the industrial sector, the relationship between creativity, technology, and business is always linear: from the technical, to the design, and finally to the marketing. In this mode, technology is the sole core of innovation. But the new design-driven innovation mode requires breaking the segregation between these three elements. It can only be realized through in-depth understanding of humanity, culture, and socioeconomic status.

The commercialization of creation and the impact of the creative industry on society and the economy can be realized in terms of two models. First, the rise and growth of the creative industry has garnered increased importance in the economy and more influence over social life.

Second, the creative industry has more impact on other industries as a special 'Producer Services Industry'. No doubt, the latter not only contributes much more to society and the economy than does the former, but also has the potential to change the shape and direction of traditional industry.

Hence, the creative industry should not be limited only to fulfilling the needs of end users, but it should also consider providing services and products for sustainable innovation in all industries, facilitating the concentration of social resources to advanced industries, and promoting the upgrading competitive strengths for sustainable development of the whole society. In this sense, the creative industry should act as a catalyst in the creation of a new economy, culture, and social life. This is the new view of production in an era of knowledge-based economies. For design education, research, and practice, new design examples must be generated to catalyze and demonstrate innovative trends.

Changing of Design

In a new era, design must be, and is currently being, redefined. Socioeconomic changes urge designers to "think bigger". For the design discipline, expanding roles and tools of design make it more possible than ever to connect and integrate multi-disciplinary knowledge on the socioeconomic level (Buchanan, 1992). Design is now more and more involved in solving strategic and holistic problems in our daily lives. Design thinking, combined with scientific-technological thinking, allows design to explore new frontiers and makes it possible for design to link itself to the future through the balance of desirability, viability, and feasibility (Brown, 2009). Design has already become an important agent for creating a "sustainable", "human-centered", "creative community"

society (Sotamaa, 2008).

This new design has raised the bar for knowledge: in depth, breadth, and comprehensiveness. Through design, information (concepts) can be turned into results, which can be either physical (e.g. products) or immaterial (e.g. services). An enhanced interdisciplinary identity, the education and training of innovative and T-shape personnel, exploration into new fields, a change in learning methods, and the establishment of the new values will be the hallmarks of a new design.

This trend will further influence the business model of design as an industry. It will transform from simply providing design services to providing 'holistic solutions' that have greater social impact and business value. The conventional employment relationship between design and capital will become, in part, more cooperative. The vision has also been expanded from objective and individual efforts to social innovation: to support sustainable ways of living and producing on the basis of a common ethic.

Social Innovation Towards a New Society

As the Chinese proverb states: "give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime". When design changes from offering to enabling, then not only the design approach is changed, but synchronously the subject of design and the value of design are changed. The democratization of innovation characterized by user innovation, grassroots innovation, open innovation, and collaborative innovation is bound to make obsolete the acceptance of a single ideal paradigm adopted by an entire society.

Enabling design not only includes those whose lives will be affected by the design into its consideration of the solution, but also means that part of the design will be assumed by the others. In this process, the autonomy and creativity of design as a specialized way of thinking will be greatly advanced. The value of design will also transcend from fulfilling professional tastes towards openness and diversity. The enabling strategy also gives design a much more proactive role to intervene in large-scale social change (Lou, 2010).

Innovation is not reserved only for designers, but exists everywhere in our daily lives and at work, awaiting our discovery. Innovative actions can be differentiated into individual and collective, professional and those of everyday life. Previously, the focus of the design discipline was by and large on individuals and professionals; the difference and barriers between experts and ordinary people were over-exaggerated. It seems that whenever we talk about "designers", it is automatically related to talents and professions. But we too often ignore the fact that technology is just a tool for problem solving. In order to use the tool properly, it takes detailed understanding of our everyday life.

The understanding and wisdom of ordinary people about their own lives should never be underestimated. For example, the poor always know much better than most professional designers how to lead decent and sustainable lives with limited resources. In reality, their lives never lack invention and creation. But due to the absence of professional knowledge, skills and social resources, it is hard for common people to refine and promote their knowledge. In this case, designers should utilize their own knowledge to understand, discover, improve, and popularize these grassroots innovations that are in line with the ideas of sustainable development, and enable the people to co-design and promote solutions that are more mature, more durable and easier to replicate, and further stimu-

late the creativity of the community at a larger scale. This is called "social innovation design". The designer will hopefully discover embryos of new products or service systems from these potential social innovations.

The entire human society has been making an impact on the world with industrial means and on an industrial scale. Now the majority of human beings know the consequences, the resulting conditions have already become critical. Should design and innovation provide a solution to rescue us from these consequences, it should have impact with industrial intensity. Only through a collaborative restoration process can social changes towards a common sustainable goal be realized.

National Conditions?

Advocacy of changing design is faced by the question of 'national conditions' in developing countries like China. In Western society where material civilization has been highly developed, many hold the view that it is quite natural for physical design to be transformed into immaterial design. In developing countries, however, the quantitative growth of the economy has just started to become qualitative, with society's awareness of the value of design yet to be established. In light of the above, is it premature to talk about changing design in developing countries? Moreover, is the emphasis put on non-material forms of design, such as service system design, going to restrict the development of mainstream design?

This question cannot be avoided. Actually, in the Chinese context, such kinds of change fit exactly the historical role of "shè jì". Furthermore, there are two central questions in the current situation. First, is the transformation possible? Second, is the role of design one of service or guidance? The traditional development approach of developed nations

is faced by ever more critical challenges in a world that is flat, hot, and crowded (Friedman, 2008). If the resources of the earth can no longer sustain a future in which developing countries take the same approach to growth as developed ones, then to 'leapfrog' is not only a possibility, but also a necessity. Additionally, it is no longer a topic legitimate only under given stages of development in relation to how design can become an effective tool for advancing the innovation and sustainability of the society. It is time for China to generate a new era of design imbued with traditional culture. Design can likewise transform itself from being driven by the market to providing a role of guidance, which includes supporting new socioeconomic modes, integrating design into new business models, and providing strategies for solving socioeconomic problems creatively.

The Advantage of Being "Developing"

For developing countries, the status of "developing" is a great asset, which can provide enough energy and space to start a series of sustainable paradigm shifts: reshaping values, rules of action, ways of living, ways of producing, ways of social organizing, and ultimately the whole society and economy. The rapid development and changing conditions in developing countries like China can make this kind of transformation both more urgent and more achievable than in developed countries. Once these steps are taken, developing countries can similarly make 'typological' contributions to the future of design and social development. It will become one of the major undertakings of design to draw inspiration from traditional ways of living and our daily lives: to select visions, proposals and tools which are in line with sustainable principles, improve and popularize them, and amplify their social impact by utilizing collaborative networks and the market mechanism (Manzini, 2008).

1.2

THE BIG ISSUE IN CHINA: RURAL DEVELOPMENT

* Issue of the Century: The Challenge of Rural China
* Villages in Transformation
* Urban-Rural Imbalance: The Colonization of Lifeworld

ISSUE OF THE CENTURY: THE CHALLENGE OF RURAL CHINA

LOU Yongqi

As a major part as well as important consequence of China's 30-year rapid development, urbanization has not only brought about economic growth, but also intensified the imbalance between urban-rural economic and social de velopment. In 2007, as a response to these situations, Studio TAO launched a long-term design research project based in Xianqiao Village of Chongming Island. Using 'Design Thinking', we try to explore a new relationship between rural areas and the city, and then further provide a new paradigm of rural development.

The reason for taking a village as the background of research is that the author agrees with Philip C. Huang's methodological reflection when he was researching the peasant economy of Yangtze Delta in the past several centuries. "The narrower focus permits sustained attention to one region as an integrated entity and to the interrelationships among different dimensions" (Huang, 1990). He contends that it's more constructive to inquire in-depth within a concentrated geo-cultural setting than to do it in an all-encompassing but superficial manner. But our expectation for this research is far beyond this village. We highly respect the value of the traditional rural ways of living and producing. We treat our approach in the village as an experiment, by creating and researching a prototype from here; we try to contribute to a new vision of future, urban-rural development in China.

The Chongming Island is now facing the same challenge as the entire rural China:

Under-developed agriculture and low incomes: A relationship between farmland and manpower and the resulting evolutionary agricultural production (Huang, 1990), wherein rural households invested intensive labour in exchange for ill-proportioned economic profit, had prevailed in the regions south of the Yangtze River since the Ming/Qing Dynasty. No genuine change in this relationship happened until the founding the People's Republic of China. The course of collectivization after the land reform movement, however, did not enable China's agriculture to overcome the limits of small-peasant economy; neither did it bring profits out of large-scale production. But rather, it dragged villages, agriculture, and farmers into a worse predicament.

Data shows that, from 1952 to 1977, China's agricultural productivity only increased by 62.16%, which means that the average annual growth rate was less than 1.95%. It was not until the dissolution of people's communes in 1978, and the nationwide completion of distribution of land to households in the early 1980s, that rural China began to recover from the shock of the era of collectivization. From 1977 to 2003, national agricultural productivity increased 13.57 times, with an average annual increase of 10.85%, a truly remarkable achievement. Nevertheless, the economic conditions of the peasantry, particularly in contrast to those of the urban population, did not improve in accordance with the increase in productivity. From 1978 to 2002, China witnessed an accelerated expansion of its rural-urban income gap. With inflation factors deducted, the per capita income of urban residents was 2.67 times more than that of the rural residents in 2002. According to the World Bank report, this urban-rural per capita income ratio is under 1.5:1 in most countries of the world, and it rarely exceeds 2 (Liu, 2004). Scholars frequently attribute this situation to the Chinese central government's economic policies that have privileged the development of industrialization over that of agriculture for a long time, and to a social administrative system based on urban-rural division (Liu & Li, 2008). Since the 1990s, large numbers of peasant farmers have flooded into cities to seek jobs in the industrial sector. With such salaries these farmer-turned migrant workers support their families that live on low, zero, or even negative incomes from agriculture. Hence, peasant farmers' dependence on farmland has been increasingly weakened.

Rural population loss and empty-nest households: This grand wave of trans-regional and trans-sectoral migration of population has led the rural population of China to decline since it reached its summit in 1995; from 1996 to 2007, the rural population continued to decrease at a rate of 11 million per year on average (Zhou, 2008). The emigrants are mostly young members of rural communities. Under the harsh circumstances of rural life, young people are impelled to strive to work or to study in cities, in the hope of obtaining better incomes, or just getting rid of their peasant status for good. As a result, the left-behind rural residents consist of, in the main, the elderly, children, women, and the incapacitated. Due to this demographic change, issues of an aging population have emerged in the rural society even more acute than in urban areas (Zhou, 2008). The departure of young labour on a large scale is bound to diminish agricultural capacity, and, in the meanwhile, will inevitable result in issues of provision for the aged in the countryside. However, what is more prominent is the negative impact that the rural elites' departure has on the future of villages: the majority of the young people who succeeded in "leaping over dragon's gate" by means of the college entrance examination have stayed and become integrated in the cities, which is unlike the gentry of the past who tended to return to their home villages after retirement and participated in advancing the social, cultural, and economic life of the villages. Within less than two decades, Chinese rural areas have gradually lost the members who are most equipped with knowledge, leadership, and managerial and administrative capability.

The rural areas, lacking in ability to autonomously develop economically and having difficulty in establishing good public order, are short of the capability to negotiate and to respond in the face of the invading outside interests. Also, the rural areas lack the skill to manifest their appeals to, and communicate with, people from outside, which fosters, in urban residents' understandings and depictions, a stereotyped image of country people that are rigid. The demographic hollowing-out described is merely part of the story. A spatial hollowing-out also prevails in the villages. The outflow of population gives rise to a large number of vacant houses in villages, which is one aspect of the cause of this phenomenon. Another aspect is concerned with the system of the use of "house site land". House site land in China is allocated to rural households as welfare based on the household population. In practice, over-sized house site land has been allocated to households, while vacant houses resulting from the population outflow are usually not efficiently recalled and converted back for agrarian use, as the system prescribes. Furthermore, the fact that rural land is legally forbidden to get into circulation also impedes the effective use of existing house site land. All these factors leads to a situation that while new houses are continuously built in villages, few of the old ones are removed. Therefore, more and more derelict houses accumulate and occupy the old centre of the village. They exhaust the land that can be used for building. New houses, therefore, can only be built at the outskirts of villages, which intensifies the hollowing-out in space by encompassing a densely built, yet sparsely populated old village centre. This is a huge waste of the village land use. As Liu et al. (Liu, 2009) point out "it damages the village landscape, and creates difficulties for infrastructure provision. The idleness of house site land and the occupation of agrarian land by new house construction is a

dual waste of land resource".

The vanishing traditional professions and skills: One century of industrialization and over half a century of national control of the rural economy and society have gradually put an end to the handicraft industry and specialized service businesses that rural families used to dabble in to meet the needs of self-consumption as well as for selling to supplement agricultural incomes. Craftsmen such as carpenters, coopers, blacksmiths, silversmiths, kitchen range builders, and so on, have been obsolete for long in the countryside. Admittedly, the elimination of these traditional professions and skills can be viewed, in a way, as the development in ways of production and living. It can also be regarded as an achievement of integrating the village economy into the regional and national economy that is dominated by cities. However, gone with them is a substantial part of the non-material cultural heritage, including the production and products closely connected with traditional ways of living in the countryside, the internal social and economic exchange between the villages, and the opportunities wherein traditional handicraft products find their way into the urban marked with their reasonable extra value being recognized.

Weakness in environmental protection and infrastructure: Although the countryside is relatively sparsely populated, its environment also faces severe challenges: the abuse of pesticides; a lack of sewage treatment systems and irrigation systems; inefficiency in dredging; water and soil pollution caused by, say, the accumulation of package waste in non-degradable materials. Ever since land was contracted to households in the 1980s, the "village collective" has no longer possessed an effective organization for mobilizing a large amount of manpower to maintain and renovate local infrastructure. A shortage of both financial services and state investment has largely restricted capital from being invested into the construction of public facilities in rural communities. As a result, a considerable number of roads and water conservancy facilities are not as well-maintained as they were during the collective years, to the extent that many barely function. As reported in the survey on farmland water conservancy constructions, which was conducted by a research team designated by the Standing Committee of the National People's Congress, "as of 2008, there are 0.877 billion mu of effectively irrigated land countrywide, approximately accounting for 48% of the country's entire farmland area". This denotes that 52% of the country's farmland is not properly irrigated. Besides, public service facilities that are necessary for creating a pleasant living environment, such as lighting, sewage treatment, public health, and waste disposal, are still beyond imagination for most Chinese villages.

Meager public life: Since the launch of the household responsibility system in the early 1980s, which allowed households to cultivate their own land allocated based on the population of each household, Chinese peasants reverted to small-scale peasant economy. The villagers' autonomy system was introduced to Chinese villages to facilitate the organization of the public life of rural communities. Nonetheless, the so-called villagers' autonomy is an incomplete system that portrays a prospect that has never been realized. Villagers were prevented from participating in the decision-making on village public affairs within the framework of villagers' autonomy system, because of the bureaucratization of the village committee itself and nepotism between the village committee and upper-level government. As a matter of fact, except for a small number of villages, grasping opportunities or relying on idiosyncratic conditions that have established "public spheres" to deal with village issues outside the villagers' autonomy system, most Chinese villages sink into "apolitical" apathy (Wu, 2002).

Viewed from a social perspective, gatherings for festivals, ceremonies, or entertainments are no longer normal occasions in village communities, neither are the improvisational collective contacts without a specific agenda. This is closely related to the aforementioned losses of the youth and elites in villages, and the decline of economic and social interactions inside and between villages. Being absent from their villages, the younger generation not only has a scant number of chances to take part in, let alone to organize, village festivities. Also they can barely provide the community with festive events associated with their own "rites of passage", for example, celebrations and feasts for engagement, wedding, giving birth to a child, building houses, etc. Meanwhile, economic life has been heavily influenced by cities, which undermines the local economic interaction. For instance, craftsmen's inter-village dealings are becoming rare. In addition, modern products and technologies, such as televisions, DVDs, mobile phones, and Internet, have greatly attracted villagers' attention and have reshaped their ways of cultural consumption to the extent that drama—the traditional cultural event gathering – is in drastic decline.

Most of the problems discussed above have been out there for a century. To tackle these problems, many Chinese intellectuals have proposed a wide collection of approaches with original ideas from social, cultural, or economic perspectives. For example, LIANG Shumin[1] and YAN Yangchu[2] conducted experimental research respectively in Zouping (Shandong) and Dingxian (Hebei) in the 1930s; FEI Xiaotong explored and devised the "South-Jiangsu Mode" of rural industrial development.,

After 1949, the long-standing urban-rural dual structure further catalysed the disparity between urban and rural areas. In order to contribute rural, and, subsequently, small towns' economic growth, FEI Xiaotong and other researchers raised the plan of supporting township-village enterprises, and practicing the strategy called "leaving the

farmland but not hometown", that is, rural residents can be employed locally, though shifting from agriculture to different sectors. In the circumstances of that time, the South-Jiangsu mode once prevailed, because township-village enterprises, with more flexible systems and lower cost, did make a great impact on China's then planned economy that suffered from a scarcity of commodities. As time goes by, however, the ecological and economic limits of this pattern became obvious. Since the1990s, China has undergone the development that is characterized by rapid urbanization, which is, in a certain degree, based on the "developmental and competitive" logic. The situation of "leaving the farmland as well as homeland" accompanied with waves of peasant migrant workers not only made the phenomenon of hollowing-out in villages go to extremes, but also gave rise to a series of social problems, inside and outside the villages. With the new century unfolding, occurrence of global ecological and economic crises and the rise of a knowledge economy bring rural China, again, unprecedented opportunities as well as challenges.

NOTE

1 LIANG Shuming (1893 – 1988) was a philosopher, teacher, and leader in the Rural Reconstruction Movement in the late Qing Dynasty and early Republican eras of Chinese history. Between the years of 1931 and 1937 Liang was instructing the rural reconstruction in Zouping County of the Shandong Province. His main emphases in rural reconstruction were the cultivation of group unity, development of science and technology, and the elimination of outdated traditions. Liang thought the most effective method would be to integrate county and village schools and the local government. Between 1931 and 1933 Liang trained 800 people to run schools all over Shandong. (extracted from Wikipedia)

2 YAN Yangchu (also known as Y.C. James Yen, 1890-1990) was a Chinese educator and organizer known for his work in mass literacy and rural reconstruction, first in China, then in many countries. In the 1920s Yen first organized the National Association of Mass Education Movements to bring literacy to the Chinese masses, then turned to the villages of China to organize Rural Reconstruction, most famously at Ding Xian, a county in Hebei, from 1926-1937. He was instrumental in founding the Joint Commission on Rural Reconstruction in 1948, which then moved to Taiwan. (extracted from Wikipedia)

VILLAGES IN TRANSFORMATION

FEI Xiaotong[1]

Excerpt from Chapter I, Introduction "Peasant Life in China"

The village under investigation, like most Chinese villages, is undergoing a tremendous process of Change. This account, therefore, will show the forces and problems in a changing village economy.

"An intensive investigation of a small field of this kind is a necessary supplement of the broad surveys made of present-day economic problems in China..." This type of study will enable us to realize the importance of the background of the traditional economy, and the effect of the new forces on the everyday life of the people.

To stress the equal importance of the traditional and the new forces is necessary because the real process of change of Chinese economic life is neither a direct transference of social institutions from the West nor a mere disturbance of a traditional equilibrium. The problems arising from the peasant situation are results of the interaction of these two forces.

Moreover, the product of the interaction of these two forces, as we shall see in the later description, cannot be a reproduction of the West or a restoration of the past. The result will depend on how people solve their own problems. A correct understanding of the existing situation based on empirical facts will assist in directing the change towards a desired end.

NOTE

1 FEI Xiaotong (also known as FEI Hsiao-Tung, 1910 – 2005) was a pioneering Chinese researcher and professor of sociology and anthropology. FEI wrote his 1938 PhD thesis, based on earlier fieldwork in Kaixian' gong village, China—not far from where he had been born and raised—and published it as Peasant Life in China (1939). As one of China's best sociologists and anthropologists, his works on these subjects were instrumental in laying a solid foundation for the development of sociological and anthropological studies in China, as well as in introducing social and cultural phenomena of China to the international community. (extracted from Wikipedia)

Typical image of a village in Yangtze Delta: Xianqiao Village, Chongming Island

URBAN-RURAL IMBALANCE: THE COLONIZATION OF LIFEWORLD

LOU Yongqi

In traditional Chinese culture, that of "Yin" and "Yang" can symbolize the relation between the urban and the rural, which are interdependent but mutually balanced.

In the dynastic era, it was a very common scenario for a man to receive education in his village, enter the bureaucratic system of the court via success in national exams, return to his village after retirement and contribute to the establishment of local social, cultural and economic order. In the traditional view, the different ways of living and life-philosophy represented by the urban and the rural, also take on different social responsibilities. In terms of levels of education, the urban and the rural at that time roughly had the same proportion of top intellectuals, there was no lack of figures in the countryside such as a general in the field or a minister at court.

Unlike the European experience, China has not been characterized by distinct urban-rural divisions since Qin Dynasty, nor has there been a notion of urban superiority to the rural (Mote, 1977). But, by the end of the 19th century, with the termination of imperial exams, the traditional channel for entering the bureaucratic hierarchy was blocked; meanwhile, new schools were built in cities in great numbers. As a consequence of the economic and social crisis in the countryside, the gentry in the countryside began to flow toward the cities en mass, what they took away with them were economic and cultural capital.

While the villages lost their educated class and the organizers of public life, the traditional urban-rural balance began to collapse. In the early 20th century, in face of national calamities, the nationalistic intelligentsia started to wage a war against an "old society", which in their eyes was characterized by feudalism, superstition, ignorance and backwardness, that prevented China from progress. In their imagination of the old society, the rural society of their time became an ideal target for their projection of all those imageries. The customs, beliefs and worldviews of the rural population were criticized and stigmatized. After the victory of the communist revolution, the statutory differentiation of "peasant" from "worker", "intellectual" and other social categories consolidated a unique "peasantry" category.

With the Household Registration System (Hukou System) in 1955, peasant status was again labelled on an individual basis, to prevent them from migrating away from agricultural production. The Hukou System and its entailed discriminatory social welfare treatment intensified the urban population's prejudice toward the rural population. The rural society thus declined into economic, cultural and social inferiority day by day.

The impoverishment of rural attraction admittedly has its reasons related to policy, economy, environment, education, health care and social services, but a more deeply entrenched cause for this is rather sociocultural. According to Harbermas, a "lifeworld" becomes colonised[1] by "steering media" when four things happen: traditional forms of life are dismantled, social roles are sufficiently differentiated, there are adequate rewards of leisure and money for the alienated labour, and hopes and dreams become individuated by state canalization of welfare and culture (Harbermas, 1987). These are exactly what happened in rural China, and the process is still going on today. The colonization of lifeworlds weakened the mechanism for coordinating life with cultural tradition and social integration. Instead, the independent sub-systems such as economy and politics have already taken control of the lifeworlds, and became their dictators.

The effect of "disembedding[2]" mechanisms, which are collectively referred to as "abstract systems" (Giddens, 1990), is to make the subjects separate themselves from the concrete lifeworlds further. In fact, urbanization is becoming such a disembedding mechanism, integrating politics, economics and culture. The values, lifestyle and code of conduct based on the rural context are experiencing a crisis of confidence. The

deprivation of cultural consciousness leads to blindness in values, development modes and choices of lifestyle. In the dichotomous approach and value judgement of “the Advanced” and “the Stagnant”, villages are easily marginalized. There is little space to allow flexible responses to present time exigencies based on people’s communicative actions. And when combined with the spiritual world of rural populations and the “bottom-up” mode in their daily life, these trends are increasingly exerting their influence on the development of Chinese society, culture and economy.

NOTE

1 According to Harbermas, there is a dual concept of modern society: the internal subjective viewpoint of the "lifeworld" and the external viewpoint of the "system". “Lifeworld” colonisation means the transfer of action coordination from ’language’ over to ’steering media’, such as money and power, which bypass consensus-oriented communication with a ’symbolic generalisation of rewards and punishments’. This results in humans (’lifeworld actors’) losing a sense of responsibility with a chain of negative social consequences. (Habermas 1987, p. 196)

2 Giddens showed that modern society is characterized by time-space distantiation and disembedding mechanisms. Disembedding mechanisms – such as money, symbolic means, English as the lingua franca and the Internet – help to lift out and disembed activities into an abstract or online form whereas they were once embedded in particular material goods and in places. Social practices are now, in large part, removed from the immediacies of the local context of a restricted place and time. These are processes, moreover, that are primarily impersonal and abstract. (Giddens, 1991).

1.3

DESIGN FOR A NEW POSSIBILITY

* A Metropolitan Debate: Urbanization the Only Choice?
* Strategic Design Ignites the Urban-Rural Interaction
* Vision of Chongming by Government

A METROPOLITAN DEBATE: URBANIZATION THE ONLY CHOICE?

Mark Veldman, Dirk Peters

From 2004 on, Chongming Island was promoted as a national model for sustainability, energy efficiency, and environmental awareness. The island was launched in the international domain of sustainable plan-making. Since then, the island claimed international fame with Skidmore, Owings and Merrill (SOM)'s master plan for the island released in 2005, followed by Arup's plan for "Eco-city" Dongtan, released in 2007. The realization of these master plans has encountered several obstacles and it is unclear to what extent the original plans will become reality. What is being realized, however, are the impressive infrastructure works that have been underway parallel to the master planning, resulting in the 2009 bridge-tunnel combination that links Chongming with the south bank of the Yangtze River. The island is now in reach of central Shanghai by car within half an hour of travel time. Further construction is on the way for a northern bridge linking the island with the northern Jiangsu province. When this connection is established, Chongming will be linked to a regional network of expressways. Moreover, Chongming's position will have changed from being peripheral to being central and, despite the delay in development on the island, the new infrastructure brings Chongming in reach of Shanghai's expansion direction. "After the bridge opens to traffic, Chongming will embrace a historical opportunity of development" according to Peng Chenlei, Communist Party chief of Chongming, at the bridge's inauguration (Shanghai Daily, 2 November. 2009).

Methodology

The RAVB Chongming Studio with Studio TAO of TEKTAO is a multidisciplinary research and design activity in which students in teams develop hypothetical strategies for a future transformation of Chongming Island at three levels of scale: the metropolitan scale, the scale of the island and the 'local' scale on the island. The strategies are hypothetical and seek to explore beyond the realities of a master plan while taking context extremely seriously. Ahead of the design development, research is carried out on preselected topics to gain understanding of both the island and its position in the metropolitan region of Shanghai and the Yangtze delta. A selection of the results of this research is shown in this publication. The island morphology has been studied in a series of maps that represent the natural and artificial expansion process, a process that is still active. The first land reclamations, in Chinese wei-ken, arose in the 1960's. As with the Dutch polders, new land is protected by dikes and cultivated, with an increased size of percolation and an ideal orientation. The island has a hierarchical canal network and a series of sluice gates that protect the agricultural landscape. The predominantly agricultural land use has flourished due to the soil conditions and controlled water system. Family farms dominate the island, in particular the old land. During the twentieth century new farm types were introduced, with different organizational structures and crop cultivation. Military farms, pig and fruit farms are among the variety of types present, each having its own compound structure, organization and spatial claim.

Metropolitan Region

Historically there are several parallels between the Dutch urban landscape and the Shanghai region. Both stem from a river delta in which water formed a means for transport and trade. A beautiful historical map from the Shanghai region shows walled settlements connected by an intense water network, a condition that resembles the Netherlands in the 15th century. The Dutch situation developed into a polycentric metropolis with different core centers. Shanghai now dominates the area as a mono-centric metropolis, characterized by one dense center. The infrastructure system reflects the domination of the center in the region. The metro network combines centrally intersecting lines with ring lines around this center. The highway network follows partially the same logic: rings around the center combined with radials from the center. However the metropolitan condition changes. Since 1990, Shanghai has been expanding exponentially and the mono-centric metropolis has seemingly adopted the characteristics of a field metropolis. The region appears as a mix of manufacturing zones, leisure and conference uses and new residential areas, connected by new infrastructure and occasionally interrupted by

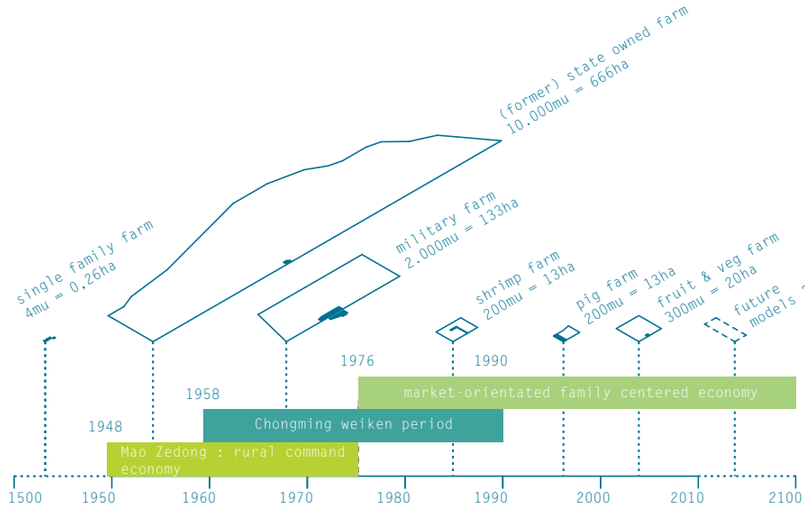
patches of agriculture. Enhanced by high-speed train connections, the Shanghai Suzhou zone that continues towards Wuxi and Changzhou transforms into a continuous urban landscape in which the radial-ring network adapts and transforms into a grid network.

The policy of "one city nine towns" further enhances decentralized urban development. However the new towns are in a traditional format, located in a ring around the original center of Shanghai. An essential difference between a mono-centric metropolis and a field metropolis is the condition of the open landscape. When urbanization becomes omnipresent it is crucial to identify void spaces within the urban territory; voids that consist of valuable existing natural and agricultural landscapes. They are distinguished from open spaces that emerge as residual side effects after other elements have been defined. When the metropolis continues to extend, it will be these void spaces that possess the opportunity to give character and quality to the metropolitan region.

Design Strategies

So far Chongming has been an isolated island on the periphery of this urbanization process. This condition has changed with the new bridge and will further change when connections with the mainland to the north and west of Chongming exist and connect, establishing the outer ring road –the Sujiahang, Yanhai, Ningqi Express road. Chongming will then not only become part of the metropolitan region, it will take a central position within this region. Starting from this given, a number of questions emerge when addressing the future of Chongming. Chongming can become the next target of Shanghai's expansion. Will the same urbanization models that we witness around Shanghai swallow the island? Is there any future for the existing agricultural landscape? Or could this island become the future metropolitan park for the region? If this becomes the metropolitan park, then what is needed to realize this? The island is overwhelmingly green, has a nature reserve and will have the infrastructure to provide access. However to become a metropolitan park it will need to provide different facilities for leisure. It needs networks for slow speeds connected to the natural resources and parts that are devoid of any human activities. Perhaps parts of the island should be flooded to protect against urbanization.

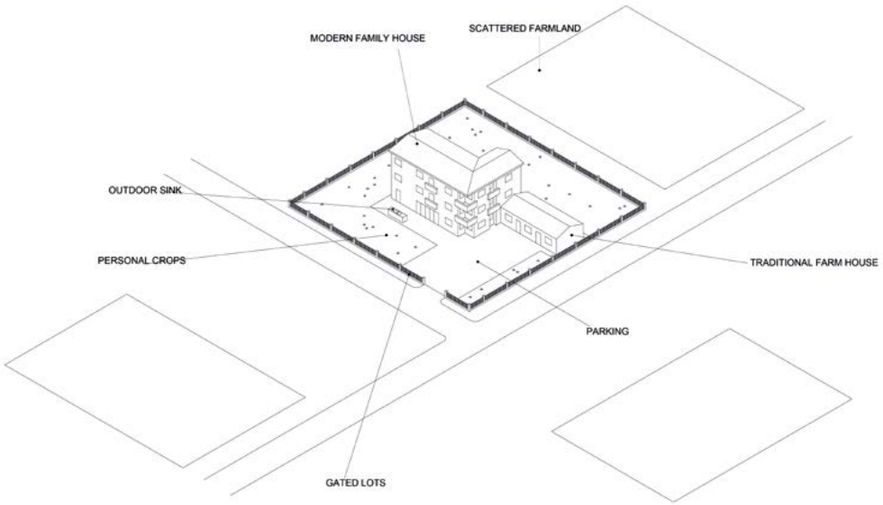
The most likely scenario for the island is an uncontrolled suburbanization. This has already started with the numerous second home villas that sprawl across the island. The challenge for an urban development strategy is the manner in which it can embed existing qualities and identity, is responsive to both surroundings and time development – in other words is sustainable – and is radical in its



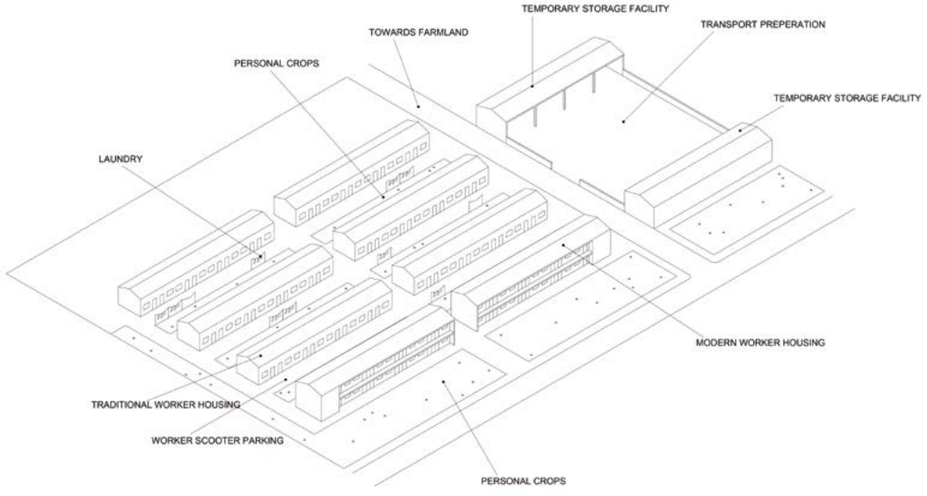
The changes of Chongming's farming unit in different period

approach of providing an alternative to complement the metropolitan region. Chongming plays a significant role in the region for its food production. Pressure on food production is exponentially growing. On the one hand the urban population continues to grow while expanding cities absorb valuable agricultural land, on the other the call for sustainable methods of food production intensifies. The agricultural landscape is either in crisis or on the verge of intense modernization. For Chongming to maintain and strengthen its existence as a food producer, it will have to modernize. How will this physically transform Chongming Island and what kind of distribution network is required?

Instead of developing a comprehensive model that takes into account all different types of program, the alternative approach is to develop strategies for urbanization, recreation and food production to critically test the potentials to a maximum and contribute to the discussion about the future of this island.

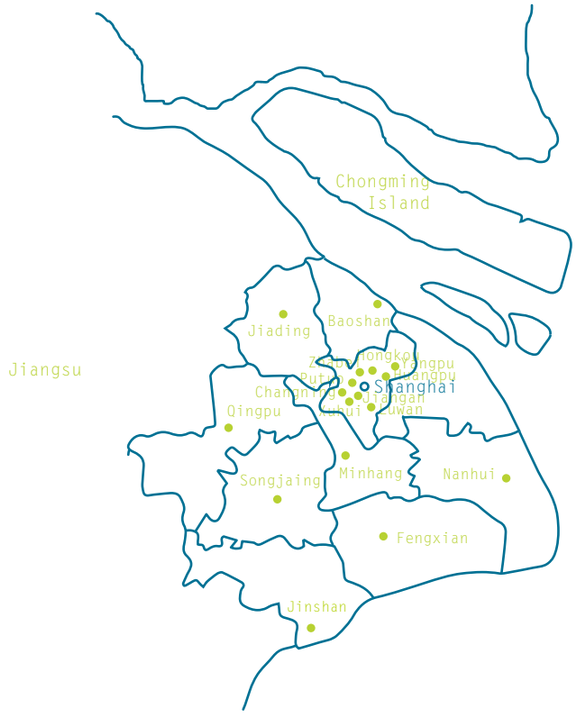


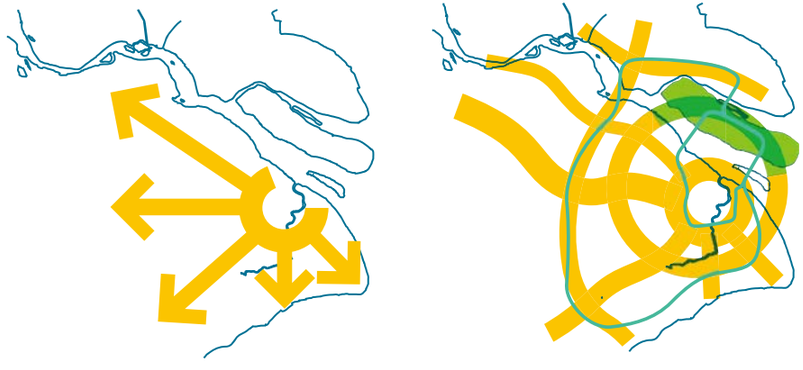
FAMILY FARM



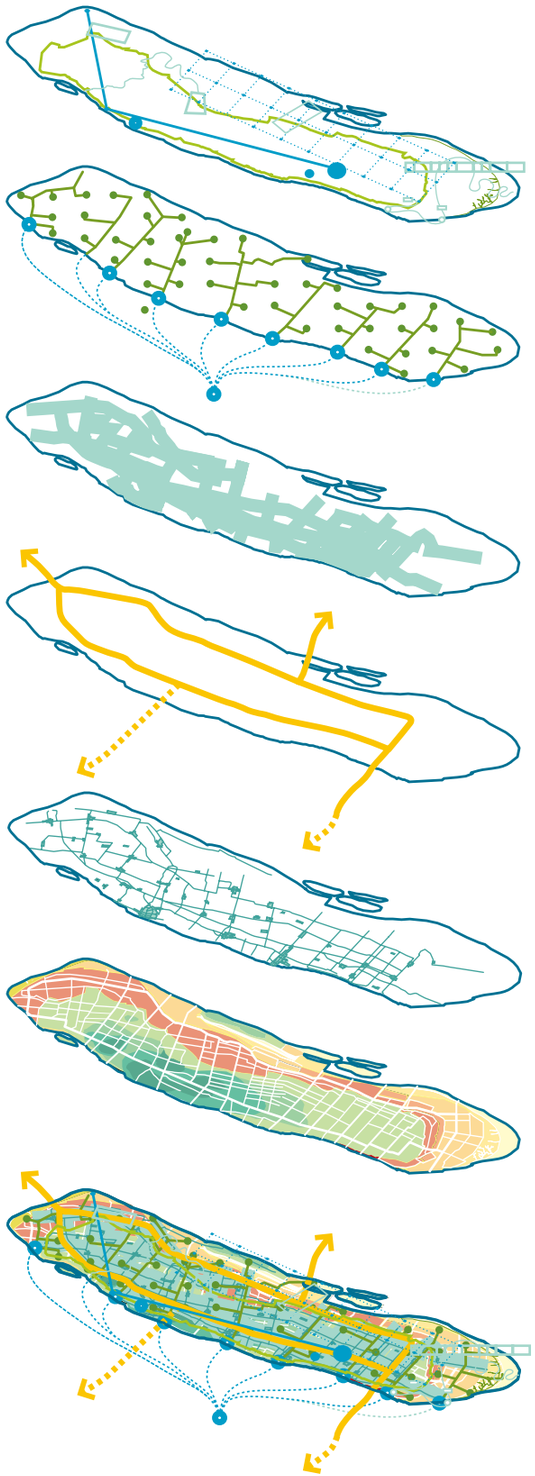
FORMER STATE OWNED FARM

Function models of traditional farming houses





Architecture schemas about the current expansion of Shanghai and the resulting future.



Leisure strategy

Agricultural strategy

Urban strategy

New infrastructure

Towns and roads

Morphological
structure and canals

The strategies of Chongming development

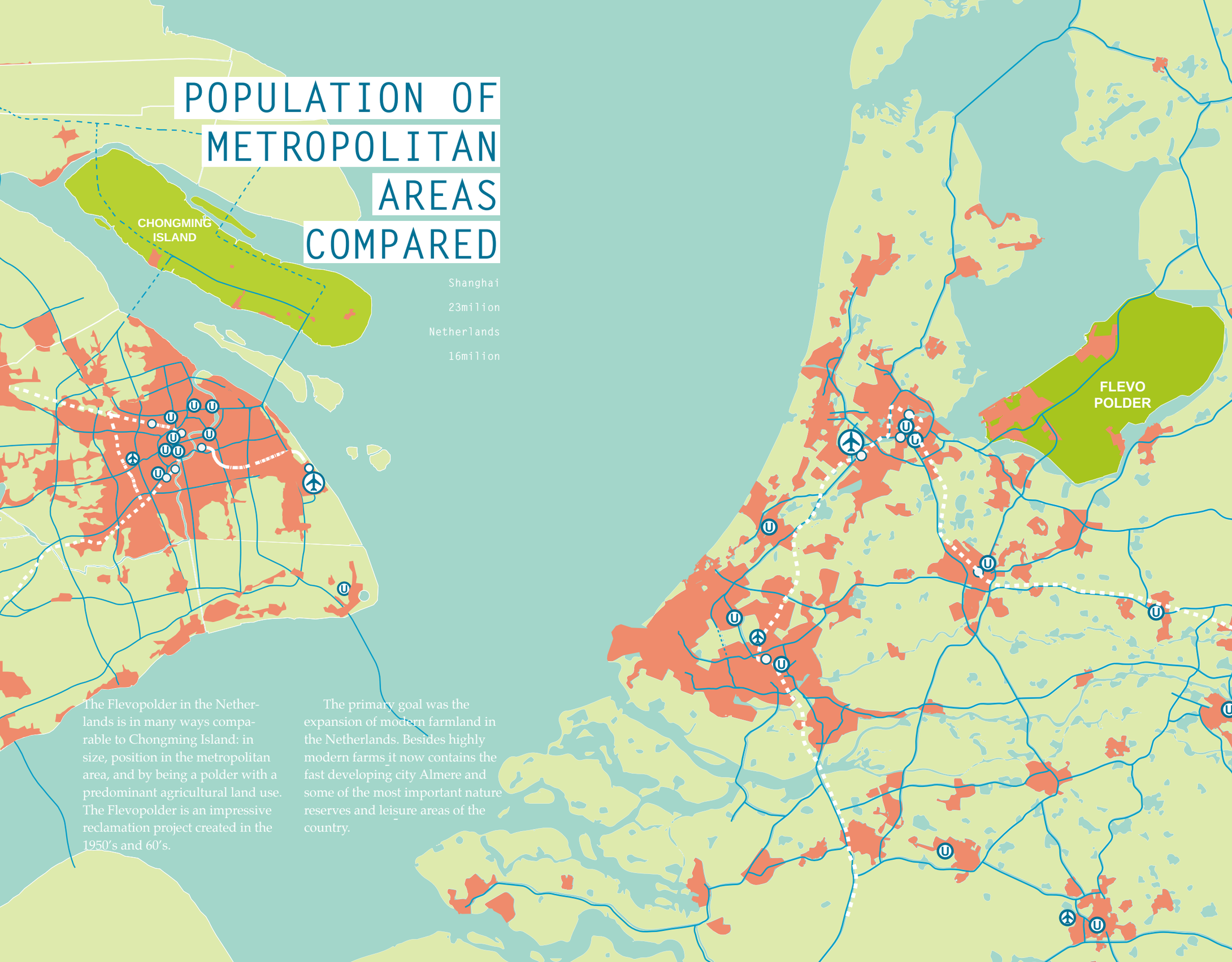
POPULATION OF METROPOLITAN AREAS COMPARED

Shanghai

23milion

Netherlands

16milion



The Flevopolder in the Netherlands is in many ways comparable to Chongming Island: in size, position in the metropolitan area, and by being a polder with a predominant agricultural land use. The Flevopolder is an impressive reclamation project created in the 1950's and 60's.

The primary goal was the expansion of modern farmland in the Netherlands. Besides highly modern farms it now contains the fast developing city Almere and some of the most important nature reserves and leisure areas of the country.

STRATEGIC DESIGN IGNITES THE URBAN-RURAL INTERACTION

LOU Yongqi

Many people claim that urbanization is the prime way of development, using the argument that denser habitation is more sustainable. This is relevant if we considerthat the ways of living, or the quality of life, should be defined as like the mainstream Western one. But if we consider changeable ways of living, the conclusion might not be perfectly correct. It is a fact that the Chinese peasants, who comprise half of China's population, consume much fewer resources than the urban populations do. Should most of the rural residents move to the cities and adopt the most "sustainable" ways of urban living, it's still questionable whether they can maintain the ecological footprint they have in their rural ways of living. Moreover, if we take no account of judgments on differences between the qualities of the urban and rural lives, the rural lifestyle is in fact more akin to sustainable development in many aspects.

In my view, rural and urban ways of living both have their advantages and pitfalls. The real challenge is not how to choose between the two, but how to discover and release the strengths of both. While making cities attuned to absorbing more rural inhabitants via urbanization, there should be a parallel way of development that attracts people to experience the rural way of life by improving the living condition of the countryside and adding attractions to rural ways of living. This approach will also try to facilitate the interaction and exchange between the rural and the urban, so that the potentials and strengths between the two will couple with each other, creating a synergetic effect. The ideal prospect is that the differences between the urban and rural lifestyles are maintained while the disparities between the qualities of life of the two are diminished.

Most Western industrialized nations have achieved more than 80% urbanization (UK and US achieved this in as early as the 1980s, while Germany in 2001 has managed to hit more than 90%), so they no longer have the choice. But China still has half of its population remaining in the countryside; China still has the opportunity to choose. We do not necessarily take the Western trajectory of development as our way of development. The first step is to challenge the common sense that rural ways of living mean lagging behind. The current situation of the countryside: a dirty, disorderly, ugly environment and shortage of public services, should not characterize rural China! Fresh air, low-density environment, slow life, and agriculture-based production are the essence for the countryside that keeps its enduring attractiveness. The value of the rural area is related to resources and the different perspectives on living and quality of life. If one recognizes the fact that, in the countryside there are abundant underutilized resources, that the value of there resources are not limited to providing food for cities, and that design and innovation can create and maximize the added-value, then it can well be an important strategy for realizing urban-rural sustainable development. This may unleash rural potential and promote rural-urban interaction, exchange and interdependency, releasing resources, capital, talents, knowledge, expertise, services and so on. One of the biggest design challenges in this process is how to take advantage of the energy behind these rural-urban interactions to generate positive social changes, and then further contribute to the entire society.

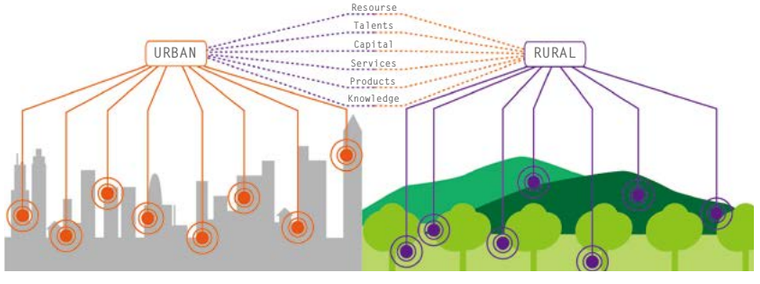
As a suburban and rural region, the island of Chongming can be taken as a typical example of the extension of urban development, which is termed the “rururban” area (Doradieu, 1998). Against a changing social background, rururban areas undergo intense social and economic changes. Their geographic ambiguity and flexibility provide them with many possibilities. If guided rightly, they are likely to get on the right track of sustainable development. Although with the rise of the state-promoted New Rural Construction movement the issue urban-rural integration has been frequently brought forward, as a matter of fact, China’s modern planning practice and theory have seldom paid adequate attention to the countryside. The entire planning system descended into the countryside as an unquestionable authority, with experiences acquired from the cities or based on stereotypes of the rural society. When this practice became institutionalized, rural areas were either turned into miniatures of cities, or simply ignored. Especially when the term urbanization becomes synonymous with development, the village’s values, lifestyle and code of conduct are neglected further (Lou, 2005). In this sense, “bottom-up” designing should be at least as important as “top-down” planning. This

opens up a whole new space for the application of the new practice of “shè jì”. Here, it is in line with what Herbert Simon says: “everyone designs who devises courses of action aimed at changing the existing situations into preferred ones” (Simon, 1996).

With a bottom-up perspective combined with an ethnographic method, the Chongming project is exactly the one that’s guided by design thinking to explore rural resources and unleash rural potential, and to increase the attractiveness of rural lifestyle, so as to find an alternative development approach to urbanization. To improve the solution by experimenting, a prototype will help us to understand the workings of different factors. The prototype will also become a node, bridging the two systems of the city and the countryside.

The now extended design will provide strategies for dealing with bigger issues, and become an interpretation of innovative development, as well as an inquiry into a brand new and unusual working field (Bistagnino, 2008). If China is to accomplish its ambition of leapfrog restructuring of industry and transformation of the model of development, design and innovation should be the important engines.

If design and innovation can bring about urban-rural integration on both macro and micro levels, nurturing a new economy, ways of living and environment by creating added value, as well as building up and consolidating an urban-rural interactive system based on sufficient understanding of daily life, then the “Farewell to Tilling, But Not to Rural Areas” strategy proposed by FEI Xiaotong and others will be given new meaning and vitality in a new era. Today, the means by which to realize this idea has changed from out-dated urban industrial productivity to most revolutionary design-driven innovation.



Designing the interactions and exchanges between the urban and rural areas

VISION OF CHONGMING BY GOVERNMENT

LI Zhihong

Chongming is planned as an eco-island, and is intended as a model of sustainable design. Chongming will become an example of smart growth in action, promoting population growth and infrastructural expansion without sacrificing agriculture, wildlife, or ecology. It is a global testing ground for new ideas that restructure the way we live and how our life affects the environment.

Fauna Map

Flora Map

Resources Map

Chongming resource maps from students' research analysis

Landscapes of Xianqiao Village,
Chongming Island

2

NEW ROLES OF DESIGN

landscape images from Xianqiao Village
in Chongming Island

NEW ROLES OF DESIGN

2.1

THE DESIGNER AS SOLUTION ENABLER

* Enabling Design for The Common Social Goal: Chongming Sustainable Community Project
* Place Introduction: at Xianqiao Village on Chongming Island

ENABLING DESIGN FOR THE COMMON SOCIAL GOAL: CHONGMING SUSTAINABLE COMMUNITY PROJECT

LOU Yongqi, Clarisa Diaz

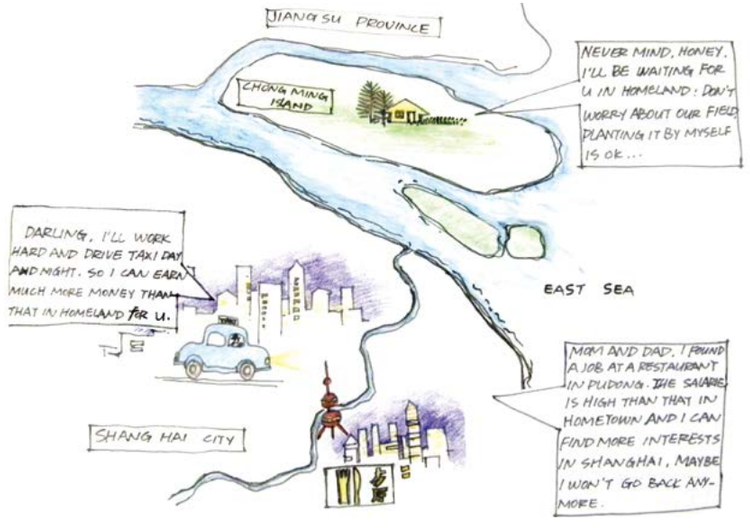
The New Challenge of Design in China's Context

At the present historical juncture, it is clear that design processes must extend into new territories and dimensions in order to address new problems and opportunities of a rapidly changing world. Today, one of the most dramatic arenas of this change is China's urbanization. Current research predicts that 350 million people will be added to China's urban population by 2025—more than the current population of the entire United States—yielding a total of one billion people living in China's cities by 2030. The drive for progress and the swiftness of policy implementation in China permit experimentation with new ideas and methods. Given China's enormous size, even a small project, if in sufficient numbers, can have global implications.

Creating opportunities for local communities to sustain themselves within a networked society is where design can have the most powerful and lasting effects. The challenge for the whole design community in China will be to stabilize China's growth by fostering ways in which people can sustain themselves: economically, environmentally and socially. In meeting this challenge, it will be necessary to involve the intended beneficiaries—only then can general principles be adapted to local conditions and proposed solutions be made truly sustainable.

The Chongming Initiative: a Sustainable Enabling Design Solution

Sustainable development in China will depend on maintaining a harmonious balance between urban and rural areas. Ongoing one-way migration to the cities by people in pursuit of better education, higher income and modern life-styles has created an imbalance in Chinese society, particularly over the last several decades[1]. The problem is magnified by the reality that the population of China is already one of the largest in the world, and is expected to continue to grow at an unprecedented rate. The cities of Asia account for 40 percent of the world's urban population, with the highest growth rate currently in China. This growth is concentrated in some metropolitan regions such as the Yangtze and Pearl River Deltas, with the country's largest metropolis, Shanghai, boasting a population of over 20 million. However, the emphasis of promoting sustainable development in China's rural hinterlands has begun to create new opportunities for developing sustainable solutions, both within and beyond the country's dense urban centers.

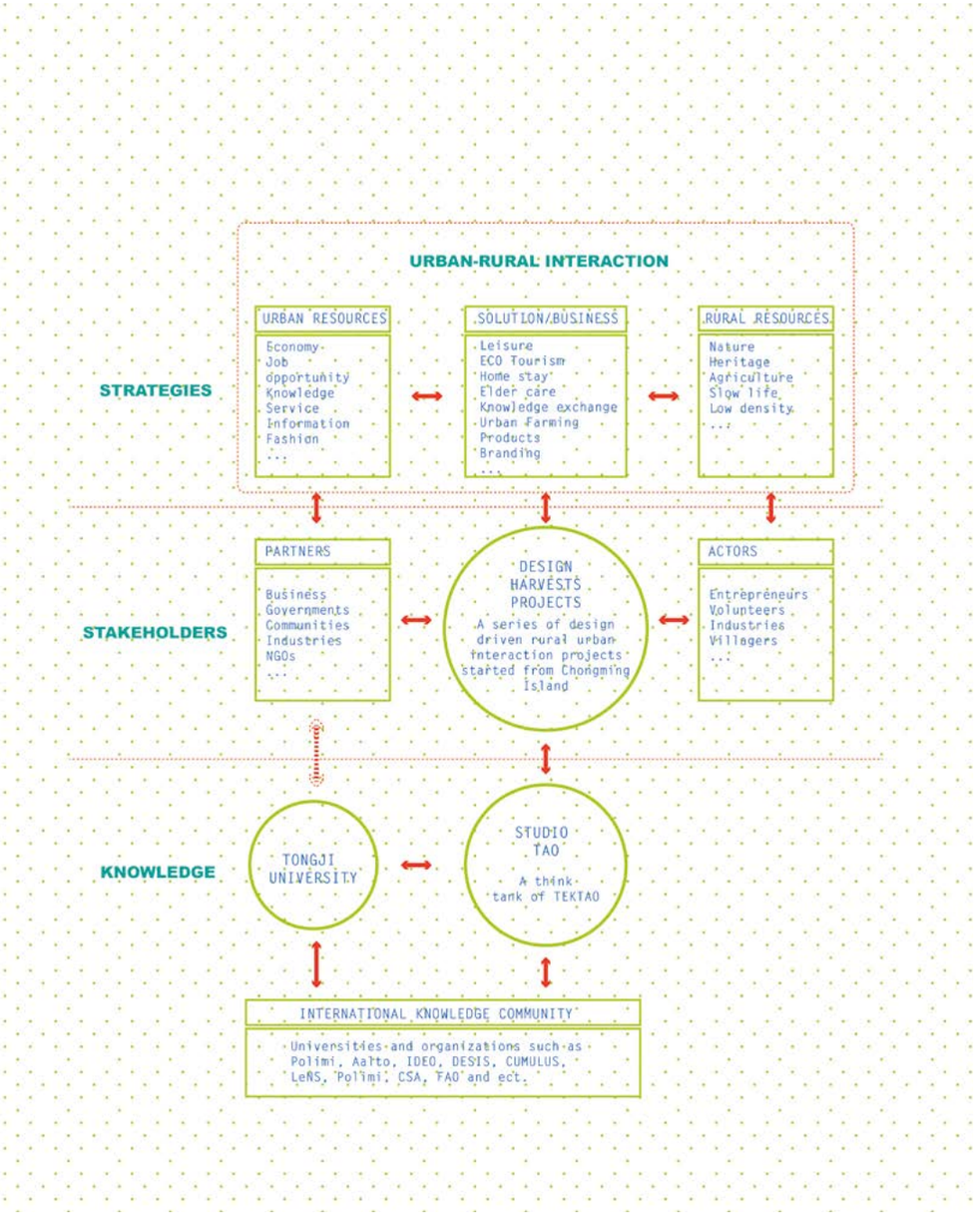


Relationship between Shanghai and Chongming Island

Chongming Island represents one such attempt at developing a solution in China. This 1041 sq.km alluvial island located at the mouth of the Yangtze River Delta in Shanghai has a population of 660,000. In addition to familiar environmental issues, this island and its community of resident farmers suffer from a variety of social and economic problems. The unattractiveness of the rural ways of living for many has led to the loss of human and economic resources. Chongming Island's unique positioning within the city is one of the reasons for these problems, but also makes it an excellent venue for experimenting with urban-rural exchange programs oriented toward sustainable development.

The Chongming sustainable community project is a design research initiative led by Studio TAO and the College of Design and Innovation, Tongji University. The research team is coordinating all the participants in the project, including the local government of Chongming Island, village communities, business partners, university resources and so on. The Chongming initiative seeks to use expanded design as a new tool to promote solutions toward a sustainable future for rural China. Through a collaborative effort involving multidisciplinary teams, knowledge is being generated relevant to improving the outlook for this island and its people in the coming decades. The vision for this project is to make a specifically Chinese example of how to practice ecological sustainability, while simultaneously improving daily life and socio-economic opportunities within a rural community. We hope a successful outcome in this project will serve as a prototype for using the design and design thinking to improve human life, in China and beyond.

The setting of Chongming within Shanghai can be understood in terms of Yin and Yang, the twin concepts of classical Chinese philosophy that interpret reality as comprised of components defined through complementary opposition to one another. In Chinese thought, these seemingly opposing principles or forces (e.g. light/dark, up/down, male/female, etc.) are in fact interconnected and interdependent, each giving rise to the other. Applying the Yin/Yang conceptual scheme to the present context, we can say that the interactions and exchanges between the urban and the rural districts of Shanghai, including talents, resources and social economy, should be designed so as to maintain the identity of each, while complementing and reinforcing the other.



A synthesis map of the Chongming Sustainable Community Project, showing all project stakeholders: from inception of the concept to the implementation of each step.

Accordingly, the Chongming sustainable community project aims to network villages on the island to Shanghai, based on the needs from both sides. An ideal state is: rural dwellers could migrate to cities if the development model there is more attractive, but if they choose to stay in villages, then broad space for development should be provided as well. The rural potential also enables urbanites to start their business or encourage them to choose other ways of living. Thus, the immediate purpose of this strategy of attending to the micro-level particulars within a holistic, macro-level vision is to develop a series of scenario-building prototypes, followed by replicating the most effective ones around the country. The project's end result may not always be physical development as in new infrastructure, but rather the development of connections among people and exploration of their possibilities.

Tao and Qi, Strategy and Action

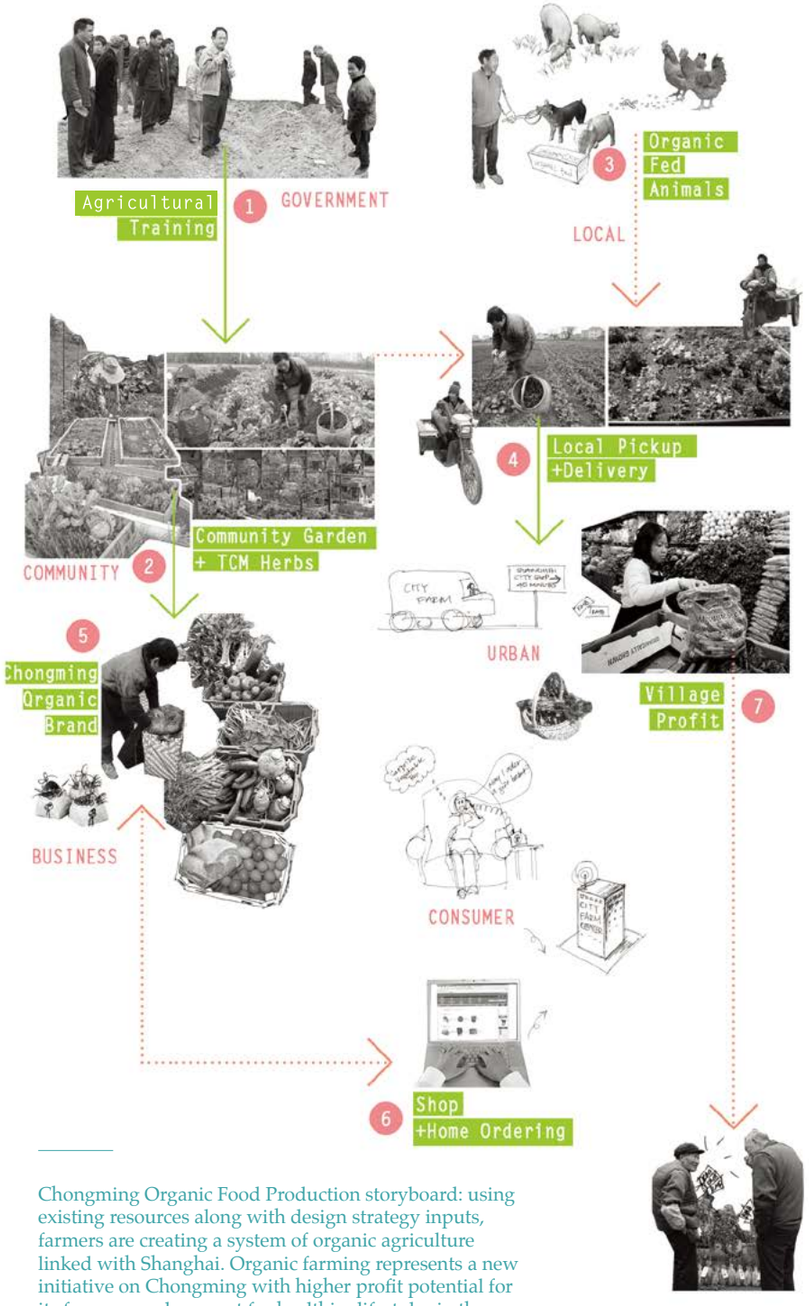
"Shè jì", the original meaning of design in China, is "to establish a strategy." Conceptually, the term consists of two levels, Tao and Qi. A renaissance of "shè jì" as a specific design sensibility can bring a constructive new impetus to addressing today's complex challenges, by encouraging the effective deployment of diverse practical techniques within a systematic overarching strategy. Moreover, we believe such a renaissance could help contemporary Chinese designers to define what "Chinese sustainability" is and might yet become. Without a systematic approach, the designer can only act in a short-term or partial frame of reference, which may or may not be sustainable; without a dynamic, practical approach, any solutions developed will not be able to keep up with further changes. In the Chongming project, "shè jì" is in evidence on both the Tao and Qi levels. Tao can be seen in the strategic design and methodology for developing the various design interventions, whereas Qi is in the operational application and tangible results of the process. Moreover, and as previously noted, combining Tao and Qi together suggests the possibility of involving a wide range of societal constituencies within coordinated strategic undertakings, and is thus the primary avenue for realizing sustainable initiatives, including the efforts at Chongming to synergistically link Shanghai's urban and rural populations.

As noted above, one of the basic ideas behind the Chongming sustainable community project is that complementary elements cannot exist without one another. In particular, large cities cannot exist without rural sustenance, whereas rural areas cannot flourish without being connected to various urban resources and by extension to global society. Cultures need to be linked, but must not be dominated by one among the others. In the case of Chongming, the twin goals of promoting interactions and exchanges with the broader urban population, and of preserving a specifically rural experience and identity, are equally important components. Here, then, the goal of Tao-level design is to establish a framework that encompasses the various urban-rural, government-community and local-global complexes involved in a dynamic and interactive system. According to the design, villages can be linked into a large urban-rural interaction network, in which knowledge, people, goods, services and other resources can circulate more easily than at present. One aim of the project is to encourage people with higher formal education to engage with people in rural areas thereby further enriching the diversity of the social structure.

On the other hand, the specific methods, techniques and tools for realizing the goal of Tao is, in Chinese philosophy, on the level of Qi, a term connoting the need always to respect the complexity and particularity of the immediate concrete context. In the case of Chongming, through surveys and inquiries within the community, existing potentials for sustainable ways of living and working are sought that can be enlarged through public services or businesses, designed on the basis of the residents' own vision and initiative. The potential for enhancing the community is thus magnified, yielding solutions that emerge organically from a context of common goals, participation and support. Specifically, the Chongming project seeks to transcend the urban-rural threshold by developing a wide array of local activities, including but not limited to ventures in community-supported agriculture, fair trade, tourism, home rental, education, and communication technology.

Thus, a series of proposals and initiatives have been advanced in this project to realize the above-mentioned goals. To encourage community-supported entrepreneurship is one of the key solutions. Of course, these various initiatives will create jobs in running and maintaining the different facilities involved, thereby giving members of the village population reasons to stay on the island. The entire process is being developed through the collaboration of different stakeholders, including entrepreneurs, community members, government agencies, businesses, designers, consumers, and other partners.

The projects mentioned above are connected in a system. The systemic and holistic perspective can help us to explore a larger scenario and provide new solutions, especially when involving social and economic considerations. For example, the design team's research indicated that pollution in the island's canal is related to the decline of its public spaces; by the same token, when the canal is no longer a part of the villagers' daily public life, it is much easier for it to become polluted. Creating a thriving public space along the canal, therefore, may well be a more efficient long-term strategy, with greater and more varied benefits, than a one-time clean up of the canal.



Chongming Organic Food Production storyboard: using existing resources along with design strategy inputs, farmers are creating a system of organic agriculture linked with Shanghai. Organic farming represents a new initiative on Chongming with higher profit potential for its farmers, and support for healthier lifestyles in the wider population of the city.

Conclusion: Towards Social Design

" What role can a designer play in a collaborative process of social intervention" (Margolin.V, 2002)? In the Chongming sustainable community project, this is being achieved through the strategy of directly involving all relevant stakeholders. In recognizing opportunities, communicating and bringing together diverse constituencies to develop a shared vision, design is developing an expanded role as an agent for building networking solutions. In this context, the role of designers is designing the links of disparate resources so as to allow communities to maintain their identities while engaging with the outside world.

At Chongming, the result of this networked, participatory process is the establishment of a foundation for sustainable solutions informed and designed by everyone involved. The project has the potential to reshape the urban-rural relationship, emphasizing the different aspects of sustainability—economic, environmental, and social—by which contemporary Chinese society will continue to develop over the long term. The ultimate objective of this approach, therefore, is to extend the design process into society by soliciting the active participation of all stakeholders in developing solutions to design problems. The old oppositions of urban and rural, government and community, local and global that have complicated and hindered Chinese development, should be changed. As the Yin/Yang philosophy reveals, these entities are all equal forces, equally necessary for a sustainable society. Design is fundamentally about conceptualizing and modeling new ways of being and doing, defining the ideal scenario, the related physical objects, the services, the process and the system. The challenge of design in its newly expanded role is to elicit and enable solutions, in a context of rapid change, in a balanced and inclusive way. In a certain sense, enabling design is a relevant tool for a real social design. Designing communication among different stakeholders and enabling interdisciplinary innovation and collective collaboration within creative communities are among the utmost important steps forward.

NOTE

1 During the last century, and especially since the economic reforms of 1978, focus on Chinese progress defined by modernization has caused the highest level of migration to urban centres in the history of mankind. Urban prosperity, while desirable per se, has left rural areas increasingly impoverished and stigmatized as "backward." See Edward Taylor, "Microeconomics of Globalization," World Bank Report, 2001.

PLACE INTRODUCTION: AT XIANQIAO VILLAGE ON CHONGMING ISLAND

Chongming Island lies against the northern shore of the Yangtze River, an alluvial island formed by silt carried along the river. It is the third largest island in greater China. The geography of Chongming is flat, and it has fresh air, ample sunshine, and plenty of vegetation. With the Shanghai Yangtze River Tunnel and Bridge joining the island to Shanghai, this once most rural area of Shanghait is now the subject of a major urban and agricultural master plan. The island is expected to increase in population while incorporating specialized agriculture in a sustainable design.

Xianqiao Village is located on the north of Shuxin Town, Chongming County. The village was established in October 1976. In January 1996, the village combined with Qianxian Village. Now the there are 745 families in Xianqiao Village and the population is 1683.

In the village, 77 people are members of Communist Party of China, and four village committee members and one reserve cadre form the local village government. In 2007, the village was included in the plan of construction of Chongming County pilot villages for rural areas.

The location of Xianqiao Village in Chongming Island

The landscapes and life of Xianqiao Village,
Chongming Island

2.2

THE DESIGNER AS SOCIAL ACTOR

* Social Design: Innovating the Next Society

SOCIAL DESIGN: INNOVAING THE NEXT SOCIETY

Louis Klein, Suk-Han Tang

Elaborating on sustainability and directions for change, it is essential to first think about social design and explore the possibilities. Designing communities is a task that requires careful understanding and analysis of all parties involved in choosing the appropriate directions for change. The Chongming project is a great example of exploring challenges and discovering potential in fostering and directing change within communities, and raises questions on how we as a society want to live in the future.

To answer this question, we must look carefully and find answers that lie in society's primary levels: the technical, political and cultural aspects. These are what link people together, whether in an organization, a community or a society. The technical aspect refers to a rational perspective that includes science and hard data, such as skills, tools, and land, among others. The political aspect is based on the different, at times aligning, at times conflicting interests that lead to power dynamics and crystallize within authorities and institutions. Lastly, the cultural level represents shared values and norms as well as the actual deeds and observable practice.

All of these three aspects can of course be understood and analysed separately, but for effective and sustainable change to occur, all must be managed together and balanced accordingly. They need to advance and be co-evaluated together.

This exercise was carried out in the Chongming project through a two-day workshop at a stage where a significant amount of possible solutions were already identified and a great amount of information needed to be analysed and understood. Translating these data and balancing them against technical, political and cultural aspects helped us understand change from different perspectives, enabling us to manage and balance expectations in order to find viable solutions which could benefit everyone in the community of Chongming Island. This is what we term 'social design.'

Social Design is about people and we, as people, cannot escape acting in relation to other people. Even if we choose to live alone on a desert island, that is how design works in our social reality. The social world is created as a result of the dynamics between all of our individual actions. It is inescapable. Social design, then, is at the same time a great opportunity and a great responsibility, because it relies on the choices we make every day. Social design is about shaping and forming. Design – echoing the thoughts of Bruce Mau – can be understood, in a broad sense, as all that which is man-made. A design-centred thinking also reminds us that we make shaping decisions that then exist as such, but could also be otherwise. If one thinks about social design, far-reaching possibilities arise, but so do responsibilities. Social design opens realms of possibility because we gain degrees of freedom. Social design refers to responsibility because, as these degrees of freedom are realized, a decision always lies at the centre that might also be decided otherwise and, furthermore, leads to the reality that all of the consequences of these decisions can and must be tracked back to the decision, the decision makers, and the decision-making process. This is valid for every area of life: it holds true for politics as well as the economy, for health care providers as well as child care givers. It pertains to the handling of conflict as well as civility. Social design can be understood as a set of models, methods, and instruments that is formulated in response to the inescapability of the "social other". It is here that we meet an exceptional feature of social design, distinguishing it from social engineering. Engineering embodies, like so much in the modern age, a positivist orientation based on true or false criteria of natural science. However, social systems are not technical systems and do not follow the predictability of the laws of natural science. The social is particular. It is characterized by a dynamic that can best be described as a set of self-fulfilling and self-destroying prophecies. It becomes apparent that a diverse set of models, methods, and instruments, on which the respective methodologies stand, can be differently capable or efficient. One could reflect, at this point, on social design impact evaluation. This would involve an evaluation which measures the impact of rule systems, basic assumptions, processes, and instruments. This would then allow the understanding of social design as fundamentally in-development, an existing result of negotiation. A negotiated result that is as it is, could always be otherwise and furthermore, always endeavours to become better, more capable, more just or functional.

The meaning of venturing such a thought becomes frighteningly clear if one deals with the self-perception of developed, democratic state sys-

tems, which seem to have generally lost perspective on their own development and on the continuous improvement of their capabilities as social designers. We regularly pick out nation building, failing states, or failed states as central themes of discussion. We do not, however, maintain a discourse about how able our own social system designs are to further advance the capabilities of developed societies.

Once we have gained perspective on the capabilities of a social design, it is just one small step further to begin comparing different social designs. Because of this, competitive thinking is given a wide open door to what is much more far-reaching than that which we know from the modern age. It regards the most differing versions and variations of co-operation and of coexistence. It regards modes of coexistence. It is not a question of true or false, but deals with functional or not functional, capable or not capable. It is about viability, about practicability, about aptitude for life and survival. The next society will be characterized by an ecology of paradigms.

In this context, ecology should mean that we will be dealing with a great deal of diverse paradigmatic alignments and a great deal of different social designs that coexist in an ecological sense, and in which the most different forms of juxtaposition and cooperation will be realized. There will be social designs that are in competition with one another. There will be social designs that alternately support each other and will enter into almost symbiotic relationships. There will not be one true political system, but an ecological juxtaposition of different political systems, which will find their respective social designs regularly having to prove their merits, both internally and externally. At this point, a new social utopia, which focuses on the viability of the social design, can be formulated. This sounds novel, but we are already innovating the next society.

Studio TAO and Systemic Excellence Group held a workshop seminar about themes centered on social systems design theory and methodology.

Systemic Excellence Group (SEgroup) is an independent think tank for leading practice based in Berlin, Germany. Their mission is to support those who take on the responsibility for shaping the world by facilitating change. They are dedicated to the continuous improvement of leading practice in the area of organisations, communities, project management, politics and culture. Our goal is systemic excellence as the emergent combination of systems thinking and design thinking. In 2007, they launched the SocialDesignSite.com to explore different meanings of social design and highlight possibilities of social change from a project perspective. SocialDesignSite.com aims to foster a discourse on the topic on a broader level by facilitating the meeting between a wide range of different audiences and professional environments and bringing these together.

2.3

DESIGN-DRIVEN ENTREPRENEURSHIP

* Chongming Future Creative Entrepreneurship Workshop
* Business Service Design Brainstorm Workshop

CHONGMING FUTURE CREATIVE ENTREPRENEURSHIP WORKSHOP

From 25th September to 14th October 2009, Studio TAO, together with Politecnico di Milano and Tongji University, hosted a joint workshop called “Services for a New Generation of Creative Entrepreneurs in Chongming Island”. Students from China and Italy, part of a double-master-degree program between the two universities mentored by Prof. Anna Meroni from PoliMi and Prof. LOU Yongqi, were the participants in this workshop.

The objective of this workshop was to envision and design a product-service-system platform supporting the everyday life of a new, creative entrepreneurial community. All the students were divided into five teams assigned to five different aspects of the platform, which were hospitality, food, mobility, agriculture and health. The teams designed relevant service systems in these aspects regarding the creative entrepreneurship.

The five teams started with seeking “seeds” in the assigned fields and generated product-service-systems out of that, and then based on these service-design concepts, they created a “brand” or “company”. The workshop considered local potentials as the major motivation and used service-design methods to visualize these potentials and transform them into attractive products or services to urban consumers. Besides, the five sub-systems could be integrated into a network where they support each other and create even bigger values.

The participants of “Creative Entrepreneurs” workshop at the Shanghai Creative Industrial Week Exhibition 2009

bloming
BIOLOGICAL / CHONGMING

What Nature Would Eat

Mission

Bio Ming brings to the customer a true organic family of products. Such an achievement is the result of a long-term program on Chongming Island. The process involves the local community of farmers who have been educated in bio-agriculture, and specific tools have been given according to needs. Fruits and vegetables are local and seasonal and are delivered to the different points of sale in Shanghai to reduce logistical difficulties and offer fresh goods.

Vision

Bio Ming achieves not only provision of an organic family of products, but also to sensitizes consumers to a sustainable and eco-friendly way of approaching everyday life. Eating local organic fruits and vegetables, helping local communities to grow them, limiting the use of energy and reducing waste can be considered as the first steps on the green path.

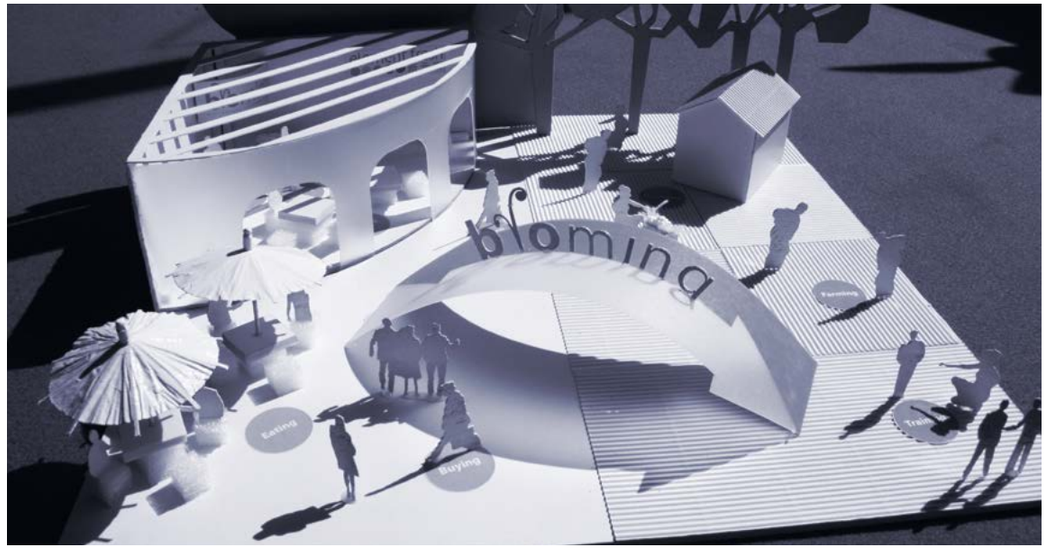
Assets

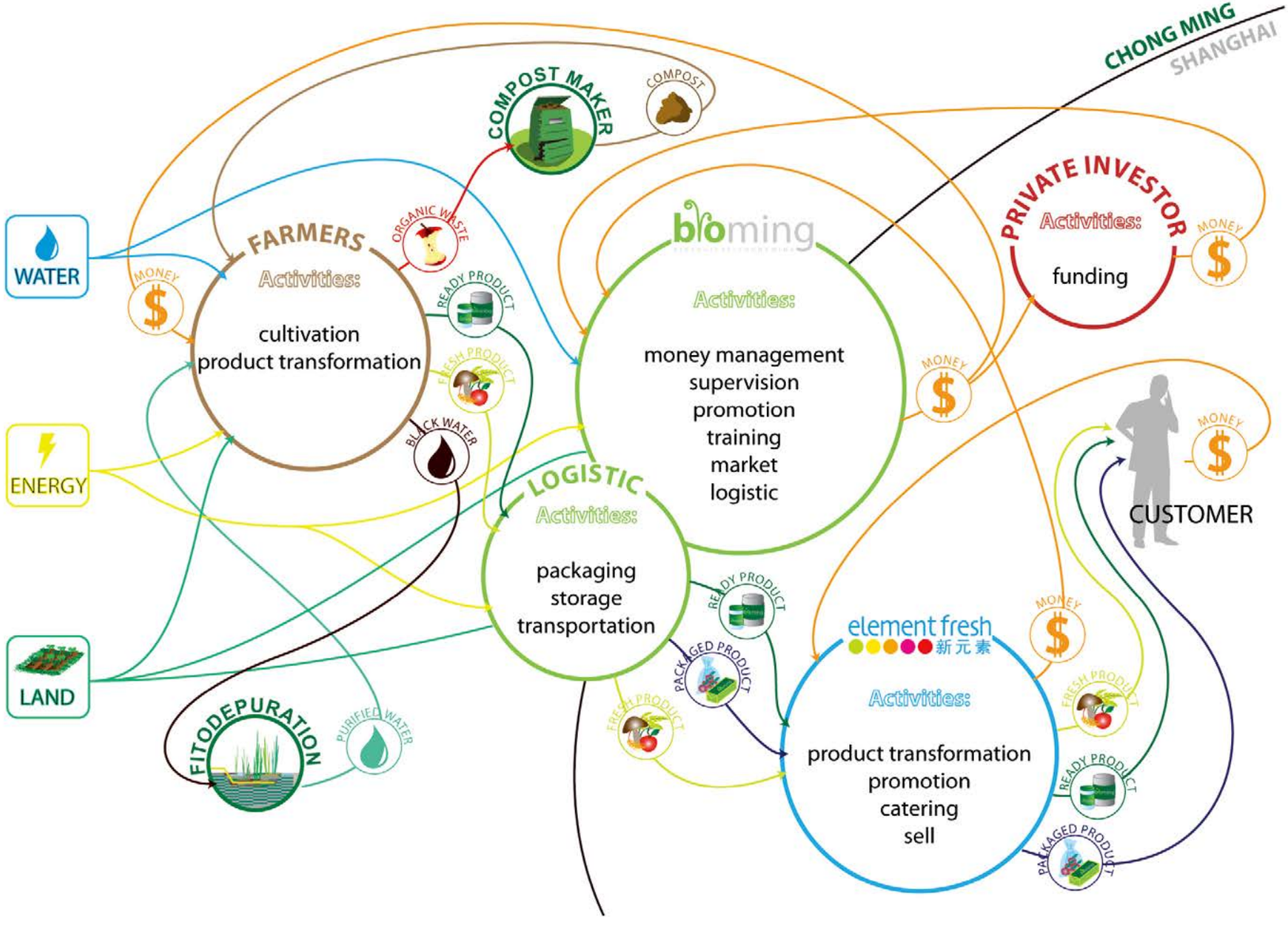
Inside Bio Ming: PSS designers, biological agriculture experts, marketing team, human resources team, logistic teams and PR team. Outside Bio Ming, in Chongming Island: farmers, energy and waste use/distribution/maintenance team, human resources team; outside Chongming Island: logistics team, marketing team and PR team.

Our story

Bio Ming was born in October 2009 at Tongji University (Shanghai) with the synergy of four Italian students and a Chinese one. The idea is to create a genuine biological family of goods coming from a CSA from Chongming Island and to sell to Element Fresh. The material is used as ingredients of meals and as products to be sold in the store. With increasing demands in the past two years, Bio Ming creates several eco-trucks to sell goods around the city. In 2018 the Bio Ming space will be opened: it won't be just a store, but also it's a museum, a place to get education on eco-consciousness, and a restaurant.

Physical model of BioMing project





System Breakdown: the schema shows stakeholders, resources, goods and money involved in the system.

The Land of Balance: “Ping Heng Dao”

Mission

Xianqiao village becomes “Ping Heng Dao”, the land of balance, where eating has a natural role in the healthy daily life-style. We provide the balance and the connection between food and life. PHD provides a perfect place for us to discover, learn and utilize traditional Chinese medicinal food.

Vision

According to Chinese philosophy we need to rebuild our link with nature. Learning about this healthy lifestyle will help us rediscover the eternal fight between Ying and Yang forces.

Good health provides a balance and a control that is enforced in all aspects of life. Food has an important role in this lifestyle so we must recognize and choose the right diet.

Asset

PHD provides the best diet for a healthy lifestyle. A traditional Chinese doctor prescribes you with a tailored menu. Our professional cook will then prepare the perfect meal in our restaurant. Our highly qualified customer service team will teach you the basis of traditional Chinese diet and help you choose the right dishes from our assorted collections.

Our story

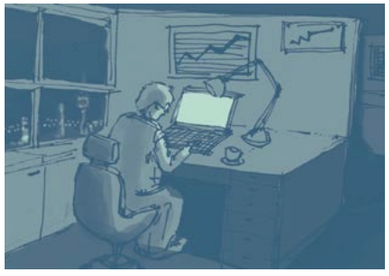
We met each other during the autumn festival of 2009 in Chongming Island. While splitting a Moon cake, we discovered that we shared the same interest in the Chinese history and culture.

Our curiosity led us to think about how to create a new era of knowledge in Chinese traditions. At the beginning, we started thinking about food as the main aspect of each culture, especially in China.

People perceive eating together not only as feeding, but also for its social and nutritional attributes. In 2020 we are going to open the first centre of PHD in Xianqiao Village on Chongming Island.

The physical model of “Ping Heng Dao(PHD)” project

The storyboard of “Ping Heng Dao” project



1. Mr.Li and his wife and children live in Shanghai. He works in a securities company and he has to work late until night. His body is in the sub-health.

2. Mrs. Li was very concerned about her family’s health. This morning she saw there was poster advertising about PHD in the bench of the park.

3. Mr. Li sometimes would go to GYM centre to relax. And this is his only entertainment besides hard working. Today at the GYM centre, he saw introduction of the” PHD” which seems to be his desire.

4. They often worry about even quarrel with each other about trivial matters of the daily life. Finally they decided to go to Chongming Island, spend a weekend to experience the life of “PHD”.

5. On Saturday morning, Mr. Li drove to Chongming Island with his family. The opening of the Yangzi tunnel significantly reduce the driving time .

6. They arrived at Xianqiao village which is Chinese medicinal food and leisure experience centre and were fascinated with the beautiful landscape, laid-back life in this small village.

7. A professional chef describes how to use Chongming Island specialty ingredients combined with traditional Chinese medicated diet philosophy cooking out the role of a convalescent diet.

8. In the centre, they learn a lot about “hot” and “cold” body type and Chinese medicine philosophy.They get useful advice from old Chinese traditional medicine doctor.

9. According to each person, the prescriptions for Mr. Li’s family members, which gives the specific constitution of different diet formulations.

10. Came out from the display area, Mr. Li’s family decided to go to PHD restaurant to enjoy a balance lunch there.

11. The Restaurant offers different kinds of recipes of multiple functions for all the people who have different needs. And it has a very professional chef can provide unique diet only for you.

12. After determine their dietary needs, Mr. Li's family sit in the courtyard of the restaurant, enjoy their beautiful filed scenery, delicious food as well.

13. After lunch, they go to PHD shop to buy some ingredients can be brought back to Shanghai.

14. Mr. Li's family plan to stay in village for two days. There can be seen labels with in the fields, which identified variety ingredients produced in Chongming.

15. They returned from Chongming Chinese medicinal food and leisure centre with very pleasant feeling.Not only experience the pastoral life , but also understand life and health balance.

The physical model of "Ren Mu" project

Health Plus

Mission

In face of the current situation of rural population migration and the future trends of countryside building, with our strong social responsibility, H+ observes and thinks from a unique perspective. We work towards the harmonious development and progress of urban and rural areas.

Vision

To do a great job for our customers and employees by exchanging the health needs between city residents and rural residents and pushing the positive and sustainable development of rural area. We are committed to guiding people to live in a healthy way, to heal, and ultimately benefit themselves.

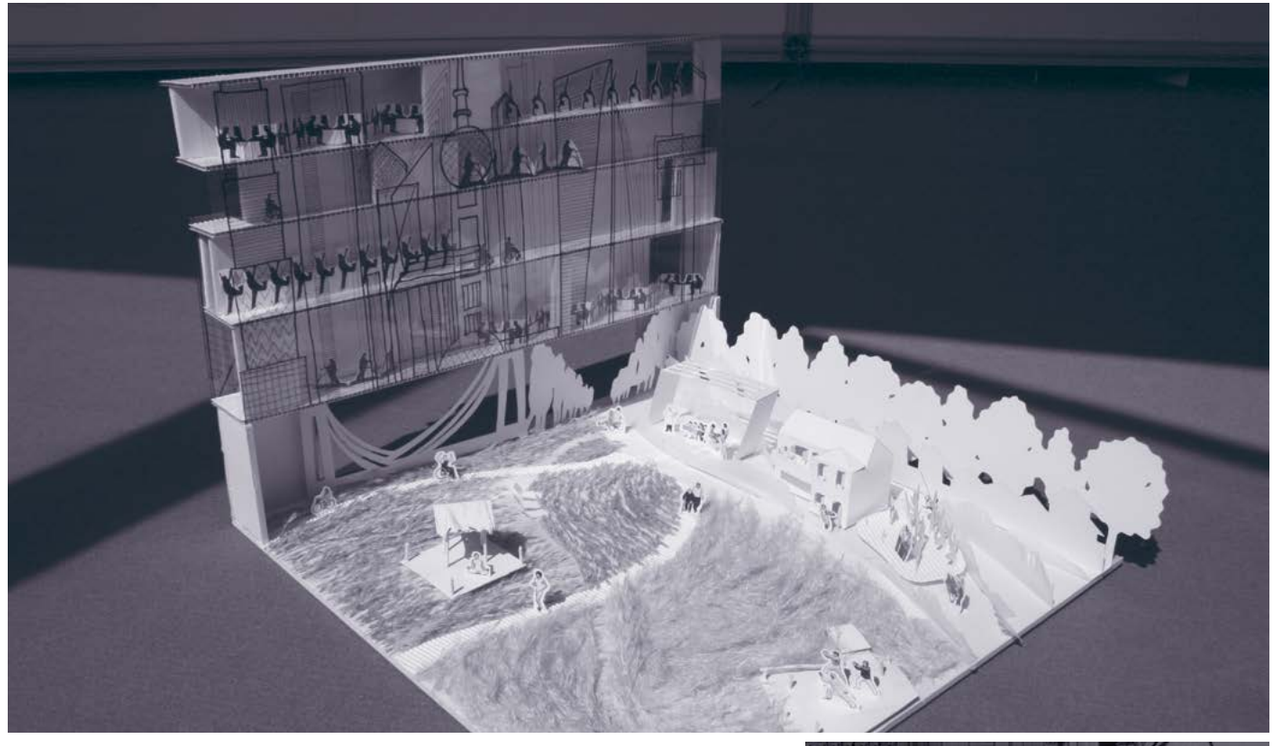
Assets

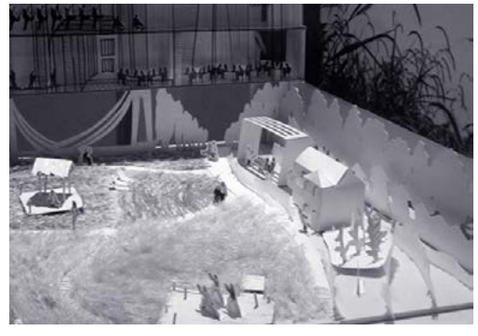
Professional health adviser / Professional health instructor / Supervisor / Business development staff / Sales

Our story

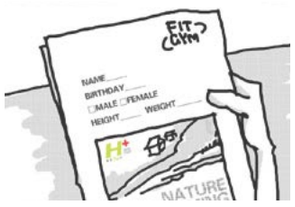
We are considering both urban and rural residents as customers. We cooperate with gyms and fitness centres to offer products and services to them, guiding people to live in a healthier way. There are two main lines of our operation. For city residents, we offer the experience of the healthy life-style of the countryside, such as natural foods and outdoor leisure activities. In addition, we build up professional trainer teams to guide them towards better experiences.

For rural residents, we set up health clubs and build equipment for them. We also train the residents to be professional trainers in our health plus centres so they can provide medicinal diet and health advice for the urban residents. As our employees, they will also get free or more convenient accesses to our services. We link these two sides together to drive a system also involving related industries and external support.



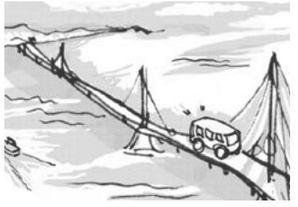


The physical model of "Health PLUS" project



1. When you register at the gym, fitness club and nursing home, you see H+'s advertising and information. You will get a chance to experience the short-dated healthy trip in the country.

2. One nice weekend, you take part in this event with other members from us.



3. You take our shuttle bus across the Changjiang River Bridge, go to Chongming Ecological Island where we have established a outdoor base.

4. Chongming Island, maintains the natural landscape and ecological environment well.

5. There are open filed, fresh air and warm hospitality of the villagers here so that you get a good mood.

6. You will stay in the standardized accommodations converted from the local houses. The hosts who got through our training will provide you with the best quality services.

7. You get advices from professional health advisors and nutritionists, such as healthy diet and nature-intimate outdoor leisure activities.

8. In the early morning, instructor leads you into morning exercises as Taijiquan along the country lanes.

9. You have breakfast with your hostess. And she introduces you the natural food grew by themselves. She also tells you a lot of healthy diet recommendations.

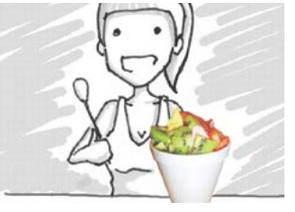
10. You start a bike trip around the island, seizing this rare opportunity to experience nature.

11. Or you can relax and enjoy yourself to have a yoga time in wheat fields.

12. Forget the video games, run in the fields, know new friends.

13. A little labour, much health. Besides, it's really a special experience.

14. You practice the skills of fishing and learn how to concentrate. Through conversations with others, you also experience more.



15. The right amount of dinner with fresh fruits, yogurt and vegetable soup keep you fit and your body in shape.

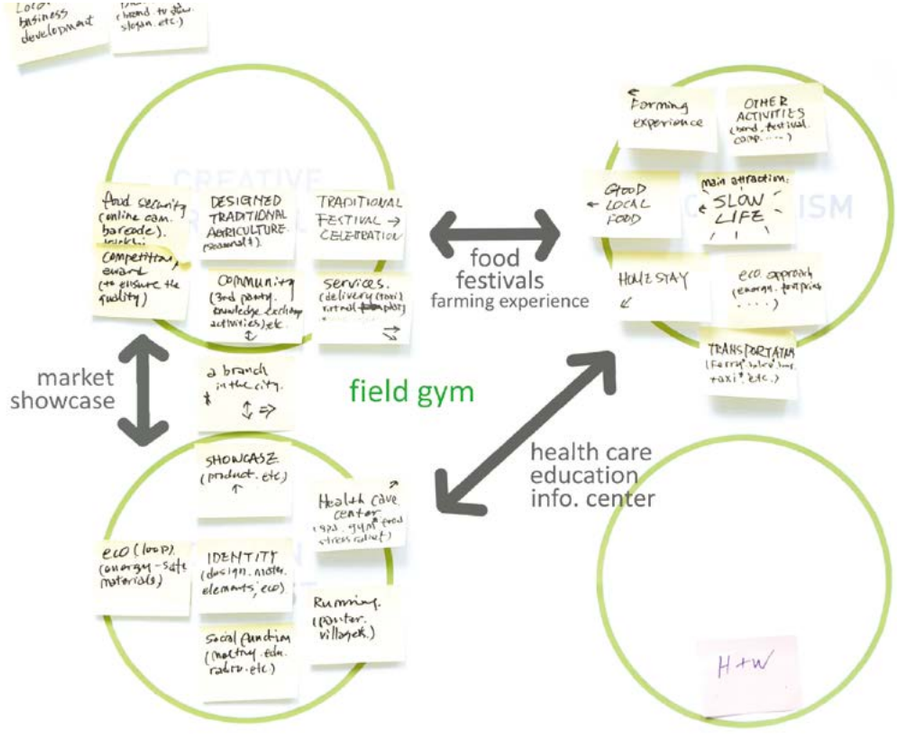
16. You buy the local-grow fruits and vegetables to bring the freshness and health home.

The storyboard of "health plus" project

BUSINESS SERVICE DESIGN BRAINSTORM WORKSHOP

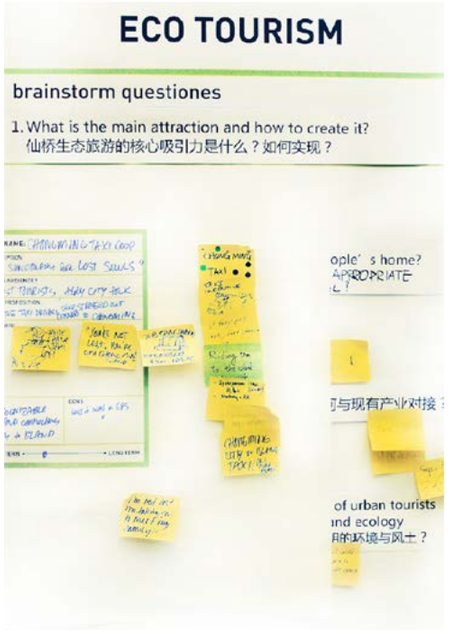
As the project was transiting to the practice phase, Studio TAO needed more supports from the outside, especially from the business world. One of the basic strategies of the project is building up a network of individuals and organizations from different backgrounds, but sharing the same values and passion in social innovation and sustainability in order to realize the design concepts using different resources and skills. At the starting point, Studio TAO cooperated with IDEO. The major mission of this phase of the project was to bring the developed PSS design concepts into reality, and to seek business partners for the ideas with the most potential. Thus, on Jan. 29th, 2009, Studio TAO hosted a one-day intensive workshop together with IDEO to explore the possible business models. Besides members from Studio TAO and IDEO, we invited professionals from enterprises and academia, such as economists. The discussion was focused on the Innovation Hub, Creative Agriculture, and Ecotourism.

These were not only the "stakes" in the project but also opportunity areas with great potential and market demands. Among these, Innovation Hub was the touching point of other ideas but also facilitated more possibilities and flexibility, and it would be the first design concept to be carried out by Studio TAO, so we wanted more feasible business models as a reference. To open the discussion and also help the participants to think more realistically, we set up a few How Might We (HMW) questions. The workshop consisted of free discussion, group discussion, presentation and feedback. The final outcomes concluded into diagrams showing the concepts and connections between them. Many of the concepts were generated in the three key opportunity areas and also in the overlapping areas.



Overview about the systematic boards built during the workshop

Results and images of the business service design brainstorming workshop



3

OUR DESIGN APPROACH

OUR DESIGN APPROACH

3.1

METHODOLOGY

* The Systemic Design Approach
* Ethnographic Research Approach
* Prototyping Approach

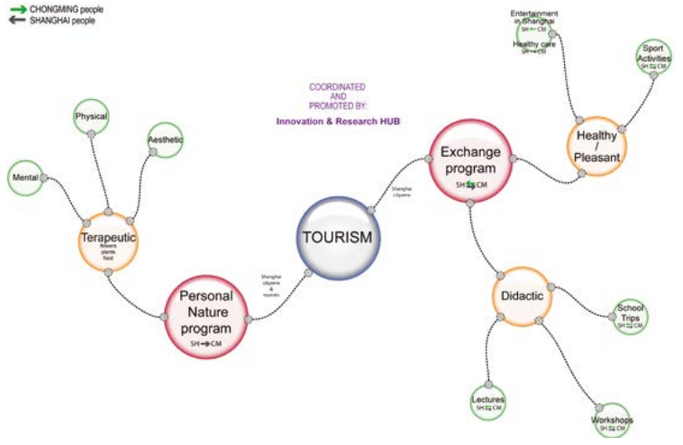
THE SYSTEMIC DESIGN APPROACH

Luigi Bistagnino, Francesca Carnevale,
Antonella Espro, Francesco Spagnolo

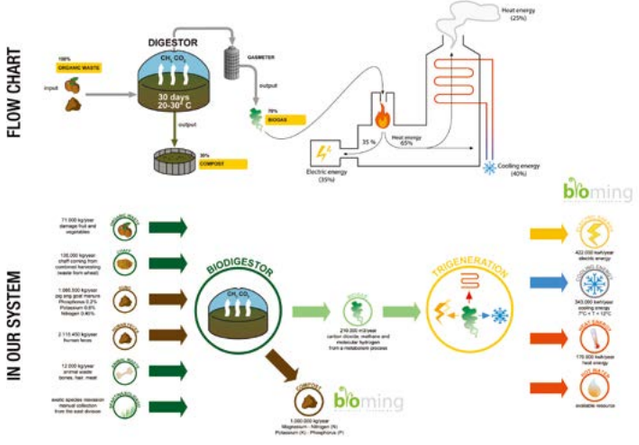
The system design proposed is primarily a different model of economics that activates, in a strictly local context, a network of relationships to transform the output of a production system into a resource (input) to another: a virtuous collaboration between production processes (agricultural and industrial) and the system of natural realms, the local context and community. The person, then the social community, must become the protagonist of any design activities. This is design for a new humanism summarized in the slogan "Man in the middle of the project ". This is not an anthropocentric view, it does not mean that the human being is superior to everything, including nature, but rather is inside a network of relationships, where life (biological, ethical, social) has a higher weight than the overall value system.

The starting point is System Design: the design of open systems where there is no production waste. The end point is a benefit for the whole community: total output reduction of a product, generating new jobs, more profit for businesses and individuals, virtuous new collaborations between different subjects, improved environmental quality and the possibility for humankind to have a future.

The current linear production model, even when implemented with efficiency measures in its production process, recycling and saving products and their waste, does generate waste that at the end of the process becomes a significant social cost. The problems inherent in processing waste are instead placed atthe level of supply and use of raw materials. Thus, we will deepen the main quality of output, not just its quantity. The approach to the world of production must change, no longer acting in a "linear" way, but as a procedure for "connections", drawing solutions from a "new culture" that is truly interdisciplinary.



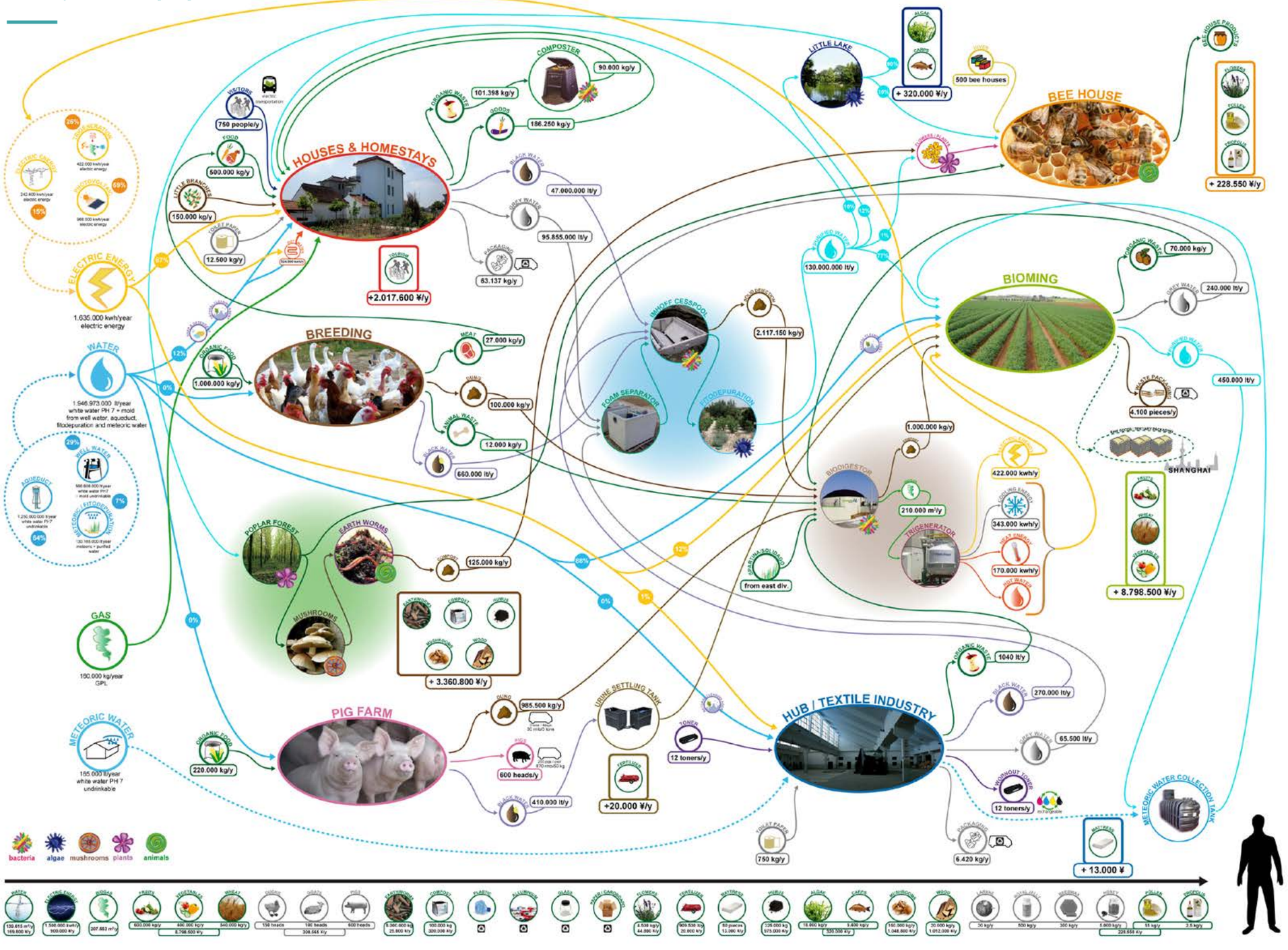
System design research of the Chongming Project



Thus, we did the investigation through desk research, communicating with local people, experiencing their daily life in the local setting. Finally we had the fresh information and analysis of geophysics, economics, and sociology. We got to know the distribution of resources, fauna, and flora in Chongming; the agriculture, industry, and tourism situation now; and people's different opinions and needs at different ages.

Through this investigation, we understood the situation in Chongming finding many problems and potentials. After studying some other cases, we generated some possible solutions. Based on these possibilities and considering the local situation, future trends and people's needs, we finished the whole system design.

General overview map and details of natural resource systems on Chongming Island



ETHNOGRAPHIC RESEARCH APPROACH

Francesca Valsecchi, Serena Pollastri

Ethnography was originally a research method developed from anthropology that sought to present a detailed and disciplined account of the social life of peoples different from the ethnographer's own (mainly pre-modern/non-industrialized societies) by conducting detailed, long-term fieldwork investigations into the society of the ones studied. Later it was developed into more of a generic research method employed by sociology and other social sciences to gain understanding of any given group of people, including migrants, political activists, artists, consumers, etc., and even groups of which the researcher himself/herself is a member. The main idea behind this methodology is that, in order to understand unspoken and immeasurable information, the investigator should try to experience the life of those who are studied, understand the assumptions in their culture, experience the circumstances they are in, and try to comprehend and make disciplined interpretation of their social life.

Today, the ethnographic method has been adopted by the design discipline, because it makes possible a deeper and more focused understanding of the context and the users involved. It's based on the realization that quantitative surveys should be supplemented by qualitative methods because not all data are quantitatively measurable, and also qualitative methods fall short when no participatory observation is employed, since there is a clear difference between what people say (when interviewed or in focus group discussions) and what they actually do. The complexity of the ethnographic process allows us to see patterns of behaviours in the daily life context and understand how these patterns are organized and changed. Direct contact with users is the key to designing a really user-centred solution that can be effective not only from a functional point of view, but is also socially and culturally potent. Ethnography helps the designer to see beyond preconceptions and see more needs and possibilities. When ethnographic research is applied to the field of anthropology or sociology, the observation of the group of subjects involved may last for a long time (can be years). Of course project schedules of the design industry normally do not allow such a long time for observing the target, and besides, such a deep observation is not necessary for the design purpose. In the design discipline the ethnographic approach should be concentrated in a short period of time (from days to months), and follow a clear structure that helps in staying focused.

The first step is to define the problem by understanding which aspects of the projects are considered (ergonomics, social impact, usability, market, etc.), what information is needed, and who the stakeholders are. After segmenting the target, the people to observe should be identified. Normally, to anticipate emerging needs, a good idea is to look beyond core users, and observe how extreme users behave. Extreme users are those who are more intensively involved, or carry on the activities under investigation in an uncommon way.

According to the typology of people selected, an adequate approach has to be planned. Existing knowledge on relevant social or behavioural aspects of the users are to be reviewed, if necessary, to allow the researcher to think beyond what he/she sees in the field or hears from interviewees. When interviewing, the researcher makes the process more similar to conversations rather than formal interviews, and encourages the subjects to freely explain and represent their reality. While receiving information from users, the researcher must spare no effort to keep on constructing a hypothesis or building up scenarios that can be provided to the interviewees for feedback.

In some cases, especially the design of services or products that are closely related to social interactions, where more social and cultural factors are at stake, there should be an awareness that interviewees' own accounts may not adequately reflect the reality. This is because interviewees may have concerns that obstruct their expression of problems, their ability to express them may be limited, or simply their needs may be limited. In these cases, more observational efforts are needed to supplement or test the information that's collected.

From the design perspective, the ethnographic plan is a design research tool for the understanding and interaction with high complexity contexts. From the designers perspective, ethnography is more than a toolbox of techniques borrowed from another research field. From the practitioner's mind-set, in which transformation and innovation come from both theoretical and practical interventions, ethnography is a problem-setting skill, a way to frame the problem, and this is why "observing and understanding" mean firstly being able to build one own and rigorous method. The ethnographer is a part of the observation itself when he

or she chooses a research method. For designers, this means choosing, and more often designing and building the communication toolkit. Constructing participant observation is a design project (of artifacts and process) that consider the need for a reflective and strictly analytic activity, and the importance of an approach to thick description of context by the use of several and mixed research artifacts (visual, probes, experiments, etc.).

Indeed during the years we acquire a deep knowledge of the context through a continuous series of ethnographic initiatives and exploration. This experience happens through workshops, conferences, public events, research- oriented sessions, focus groups, both with the people of the countryside rather than urbanites, providing potential participants interesting opportunities to apply, and allowing us to accumulate and experience variegated and multiform data.

After the process of collecting data, the design team's main effort is in summarizing and analysing it. A thorough and comprehensive review of the data should be planned in advance, including how to investigate, discuss and interpret the ethnographic data. Discussions and reflections on the data contribute to generation of ideas ed. Based on all the new understandings derived so far, structured description and interpretation of the users' traits and needs are made.

The final step, which is possibly as important as the previous steps combined, is to understand the implications of the social, cultural, and behavioural findings for the design objective. Good ethnographic research makes this step relatively easy for the designer, because the requirements are now clear. But, there is still a question: what design fulfils the needs of the users? That entails the need for experimental methods including prototyping and testing the prototype in the actual social and cultural settings. When testing the prototype, the ethnographic method is again useful for documenting and taking account of the users' adaptation to the new design. Design rhetoric refers to the ability and the purpose of design thinking and culture to enact transformations; ethnography is a way to face problem, setting through research tools that considers observation and dialogue as the necessary design premise.

The approach described here has been used at different steps of the DESIGN Harvests project, in order to get knowledge of the local community, and to collect ideas and opinions from different stakeholders including local villagers, potential business partners, and customers.

Field research of local knotwork market

The ethnographic research approach has been largely used in different steps of the DESIGN Harvests project

PROTOTYPING APPROACH

Serena Pollastri, Francesca Valsecchi

Function of a Prototype and How Is It Used

As a general definition, a prototype is a design tool to test the final solution by observing user interaction with a model of the service. This model can be a rough mock-up, a realistic model, or a beta-test of the final scenario. The important part to design, in every case, is the interaction with the actors, who should have the possibility to fully experience the service, evaluate it, and give feedback and suggestions to the administrators. The aim of the prototype is to verify what happens when external factors interfere during service delivery, in order to test the solution in a real context. When the final solution implies diffusion in multiple contexts, the first scenario that is developed can be considered as a prototype to be deeply analysed, transformed into a module, and applied in the other local realities.

The structure of the service must be clearly schematized through the use of technical tools like maps, blueprints, storyboards and interaction maps in order to make all the details of the solution clear and visible to the design team. The design team must then be ready to identify the critical parts during the evaluation process and modify them, considering how each change influences the whole system. Some tools to enable the active participation of the user must also be designed, to integrate their contributions in the design.

Prototype for Urban/Rural Relation

The Xianqiao Sustainable community project is meant to be a prototype of an urban/rural relation sustainable solution design. The basic idea is to create and analyse a model that can be exported later on in different contexts, including redesigning, from time to time, the aspects that are more strictly related to the specific location.

The situation of Shanghai and its relation with Chongming Island is a ideal model of the coexistence of rural and urban reality. In this context, thanks to the geographical characteristics of the area and the development strategy planned by the government, the identities of the two places are maintained, and the clear borders between the two areas contribute to making the distinction even more evident. For these reasons, the Chongming/Shanghai context has been chosen as the location for developing the prototype of a system of solutions designed to achieve the rural/urban balance.

Once the scenario is created, analysed, schematized and evaluated, the general structure can be exported and adapted in different contexts, to contribute to the sustainable development of rural China.

Starting from a small village in the island facilitates deep understanding of the context and the involvement of all the members of the community as active users and co-designers. Micro-relations can easily be understood, as well as the changes that the new scenario brings to the socioeconomic structure.

Details of the Prototype Process

The prototyping of a solution in a given context starts with the deep understanding of the local reality and the community to be involved, whose members should also understand the general idea and their own role in the prototyping activity.

Early prototypes of the non-finished solution can also be useful to communicate and visualize the spirit of the final solution. In the DESIGN Harvests project, the opening ceremony of the Hub took place before the construction of the site started, in order to show both the urban and the rural community the sense of the new place, and get early insights and suggestions. The network of small services created in the village, grouped and organized around the innovation hub and following the visions of the innovative community, then works as the final prototype of the rural/urban balance model. It can be exported to other contexts.

Having a first prototype is also useful to explain the details of the proposals, the benefits, and the critical points to possible new investors and interested partners.

Prototypes in different steps, from products to services

OUR DESIGN APPROACH

3.2

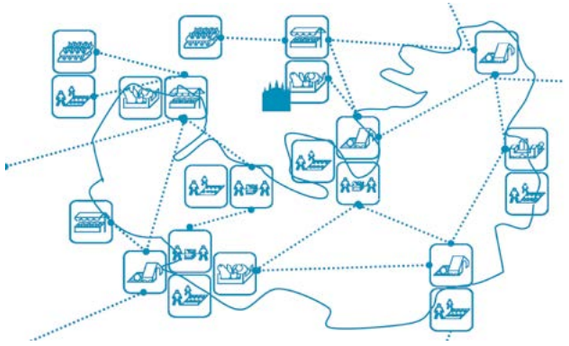
A STEP-BY-STEP PROCESS

* Exploring Methodology
* Seeking Potential: Village Economy of Xianqiao
  Envisioning Village Services
* Identify Strength: Milano & Shanghai
  Agriculture on the Edge of the Town
  The Chongming Kitchen Project Workshop
* Refine and Synergize: Rural Public Space—
  Defining New Typologies Workshop
  System Design for Sustainable Tourism
* Bridge and Connect: DESIS Network, DESIS China
  and the Chongming Pilot Case
  Consumer Needs Research
* Branding: Creating a Chongming Brand
  Creating Connection Through the Branding of
  Local Handcrafts
  DESIS 2011 Design Summercamp, Connecting
  Rural-Urban To Promote Social Innovation

EXPLORING METHODOLOGY

Francesca Valsecchi, Serena Pollastri

Steps of the exploring process of the project



The systemic connection of the services in the Agricultural South Park project

In the last years we carried out different activities and workshops with students and user groups. These activities have been conceived according to the acupuncture perspective: single initiatives unified in a general framework with the idea of working on the topics related to the island in a holistic way. Then, each of these activities had a specific context of ideation, developing different tools with specific purposes and intentions, etc. Moreover, with this approach, we intended to follow the methodology process we previously outlined: through a systemic design conception we had an overall design plan; then we conducted different actions for a deep understanding of the local situation; finally we strived to make each action conclude with a final prototype solution.

Regardless of their specificities, each research activity referred to a general methodology framework. The methods used proceeded from exploration-based research, gradually approaching interpretative and creative ones.

The framework was based on the idea that, in order to verify and implement a solution model based on resource exchanges between rural and urban, a vision of the island as an open knowledge system is utilized, and the research phases gradually explore the knowledge. The previous schema summarizes the research process, describing the different steps in which knowledge is discovered, explored, and fostered.

In the first step (called seeking potential) we looked for potential resources from which we could identify major and more relevant strengths. This action required deep exploration and interaction with people. We discovered that what we could consider as local strengths were not necessarily unique and special features, but they were mostly hidden. There were also corresponding weakness in simple ordinary processes and activities. This is the phase of identifying strengths. In the case of Chongming we found two interesting directions that we are currently including in the implementation phase. The first direction is the handicrafts system of the island, that currently consists of a spontaneous flow of tradition and knowledge, but is underestimated as a local resource and economic driver.It is a diffused and dispersed activity. Another example is the system of values connected to the kitchen, as a place that is not-designed but still is typically and traditionally equipped: around the kitchen a dialogue converges about the food chain. So it is around the kitchen that more conversation and envisioning can be done, to discuss food production and agriculture techniques, as well as food consumption and habits. Starting from these enhanced topics we proceed with the concept implementation, following an approach that narrows down to specific actions and then collects and connects their impact for the benefit of the whole system. Several workshops that we have documented in the book have been conceived in order to explore the discovered research directions. The outcomes are then integrated and used as part of documentation that nurtures the factual design project. This is the “refine & synergize” phase.

A way to clarify and make this benefit concrete is to transform the knowledge we acquired from the system in tangible out- comes from the system itself. Through branding, as a latter phase, we intend to create the dissemination material, identifying artifacts and products involving the island and their habitants in a conscious bottom-up process of self-recognition and enhancement. These are the phases of connecting & branding.

HOW OUR METHODOLOGY APPROACH WORKS:

THE SEVERAL WORKSHOP ACTIVITIES THAT HAVE BEEN ORGANIZED HELPED US TO COLLECT DEEP KNOWLEDGE ABOUT THE CONTEXT AND TO PRACTICE AND DIRECT INTERVENING IN THE ISLAND SYSTEM.

ACTION

WAY OF IMPLEMENTING

- **SEEK POTENTIAL**
  Explore the context in term of resources, possibilities and weakness

- **IDENTIFY STRENGHTS**
  Focus the design interest on specific patterns and explore deeper

- **REFINE AND SINERGIZE**
  Experiment with intensive design activity through participatory actions and include in the process the evaluation of results

- **BRIDGE AND CONNECT**
  Disseminate and discuss the experiments with partners and stakeholders

- **BRANDING**
  Approach a medium-term strategy of design implementation

SEEKING POTENTIAL //

ILLUSTRATION: VILLAGE ECONOMY OF XIANQIAO

Clarisa Diaz

The wife of a village leader grows vegetables on a quarter of an acre with the purpose of selling them. She said it is mainly for exercise as it takes work to plant and pick all crops and take them to the town market everyday.

She grows bok choy, green onions, herbs, garlic, potatoes, radishes, spinach, peanuts and yam.

The soil quality is above the PH level of 7 but farmers claim this does not affect the growing of vegetables. Some neighbouring villages grow rare vegetables in greenhouses that bring more income. Their vegetables are bought by companies that sell the produce in Shanghai. Xianqiao residents are also willing to do the same if there are companies in charge of selling their crops and the market is ensured.

All the vegetables are grouped in plastic bags that all fit into a basket. The basket is hooked onto the side of the bike to ride back and forth from Xianqiao village to the market in the town centre. It is a 15 minute bike ride and she considers it good for her health while earning a little extra money.

A family owning a former barber shop now runs a seasonal kitchen for making Chongming Cake, a special rice cake eaten during the Lunar New Year holiday. Families in Xianqiao and other villages pay to order Chongming Cake and each give extra rice and sugar to make their cakes.

The kitchen operates for 20 days only in January before and during the New Year Festival. The cake can be made in various sizes and shapes. It mainly consists of steamed sticky rice and sugar with fruits and nuts added according to taste. Each cake takes a half hour to steam, making about 20 cakes per day.

These are men from neighbouring villages that make a freelance business out of gathering extra soy beans grown by residents. They ride from village to village with a speaker calling for the beans. They pay the families a small amount for the extra beans. Most families grow and harvest soybeans on their own, whereas other staple crops like wheat, rice and rapeseed are planted and harvested by the government. The soybeans are then sold to food producers in the town to make tofu and other soy products. The collector can sell the beans in the town for a higher price, making an income of RMB 15,000 per year. The products are sent to Shanghai for distribution. A few men also gather crabs and turtles from other villages nearby.

This Xianqiao resident runs a successful pig farm. He owns six sows and more than 50 piglets at present. When the pigs reach 100 kg in weight, they are picked up by a client in a truck to be inspected. The pigs have a higher quality of meat since they are only fed organic materials mainly consisting of corn that the owner orders in bulk from outside of Chongming.

The owner previously worked in a factory that produced organic animal feed, then he decided to quit and used his knowledge to raise pigs. He makes up to RMB 870 per 50 kg and raises on average 200 pigs per year. He also sells pig waste for organic fertilizer at RMB 20 per truckload.

There is a group of residents forming an association in the village. They work for the local government to plant and harvest rice, wheat and rapeseed. Mechanized planting and harvesting alternate between rice in the Spring through Autumn and wheat from Autumn until the Spring. All farming is mechanized except for the fertilizing process. The family who has the land rights to a field must fertilize the crops. These are chemical fertilizers since it is claimed there is not enough biological waste produced in the village. Every family is given land rights to about a quarter of an acre per family member. Most of their land is used to grow the crops issued by the government with a small portion of space in between fields for vegetables, fruit, sugar cane, sesame seeds, sweet potato, taro, herbs and beans.

Weaver who makes baskets and containers out of bamboo. The baskets are sold to other residents at RMB 10 each. The low price keeps the quality crafts in competition with plastic containers that are cheap and readily available in the market. He believes that if he were to raise the price of his crafts, residents would buy the plastic containers instead. There are basket weavers in neighbouring villages who sell their crafts in the town marketplace. Because of his age, he prefers to make the baskets in his free time and sell them from his home.

This construction team consists of workers from other villages who are hired by the local government to build bridges and roads.

Most of the workers are elderly people who want to earn extra money. They each receive RMB 40-50 per day. Work is done by hand, aided with simple equipment, making the process labour intensive.

Xianqiao resident who makes an active business from raising bees. She and her husband built 50 bee houses on their land to make honey. The bees gather pollen from the flowers of rapeseed, a staple crop in the village. She steams the honey to process it and makes 500 to 600 jars per year.

They are sold to residents in Xianqiao and to many residents in neighbourhood villages. The bees pollinate from March until October and the honey produced is stored and sold all year long.

SEEKING POTENTIAL //

STORYBOARDS: ENVISIONING VILLAGE SERVICES

STORYBOARD 1:
Zero Kilometer Food Chain

1. Skill/Knowledge Training

2. Community Garden

3. Pick up from city farm/community gardens

4. Organic-fed animals

5. Food Packaging

6. Chongming Delivery Van

7. Ordering

8. Retail stores

STORYBOARD 2:
Leisure Experience in the Countryside

1. Chongming as Shanghai's Nature Haven

2. Access information about visiting Chongming

3. Experience farming

4. Collect ingredients for meals

5. Learn at the Chongming Cooking School

6. House-to-house tasting

7. Have dinner in family restaurant

8. Bike Rental System on the island

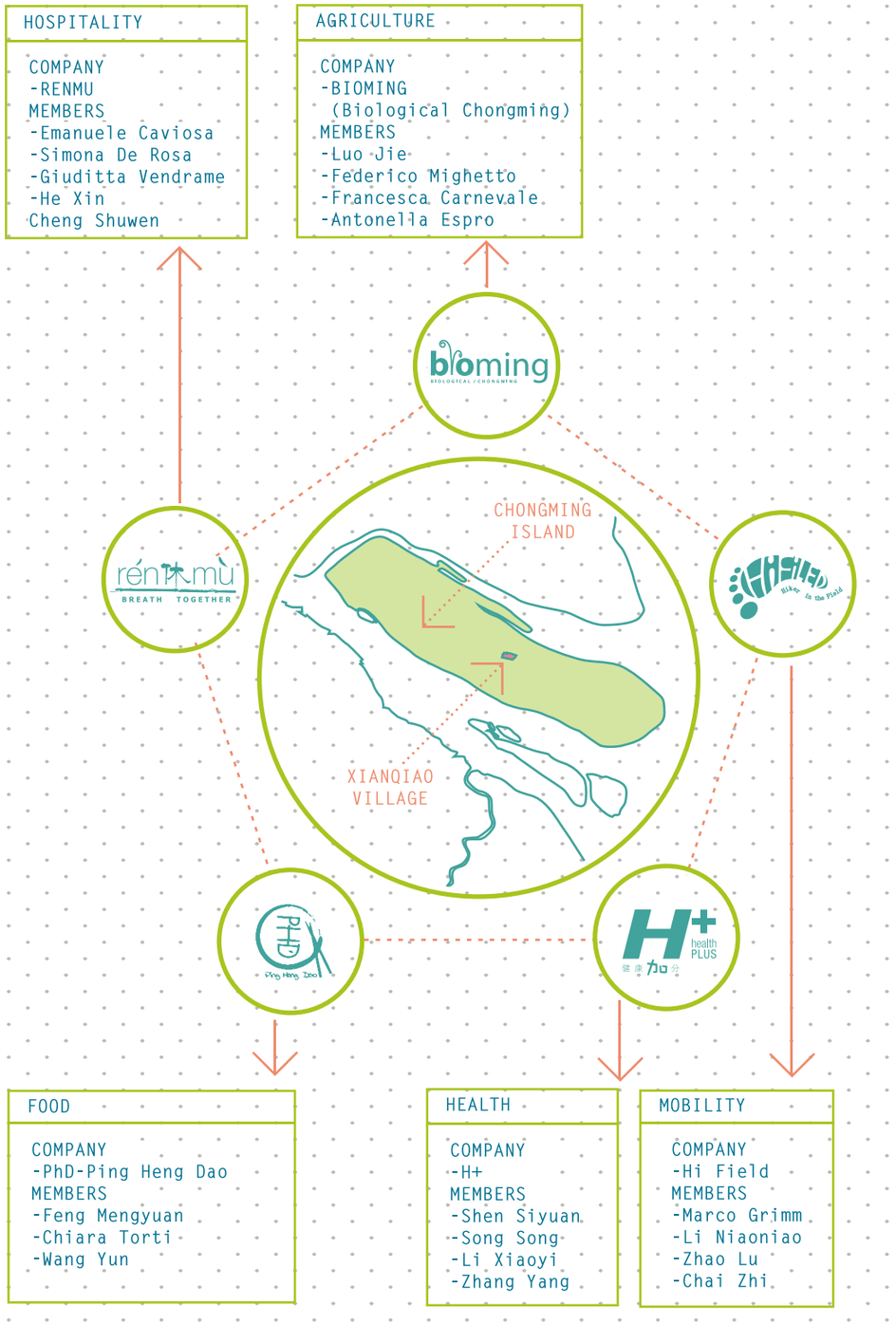
IDENTIFY STRENGTH //

MILANO & SHANGHAI AGRICULTURE ON THE EDGE OF THE TOWN

Anna Meroni

Milan and Shanghai: two cities, a long distance apart, different cultures, similar problems and opportunities. The chance to make some common design thought has come from a couple of applied research projects, anticipated by academic workshops with students in Service Design and Product Service System Design of the School of Design of Politecnico di Milano, and the Politong Masters Program[1].

The cities (as with many metropolises of the contemporary world) hold extended peri-urban areas lying between the urban settlements and the rural surroundings: rururban territories (Donadieu 1998) that still keep a mainly agricultural identity. This is the case of the Agricultural South Park of Milan and Chongming Island in Shanghai. These territories are places which are today critical contexts of the sustainable development of urban areas. They are subject to urban expansion and the agriculture is threatened. It is here that urban and rural dynamics meet, creating unique opportunities to improve the quality of everyday life and make a decisive step towards sustainable development.



New Generations and Future Scenarios

A new generation of designers needs to grow up, be trained to develop new skills, and be equipped to contribute to solving new kinds of problems, both systemic and wicked (Manzini in Meroni, 2007, Buchanan, 1992). At the same time, a new generation of entrepreneurs needs to flourish, oriented to the so-called green economy. While committed to jobs, they are potentially the engine of this economy, but the jobs ought to be reinvented in the light of contemporary lifestyles. One of these jobs is that of the farmer.

The opportunity of designing for peri-urban contexts with students of interdisciplinary curricula trained to develop a strategic approach to design offers a great chance. An alternative awareness of design and business can be created among the youth, where emphasis is more on the environmental, social and ethical issues of the community. We took this chance and set up a design process where training activities were synergetically integrated with action-research. Actually, in both contexts, an initial self-commitment and a research demand from local actors created the opportunity for a series of academic workshops and for further structuring of projects, as will be discussed here.

Similar design contexts shed light on the ethics and values of a project. This can orient design actions to make these values tangible, and develop an approach connecting design to human dignity and human rights (Buchanan 2001). In doing this, a shift from the concept of User-Centred Design to the one of Community-Centred Design is implied (Meroni 2008). Here, understanding behaviours and collaborating with the most active social communities in conceiving and developing solutions (Ogilvy,2002, Jégou and Manzini 2008) is the distinctive work. In this way urban systems are established for the coherence of productive systems with local resources and entrepreneurship, and capability and self government by local communities are developed. In short, this is “community sovereignty” (Magnaghi 2000). Both contexts call for projects to be able to strengthen the cultural, economic, and social capability of the places. Products and services are proposed for a more sustainable food system, characterized by ecological practices of local production, distribution, and consumption (Petrini 2005).

Both contexts, then, are characterized by the presence of cases of creative communities and entrepreneurs (groups of people who creatively organize themselves to obtain a result in ways that are promising steps towards sustainable ways of living and producing - Meroni 2007) This kind of social innovation that prototypes innovative behaviours can be seen as a driver for technological and production innovation. Practices combining a high degree of feasibility and an impressive visioning with the power of transmitting provide us their ideas, feed our imagination about the future

and become the source of inspiration for new solutions and services rooted in existing resources. They embody in a positive and fashionable way the contemporary interpretations of some of the previously-mentioned crucial jobs, such as the farmer, which we believe lie at the base of a truly green economy.

To grasp the enthusiasm, the vitality and spirit of initiative they express and, along with this, the unconventional and fragile beauty of these places, a field immersion aiming to pursue a direct experience of the contexts has been decided as the method of work. This de-mediated knowledge of people and places goes under the definition of empathic design, as an approach by which designers are pushed to move in real contexts so that projects benefit from emotions of both users and designers (Leonard and Rayport, 1997). In fact, good knowledge of the context is the condition that enables designers to make reasonable proposals. To activate people, to spur them to take action and collaborate in doing things, we must be aware of the kind of behaviours a community will be willing to take up. We must be conscious of the "latent attitude" to action that can be enhanced in a given context. Moving from here, designers can work with local communities to develop scenarios, namely hypotheses with some chance to find the right humus to flourish as future solutions, and to take the responsibility of making them happen (Ogilvy, 2002).

Designing scenarios for and with local communities requires the designer to be able to manage collaborative processes and transdisciplinary skills. The design for services approach chosen to conduct these projects actually contributes by imagining future scenarios. It helps collaborative design practices to happen, exemplifying systemic changes at the level of everyday experiences, and materializing big shifts into tangible lifestyles and business opportunities (Meroni and Sangiorgi, 2010).

Method of Work

The method of work adopted in both Milan and Shanghai project can be summarized in the following steps:

- Resources and assets mapping: finding, analysing and visualizing the "place capital" (natural + artificial + social) and the relative potentialities.

- Social innovation mapping: finding, describing and representing the local creative communities and their initiatives.

- Scenario and solutions design: co-designing a set of scenarios for the context, exemplified in specific solutions connected to the existent social innovation.

- Pilot projects definition: finding the most promising initiatives and developing ideas about how to replicate them or start up new initiatives using existing assets.

- Project networking: linking projects in a local system, creating mutual connections and relating them to the external environment.

- Projects dissemination: communication of single projects and of the whole scenario.

The aim of this process is the generation of a set of ideas for local activities, interconnected into a network strategy that binds all of them into a consistent scenario and creates strong synergies. These ideas, essentially services that creatively valorise the resources of the context and take inspiration from the creative communities, are then considered as the functional, economic and social pattern driving regional planning and technical development of the areas.

The specific design contribution therefore consists of offering a methodological toolbox for supporting a new paradigm of urbanisation, founded on the identification of the relational qualities of the local community, and aiming to amplify the local virtuous initiatives, rather than the techno-functional ratio, in a vision of connected and symbiotic networks.

This same approach has been adopted for both design workshops with students and the more extensive research project conducted by academic and professional teams. The continuous cross-fertilisation of the activities has brought to the formalization of an action-research process, whose validity has been proved by the fact that the ideas developed have opened up new opportunities for work. Actually, the Milanese project started as a small methodological research funded by the government, and then evolved into a bigger specific project funded by local institutions, titled Nutrire Milano, where students' contributions have been integrated in the process, and the topic has become for them the chance to face a real context of application .

This case demonstrates how didactics and applied research can be mutually beneficial when methods and tasks of the work are clear and consistent: they feed each other with stimuli and knowledge, alternating phases of exploration, assessment and development.

Agricultural South Park of Milan

The Agricultural South Park, whose fields are partially rented out to farmers and partially owned, is a huge agricultural area bordering the south of Milano. Presenting all the features of a peri-urban agricultural area, it is currently suffering as small farmers abandon the fields and the soil is overexploited by agro-industrial production. As their contracts expire, leaseholders fail to invest in new infrastructures and services. Small producers are not stimulated to invest money in the business, which is no longer profitable in a mass distribution scenario. Land is also subject to aggressive building programs. Despite this situation, the previously described creative communities network has emerged, and seems to have opened the way for some sustainable scenarios.

The project has taken this virtuous situation as a starting point from which to develop a coherent system of ideas, consisting of eight service models that find inspiration from the observed reality, and take it a bit further (Meroni, Simeone, Trapani, 2008). They represent a first outcome of the research, resulting from a workshop with service design students and a further deep reconceptualization.

The park collective brand: a brand featuring the local initiatives that is the result of collaboration and networking between different actors, favouring local distribution and adopting eco-friendly production techniques.

The farmers' market: placed in dedicated areas within the most important street markets, here local products and local services are sold side by side in a new formula where people can find local food products and service packages to enjoy the park and a refreshment point with local food.

The public green procurements: a service that creates touch points between producers and consumers through the realization of critical mass and the organization of shared platforms for goods exchange. It works like an auction where the discount on the products increases with the increasing number of people who join the auction.

The food box subscription: a service that makes more accessible to (for cost and convenience) the direct food purchase from the producers, by delivering to home or in the neighbourhood a seasonal choice of vegetables, fruits, dairy products and meat.

The visitors' centres: a network of centres, diffused and contextualized in different strategic locations, welcomes visitors in the park, combining physical access to the territory with access to its knowledge and produce. Each is a multifunctional centre, besides offering support to the visitors, and becomes a service hub for the area.

The rural cultural centre: a research centre at an historical building that explores the value of local biodiversity through activities carried out by scientific researchers and experienced local farmers.

Horticulture: a service that transforms available fields on the farms into allotments to be cultivated by "professional amateurs" in exchange for a fee, following a collaborative pattern based on trade of favours and products, and managed on a credit system.

Urban indoor/outdoor agriculture: a service that gives supports to users in implementing gardening technologies for urban agriculture.

These service models propose a system where local food production and consumption are the means of sustainable development of rururban areas. Built on the principles of direct relations (de-mediation) between producers and consumers, and on the idea of collaboration among the actors, they allow small enterprises to differentiate in the market, activating a quality market besides the mass one.

These service models finally have, so far, worked as first "objects" for the conversation about the future of the Park and have offered the initial conceptual framework to develop the on-going project Nutrire Milano, whose aim is to set up a system of services and infrastructures supporting a sustainable food network in the area. In fact, the pillars of these projects are multi-functionality, remediation and collaboration.[3]

The main actions that are about to be undertaken are: 1) supporting existing best practices and resources; 2) activating resources not yet / no more valorised; 3) creating new services. All this via pilot projects, some of them, such as the farmers' market already under experimentation, have the intention to create a factual sustainable city aligned with the perspective of the International Expo 2015 in Milan.

Chongming Island

Chongming Island is a huge agricultural land connected to the city of Shanghai by a recently-built bridge or a short navigation. Still devoted mainly to conventional farming, it is likely to be taken over by urbanisa-

tion, given the fragile nature of the local agricultural business. Actually more and more of the youth and adults are leaving the village for work in Shanghai city, but are neither attracted to city work nor to village life on the island.

The workshop we held with the students of the Politong program was focused on envisioning and designing a network of new and creative business ideas, able to create an entrepreneurial community in the village of Xianqiao, which has been planned to be one of five model villages of future rural development. The result was a set of 5 ideas in different fields:

Food: Ping Heng Dao is a service that aims to transform the village into the land of balance, where eating has a natural role in a healthy lifestyle. It provides the balance and the connection between food and life, by discovering and utilizing traditional Chinese medicinal food.

Agriculture: Bio Ming is a service that brings to the urban customer an organic choice of products from the island. Fruits and vegetables are local, seasonal and regularly delivered to different points of sale in Shanghai.

Hospitality: Rénmù is a service that valorises the local habits of the villagers in welcoming visitors. It encourages the renovation of traditional constructions for accommodating the visitors, instead of building new ones, and stimulates interaction and cooperation with villagers.

Mobility: Hi Field is a service that makes field paths accessible to visitors and more attractive to the villagers, by creating a system of trails allowing them to get closer to the intangible pleasures of nature.

Health: H+ is a service that provides health packages on the island, making participants practice open air activities while enjoying nature.

As for the Italian project, this set of ideas has worked as input for more developed ones, and has contributed in testing the method of work.

Network Organizations

As already mentioned, a key element of the projects is the network organization, how the different services are connected to support one another and to frame a consistent scenario. Actually network organizations respond better to changing contexts and economies by struggling to balance stability/ flexibility, specialization/generalization, centralization/decentralization and reducing possible losses through burden-sharing (Van Alstyne 1997).

The social and relational basis to build the network is the need to enhance actors' perception of a coherent community where everybody (the local "change makers" - Drayton, 2010) contributes to collective success.

This is facilitated when a shared vision confers the network with a sense of identity, claims values, creates trust and orients motivations, actions and strategies (Van Alstyne 1997). The functional basis to build the network is the need to share or complement the various assets and operations of the different activities, so as to make beneficial synergies. Actually, a network tends to internally codevelop specialized assets, and these are jointly owned or integrated.

Three forms of synergy can be identified according to the kinds of activities that can be synergized:

- Synergies between analogous activities: economies of scale and scope of similar solutions which can benefit from sharing some operations and infrastructure, and creating critical mass.

- Synergies between complementary activities: economies of scale and scope between different solutions which, while delivering different products and services, have many common elements since the outputs of one activity become the inputs of another.

- Synergies between compatible activities: economies of scale and scope between solutions which, when combined, can generate mutual virtuous savings and reinforcement.

Synergies allow collaborative problem-solving to happen, meaning that they create the condition for breaking tasks into sub-tasks and sharing them (Van Alstyne 1997), activating collaborative services (Jégou and Manzini 2008) and collaborative entrepreneurship (Dayton 2010).

According to the network theory (Halpin and Summer 2008), a network with few hyper-connected nodes, hubs, and a long tail of less-connected nodes, is likely to be more stable and resilient in turbulent environments. Successful networks naturally evolve several or many important hubs having redundant functions and roles.

Then, social motivation, the visionary intention to impact social and political patterns, is likely to be a distinctive point of the hubs: actually

motivation is a powerful driver that pushes nodes to constantly activate and test initiatives. This makes them evolve as hubs (Drayton 2010, Meroni 2007) and moves people forward based on ethical reasons.

For both Italian and Chinese projects, the network organization resulting from the connection of the specific services into larger patterns, is taking the shape of a system with diffused hubs and a long tail of nodes.

Hubs have a multifunctional identity, as they play the role of operational support in the businesses gravitating around them, implement different kind of synergies and result from the convergence of social and human energies. Nodes mainly perform specific roles and benefit from few synergies with few similar identities.

Altogether these networks outline different scenarios of Community Supported Agriculture in which organization, food production, trading, hospitality, leisure, cultural and social activities create a unique mix of functions, adding value to the territory and its social fabric.

NOTE

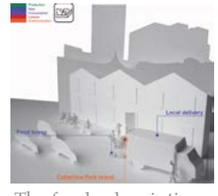
1 Politong is a Double Master Degree program on Product Service System Design between Politecnico di Milano and Politecnico di Torino in Italy, and Tongji University in Shanghai, China.

2 The first commitment for the project came from the PRIN, Miur, 2006 – 2007, Italian University and Research Ministry, then in 2009 Fondazione Cariplo, Comune di Milano and Provincia di Milano, have funded the project "Nutrire Milano. Energie per il Cambiamento" (Feeding Milano. Energy for change) where Politecnico di Milano partners with Slow Food Italia and Universit à di Scienze Gastronomiche.

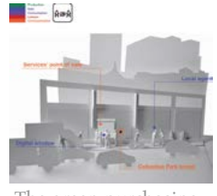
3 Named "Il mercato della Terra" and following the specifications set by Slow Food.

4 The workshop was held by Anna Meroni and LOU Yongqi with the support of Miaosen Gong, Clarisa Diaz, Joon Sang Baek and Fang Zhong. Participants: Francesca Carnevale, CHAI Zhi, CHENG Shuwen, Antonella Espro, FENG Mengyuan, Marco Grimm, HE Xin, Emanuele Laviosa, LI NiaoNiao, LI Xiaoyi, LUO Jie, Federico Mighetto, Simona de Rosa, SHEN Siyuan, SONG Song, Chiara Torti, Giuditta Vendrame, WANG Yun, ZHANG Yang, ZHAO Lulu.

The farmer's market



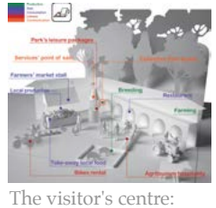
The food subscription



The green purchasing

The service models of the Agricultural South Park project propose a system where the local food produc¬tion and consumption is the means of the sustainable development of rururban areas.

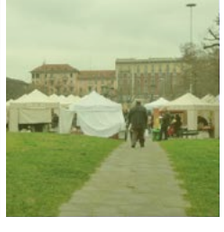
The horticulture



The visitor's centre: Park Point

The rural cultural centre

The urben indoor/ outdoor agriculture



IDENTITY STRENGTH//

THE CHONGMING KITCHEN PROJECT WORKSHOP

A presentation to the farmers to get inspirations and feedbacks

In traditional Chinese rural life, the kitchen plays a key role, standing in the forefront of very long-established culture. It is a main place of preparing food and consuming energy; a public space for family members to meet and communicate in the house; and a place closely connected with local economic development. In other words, the rural kitchen is a very important carrier of traditional rural culture and lifestyle.

We cannot ignore cultural heritage if we want to develop a truly sustainable society. We should dig and develop the value of rural ways of living from public life, energy consumption, food manufacture, and quality of living.

In May of 2009, together with Studio TAO, Tongji University cooperated with Fudan University, China; Bern University, Academy of Art and Design Basel (HGK Basel), Switzerland, Interior Architecture School and Scenography European Graduate School of Arts, Health and Society Division, Chinese Academy of Sciences; and Technológico de Monterrey, México, to hold a workshop of new ideas to create a platform for developing adjusted solutions for a sustainable contemporary and future living in Xianqiao village of Chongming Island.

The aim of this workshop was to use design thinking to discover and rethink the kitchen as the core of future living for the rural population of China as well as to design social, ecological, economical, technical, and functional innovations—translated into the space.

As the kitchen is one of the most important places in a Chinese house, it shall – again – become a symbol of health, happiness, and prosperity for present and future generations.

Our task was to find new perspectives for the village residence and to propose a series of interventions as well as to discuss the feasibility of implementation with Chinese users. After systematic analysis and design, we hope to improve and distribute the advantages of the traditional rural lifestyle.

The workshop was to be developed on the following topics:

- Industry/Business
- Architecture/Environment
- Craftsmanship/Tools
- Service/Lifestyle
- Energy/Waste

The students who come from five different countries and different disciplines joined this workshop, and finished all the work through intercul-

tural and interdisciplinary cooperation.

It was important to foster dialogue between the local population and the students to search for solutions that respect established Chinese traditions, by amalgamation of local customs with elements stemming from the backgrounds of the students. All the designs and research were based on "field work".

Through investigations and research in the village, or communication and interactions with villagers, they tried to analyse and understand villagers' daily life and way of using the kitchen, then found the potential points at which to develop solutions. It was a challenge to overcome one's own idiosyncrasies and to create solutions that are compatible with the requirements from all the professional perspectives involved (architecture, interior design, industrial design, sociology, mechanical engineering and land-scape planning).

Looking back, one can definitely say that The Kitchen Project brought about an increased respect for cultural differences, an awareness of diverse methodological approach in the five countries involved, and made a contribution to friendship and peace among the participating students and faculty members. Some excerpts of the presented projects are included in the following pages; for further results, please refer to the students' project website: *http://www.hkb.li/the kitchenproject/*

"First contact with 'our' family: A family living in a small village on Chongming Island in China receives seven foreign students, of which at least two are Chinese. The deal is somehow clear without needing discussion: They know we are curious to see how they live and cook, they surely expect something, although what exactly we'll probably never know. I remember the embarrassment and timidity of the first moment on both sides: the villagers felt observed, I felt embarrassed about the fact that we officially came to observe. I supposed the family would show us their kitchen and explain their daily life, and the Chinese students would translate it for us. But in the first moments they drew back, retreated to themselves. Having little opportunity to express ourselves because of the difference in language, we all smiled at each other and entered the kitchen. Thank god the atmosphere changed rapidly. The curiosity of the family members and also the fact that chopping vegetables is more or less the same all over the world made the strange feeling of having barged into somebody else's life slowly disappear. Questions like the following ensued: How do we get the answers to our questions? Which facts and information are measurable and what needs to be experienced in the atmosphere, in the dialogue? Which methods do we need to get close?" Student, Switzerland

"I think the most important thing I have learned is to see different ways of thinking, working and designing. I learned a lot....We had some disagreements and sometimes we could not understand or convince each other. We had some bad times but also some good times…You need to respect other people, they are always working in their own way." Student, China

"Trying to understand what everyone is working on was very important, and to complement each others' ideas to finally generate only one product and not a composition of several parts. But we never forgot that each of us is an "expert" in their discipline and trust is needed in order to develop proper team work. If we don't trust in the idea that the engineer part knows what they are talking about, as well as the architecture and design parts, then there won't be a plausible final delivery." Student, Mexico.

The working scenarios of the kitchen workshop

GROUP 1: SERVICE LIFESTYLE //

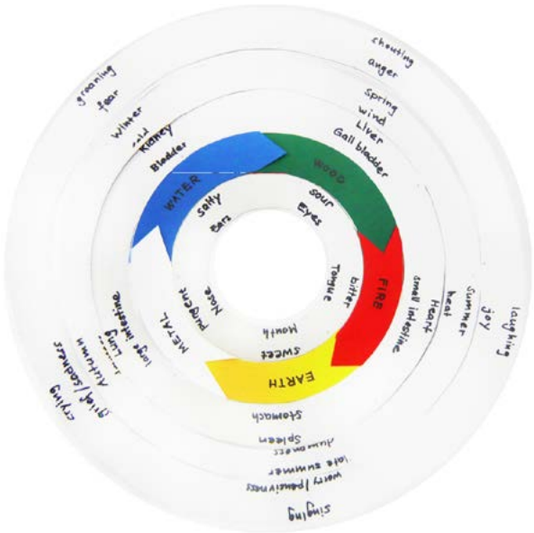
ECOSYSTEM KITCHEN

This project is based on the conceptual model of an ecosystem in which different elements coexist. The concept has been developed in five elements and attributive aspects.

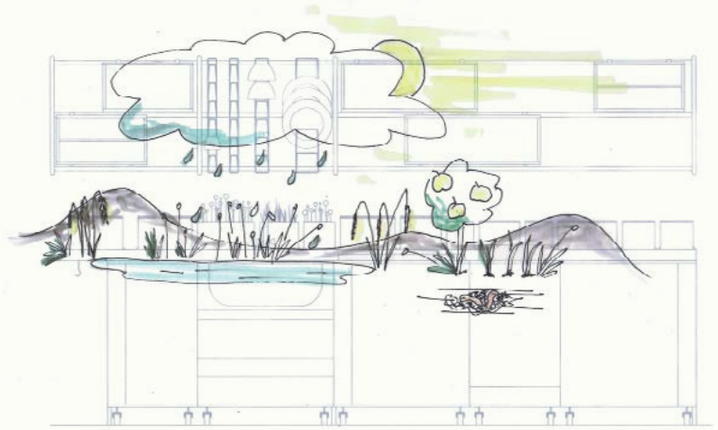
Complexity
The main inspiration for the unit was a natural ecosystem.

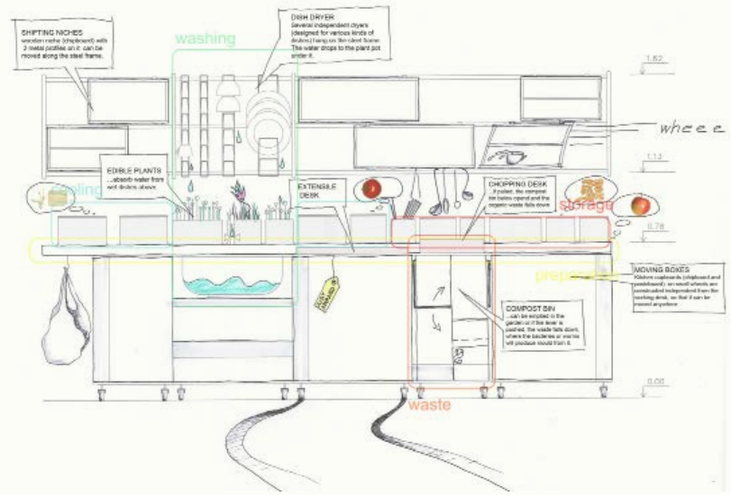
Variability
The unit is based on the fixed constructed working desk, other elements can be added or removed when needed.

Flexibility
Most of the kitchen elements can be moved, shifted and have more than one function.



The main inspiration for the kitchen unit was a natural ecosystem





GROUP 2: ENERGY AND WASTE //

LIFE AROUND THE WALL

Life Around the Wall

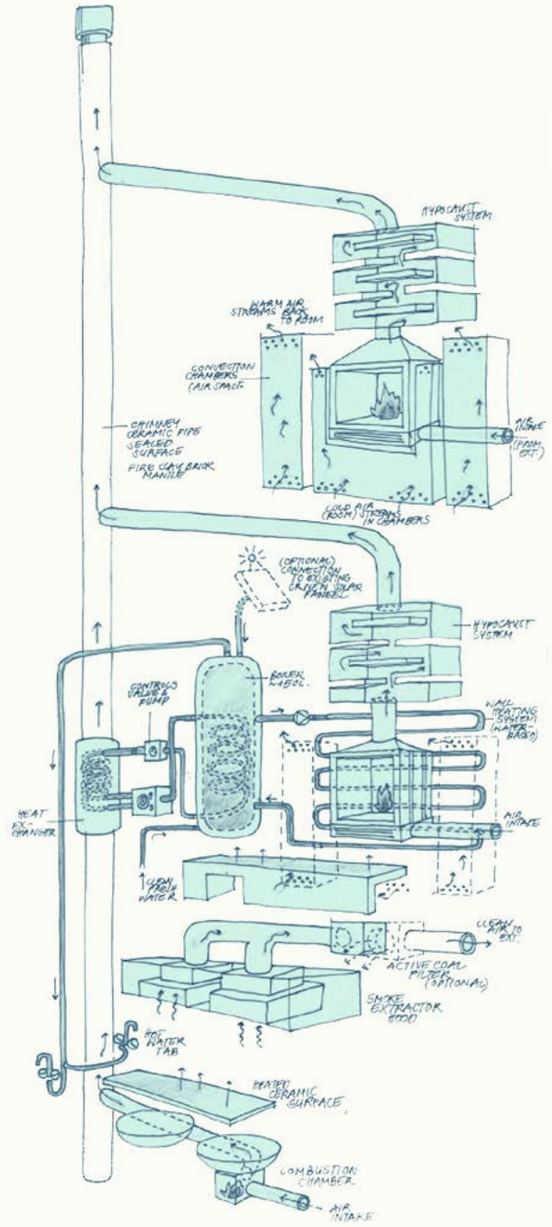
How much to innovate and how much to preserve? If energy means more than the pure technical fact, then the life inside the house becomes an important design tool.

Life around the wall is the synthesis of Nin Lil's approach to energy. The cosy atmosphere of the fireplace and the stove makes the wall the centre of collective activities in the house: the kitchen, the mahjong room, the TV room. The other existing qualities of the house, such as the darkness of the storage room and the milky atmosphere of the bedrooms are preserved. Only some adjustments are needed to offer some space for guests or tourists.

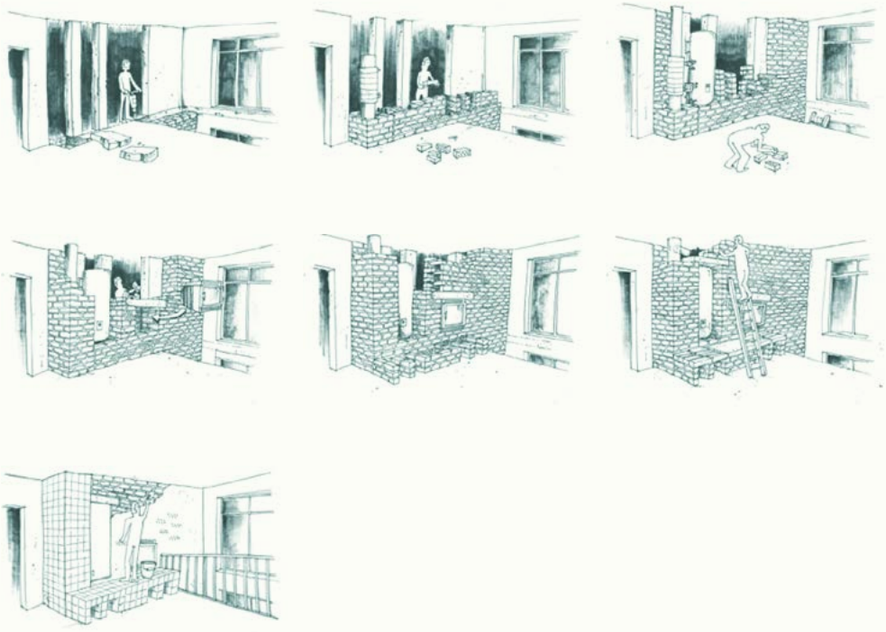
The Heating Wall Techniques

The wall supports both the collective life and the heating system of the house. While at the ground floor the cooking process is still a resource for heating, the upper floors create a combination of tradition and modernity to provide thermal comfort. The ancient technique of fireplaces, buffering, and convection chambers is combined in a water-based pipe system and a boiler.

The wood exhausts coming from the stove help to heat the boiler's water, thanks to a booster pipe.



The heating wall system structure schema



The construction process of the heating wall system

REFINE AND SYNERGIZE //

RURAL PUBLIC SPACE: DEFINING NEW TYPOLOGIES WORKSHOP

From April 6-17, 2009, Studio TAO, Tongji University. Rotterdam University, Willem de Kooning Academy, International Product Design School of Rotterdam University and the School of Architecture and Urban Design met in Shanghai to co-hold a workshop on rural public space. Titled "Rural Public Space: New Definitions of Typologies". The focus of the workshop was to create ideas for public space based in agriculture and tourism. The result was four projects covering landscape use for visual identity and seasonal crop profit, use of empty homes for local business, streetscape, a market, and community centre.

The purpose of the workshop was to identify and create the purpose and form of public space in rural areas for both residents and tourists. Defining rural public space re-examines the differences between it and the public space generally associated with the urban condition. Squares, plazas and parks have come to define gathering points in town or city planning to establish landmarks and promote social interaction for those who pass through them. In the rural countryside that automatically offers open space, the same needs for social interaction may manifest themselves in the same way or through alternate means. Other types of public space are more spontaneous, with linear activity along bustling streets or the conversation with a neighbour on a doorstep.

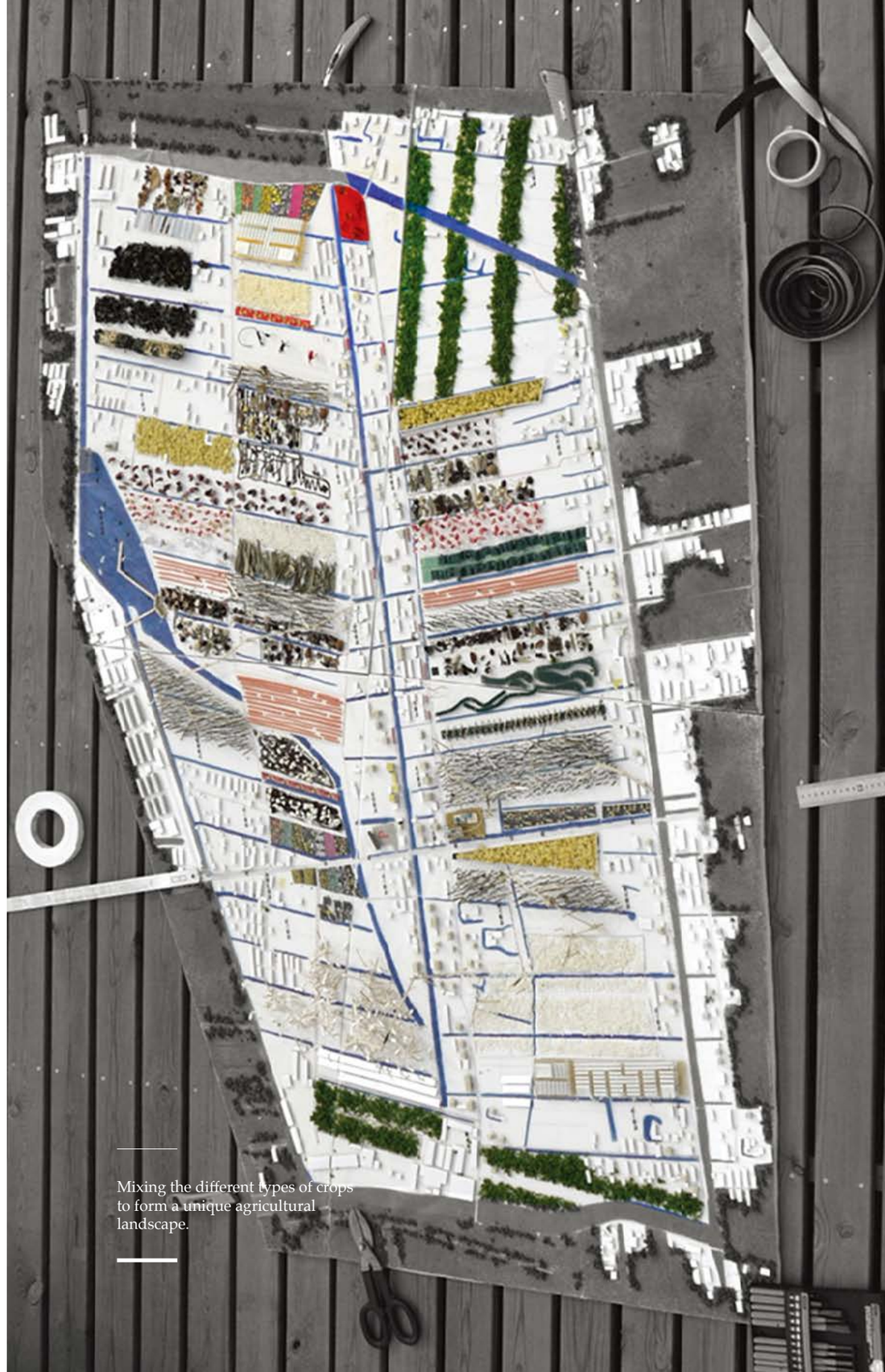
While organizing open areas around identity by symbolic or monumental means, the dispersed and interstitial spaces of public activity harbour the finer qualities that shape the identity of a place. Around 20 students from Rotterdam and Shanghai were involved and the workshop was supported by the strategic partners including the Chongming local government and the Shanghai Creative Industry Centre.

The result of creative agriculture workshop was presented to the vice mayor of Chongming Island in TEKTAO Studio.

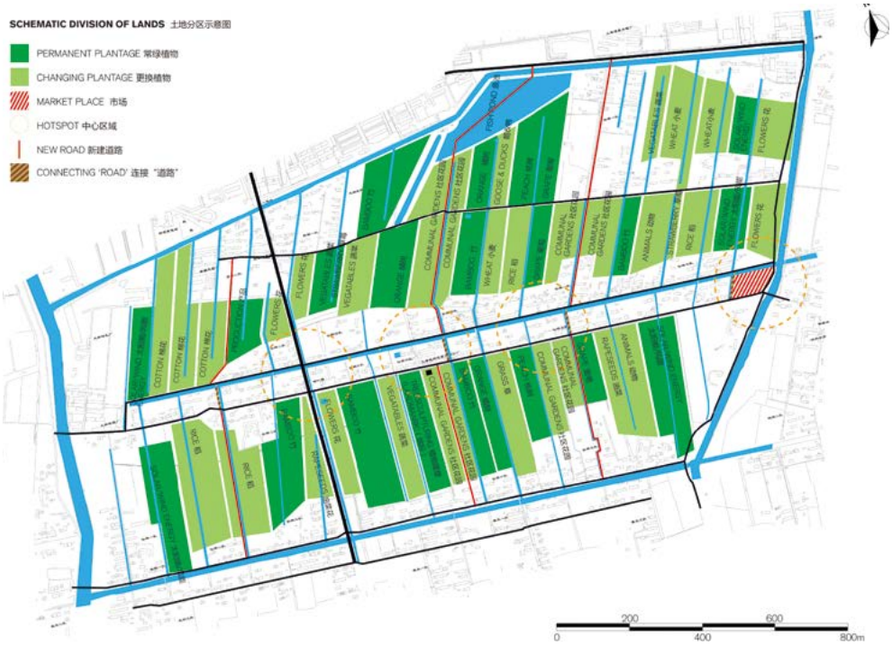
Proposal 1: The Public Field

We take the linear element from existing landscape, give each plot a specific crop, animal or a natural energy to farm. So when visitors travel along the fields, they will have an interesting view of the landscape, changing the feeling of time. And it is also an efficient division for farmers to do their work.

Communal gardens can improve the utilization of rural land. Local farmers and city people can work together and have more opportunities for communication.



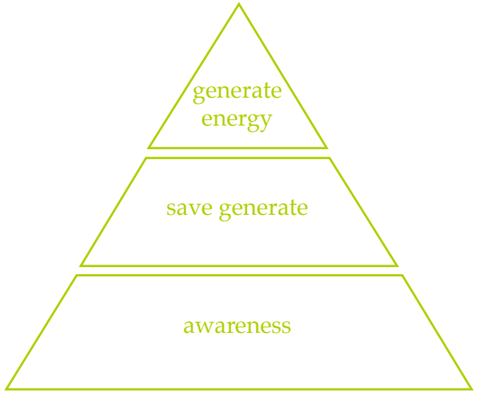
Mixing the different types of crops to form a unique agricultural landscape.



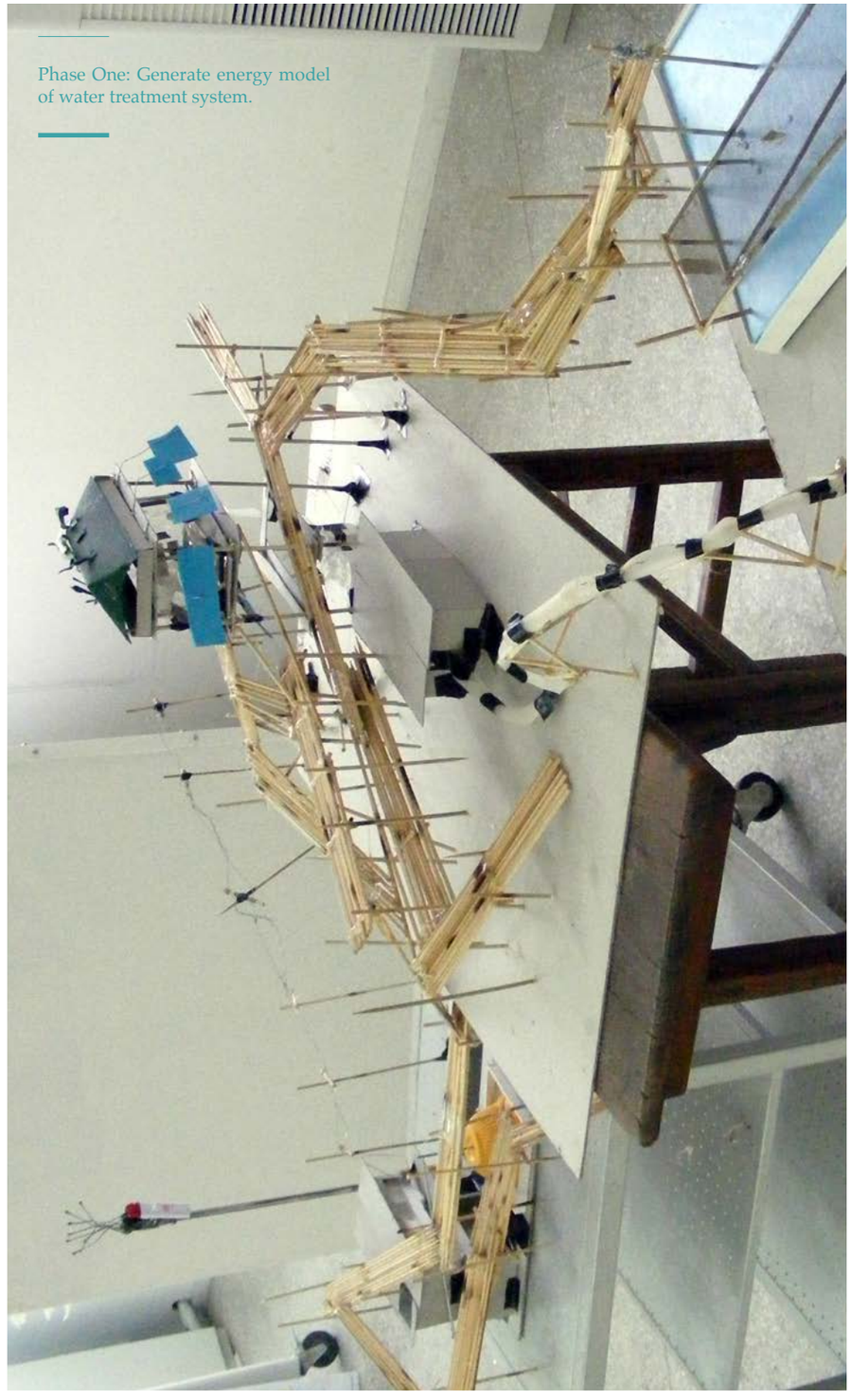
Schematic division of lands and seasonal change chart

Sketch of Landscape experience

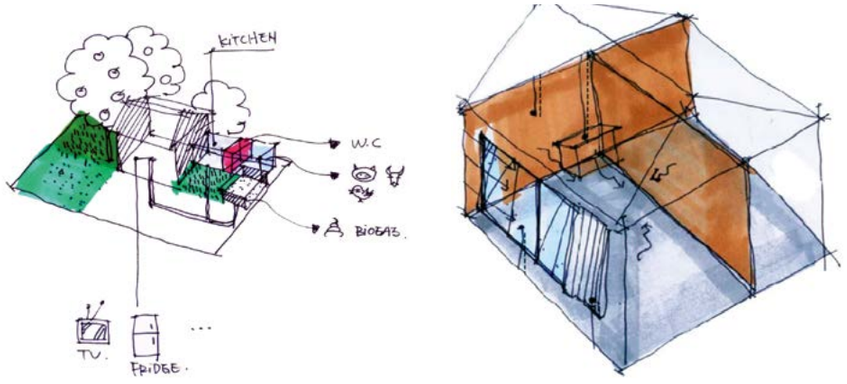
Proposal 2: Ecology



Proposal two aims to build a more sustainable rural community from the point of ecology. The group puts forward the conception of an ecology pyramid. There are three phases of ecology, which are, respectively, energy generating, energy saving, and awareness. The students design a water-treatment system to create energy and use biogas and eco-friendly materials to save energy. Moreover, they want to promote a reward system in the local village that leads the villagers into a sustainable life style via visible energy saving.



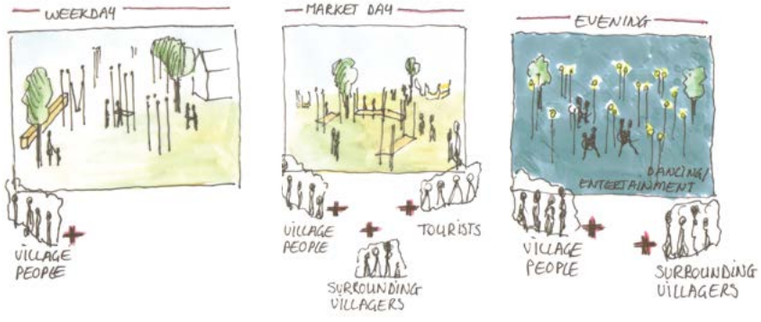
Phase One: Generate energy model of water treatment system.



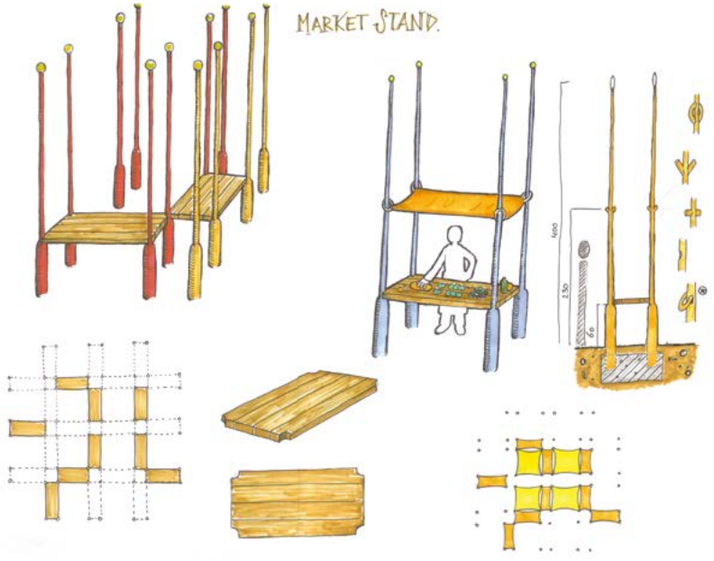
Phase Two: Save energy-building energy saving reconstruction.

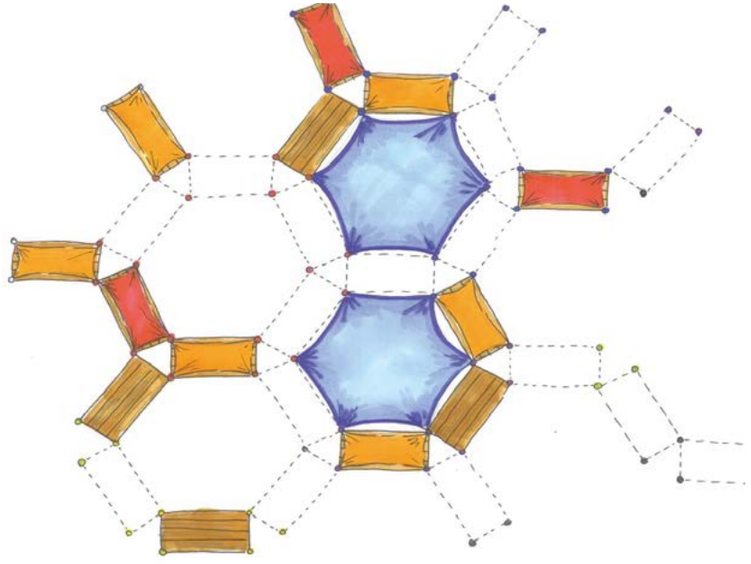
Phase Three: Awareness install solar water heater in community centre and provide the villagers with hot water and promote public.

Proposal 3: The Market Space

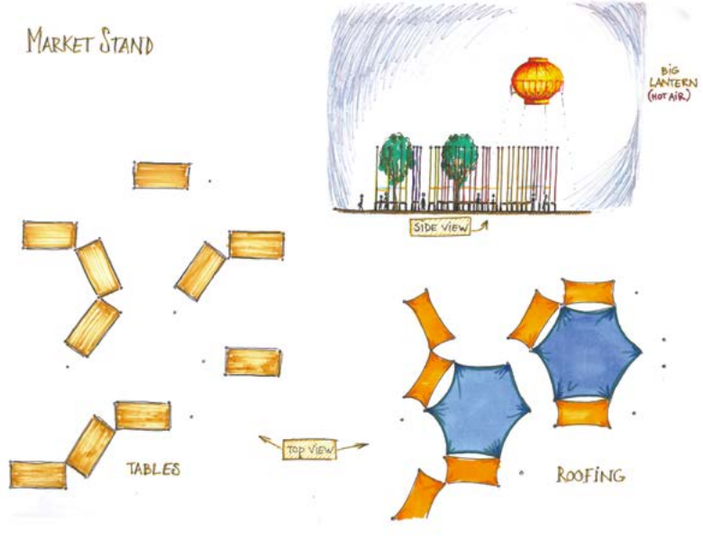


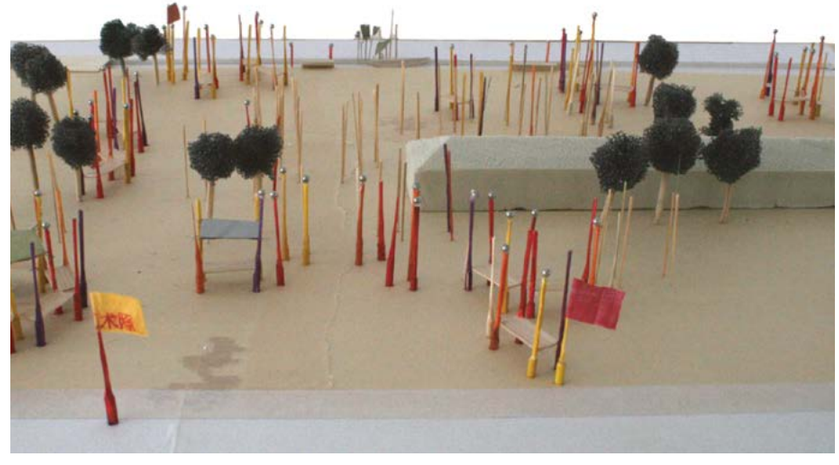
Selling goods allows neighbours and villagers to connect and communicate. Tourists can buy popular Chongming eco-food and products. By having a social meeting point, everyone can also dance or go to musical entertainment at night. With only fifteen poles and five countertops this design forms a small market to sell vegetables, fish, or other local goods. The poles, placed in threes, follow a honeycomb pattern, which enables the market to expand in any direction if necessary. The curvy layout of the stands form a route along them, possibly leading towards smaller-sized open areas. The height of this 'colourful forest' is four meters and will draw attention from people at a great distance on any day. At dusk the poles switch on their solar powered lights on top, to lighten up the liveliest meeting point in town.





MARKET





The plan and design of the modular based rural market place.

REFINE AND SYNERGIZE//

SYSTEM DESIGN FOR SUSTAINABLE TOURISM

Luisa Collina, Davide Fassi, Francesca Rizzo

The project relies on the idea that the rural community that resides on the island needs a strategic vision that will ensure its development together with the development of its territory and the resources that characterize this land. That means designing for a sustainable rural community. Sustainability means not only the sustainable environment, reducing the artificial impact, and improving the energy efficiency, but also economic sustainability: industrialized agriculture has improved farmers' income to a certain extent, but with the present price-fixing system for crops, agriculture has been thought to be the work of rural families. More and more farmers migrate to cities while the permanent rural population is rapidly decreasing. Thus, the social fabric and historic contexts are facing the problem of dissolving. To realise the sustainable development of the rural area, any specific solution for the economic, environmental and social problems is not sufficient, only when they are considered systematically, a new way for countryside reconstruction can be figured out.

The Chongming sustainable tourism project is a design-driven project. It comes from the vision of sustainability, the insight of the present context and the understanding of the particularity of the area. The project focuses on territorial development and revitalization, and aims to involve all interested stakeholders, including the local Chongming island government, village communities of the island, business partners and university resources, to develop a common vision for the project and a corresponding strategy. The Chongming initiative is, in other words, an attempt to use design at two different levels: as a new actor capable of promoting solutions towards a sustainable future for Chongming, and as a domain of specific competences to design a set of tools to help stakeholders imagine and figure out possible solutions to implement sustainable tourism for the island.

The specific focus of the project[1] is related to bike mobility, for several reasons: it is a traditional Chinese way of transportation; it is also an increasingly trendy way, at international level, to practice a sport, to discover an area in a slow, silent and deep way. In other words it is healthy and sustainable; it can be considered as a means of transport but also as a contemporary lifestyle. It relies on the Chinese tradition but at the same time it is a way of transport and at the moment, more attractive for Europeans rather than for Chinese. These different ways of considering biking as well as the necessity to understand Chongming both from the Chinese perspective as well as from the point of view of a foreigner, who could be potentially interested in spending some free time on the island, have brought the idea of approaching this theme through a mixed team of students (fifteen Italian students and eight Chinese students), professors and tutors.

The designers' role in the project is immersive and strategic: they need to immerse themselves into the context with the goal of deeply understanding the local territory (from different perspectives: historical, cultural, social, economical, etc.) and of mobilizing social capital to understand and share the relevance of the project for the island. To reach this goal a specific strategy has been elaborated. That can be synthesized as follows:

- step 1: understanding local resources
- step 2: contextual workshop
- step 3: scenario and strategy
- step 4: self-standing proposals
- step 5: co-design processes

All the roles, or the stakeholders, have been motivated by the design activities and solutions. The key issue of the project has been the quality of the scenarios and proposals and how much the stakeholders could be activated, given the fact that designers intervened at different levels of the project and are using different design tools.

The 23 students were part of the design team that has so far developed the first four phases of the project. Students were from three different backgrounds: design, architecture (urban planning) and civil engineering. This emphasized the multidisciplinary nature of the project. Some of them belonged to ASP (Alta Scuola Politecnica)[2], a high level didactic path held both in Politecnico di Milano and Politecnico di Torino with a main

project to be developed in two years, including desk and on-site research, developing a concept, finalizing the project with a business model, and working out feasibility issues. Some of the students[3] were from Politong, the double degree programme between Tongji University and MSc Product Service System Design at Politecnico di Milano-School of Design.

The present results include some design proposals for the rural areas of Chongming Island, developed during a design workshop which lasted a week (29/08-6/09/2010), supervised by Luisa Collina, Davide Fassi, Francesca Rizzo, professors from the Politecnico di Milano - School of Design and Serena Pollastri from TAO practice in Shanghai. The fifth phase will be partly developed within the next year through a series of co-design and design workshops held in Milan, Italy within the project "Nutrire Milano–Feeding Milan" [4].

Understanding Local Resources

In the preparatory phase, the students conducted research and joined courses in their home country, on the theme of sustainable mobility, proximity tourism, and the area linking Chongming Island to the city of Shanghai. The focuses on bike-sharing systems, integrated with other forms of public or private transport, and tourism, as a development engine for the local economy, were two aspects on which students concentrated.

The desk research led to the filing of several cases of best practice in the field of urban bike-sharing, laying the foundation for the exploration of scenarios and training systems to apply at a later time in the peri-urban context of Chongming. Other study-cases were analyzed with on-site research, testing services offered by the municipalities of Milan, Lyon and Paris.

Sustainable mobility as a macro-system to which bike-sharing belongs, has been analysed in various aspects of the discipline of design in terms of services. It represents a strategic choice for contemporary city government, to raise the so-called "green transportation" through addressing products in the form of technology,including components of the system such as platforms and bike rental, or space and equipment of areas used for sharing which connect with the context, or communication including a signals system and user interface.

The theme of local tourism became central when desk analysis of Chongming Island highlighted its close, complementary link with the city of Shanghai. . On the one hand, the megalopolis, by purely physical characteristics, is characterised by buildings, whereas the other large rural

agricultural area has high potential for tourist accommodation from the nearby town.

Contextual Workshop

The activities carried out on site in August 2010 in Chongming Island allowed the actors to generate some design concepts applied to the context, following a series of primary data collected in different ways (interviews, videos, photos etc.), organized and shared with local stakeholders. A first step defined what the elements that give identity and character to Chongming Island are, analysing the flora / fauna, the system of channels, socializing with residents, their craft, agriculture, traditional costumes and history. Qualitative research included interviews with local people, workers, farmers and volunteers.

A second part was focused on the existing services that allow us to discover and experience the island as a tourist: systems of rental bikes / scooters, bed and breakfast, information centres, services in towns and in rural areas, seeking to understand who are the actors behind these initiatives and who are the visitors to the island today. This phase was accompanied by a parallel investigation of possible ideas put in place to bring visitors to Expo 2010 to discover Shanghai in greater depth, its traditions and its culture.

This first step was completed by visiting the island by public transport, with bicycles rented from local farmers, and by groups walking in areas poorly served.

Scenario and Strategy

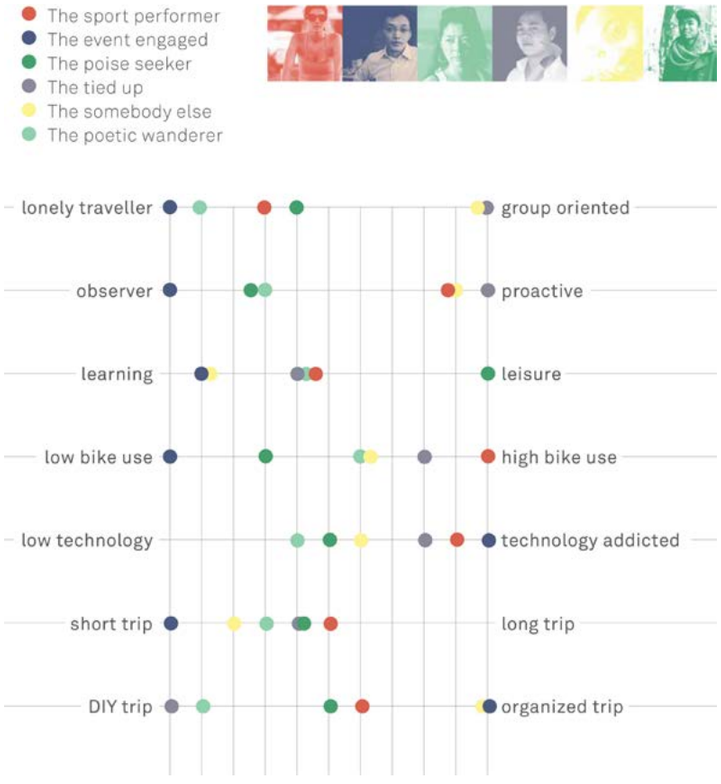
The research results showed two categories of values:

a. "To preserve"

- real and not fake: in Chongming Island it is possible to experience real China, with the rural and agricultural life;
- local attitude: local reality, slow life, welcoming;
- untouched island: simplicity, freshness, silence, light, air, horizon view;
- pure feelings: hearing, tasting, looking.

b. "To discourage"

- sustainable banal stereotypes;
- invader attitude: promoting low impact projects;



Personas and interest areas in Chongming

- "make it something else" approach: not trying to change Chongming values, by destroying or modifying their natures, but work on them, to emphasize Chongming characteristics.

After collecting enough data on the context, profiles of probable users were defined through the construction of a series of personas reference (also based on the analysis): the sport performers, the event-engaged, the poise seekers, the tied-up, the somebody else, the poetic wanderer, etc.

Each one goes to Chongming for different reasons. Every brief typology is embodied by a character who is charmed by the various aspects of the island that are never the same. Through personas analysis some hot interest areas have been discovered. For each one, two opposites behaviours were considered (i.e. learning-leisure, short trip-long trip, observer – proactive etc.), in order to understand the main trends and to get to precise concept direction.

After the personas definition, the essential elements that all these personas will need in order to improve their experience on the island were assumed: Chongming advertising, website, thematic paths, signage, magic number, integration bus-bikes, workshops, catalogue. The solutions based on mobility and Internet were the most suitable and common to the majority of the personas. Some other solutions, such as workshops, are more specific. That's why they are not included as transversal elements helpful for the development of the concepts. These transversal cues are mainly two: the need of communication in an effective way and the need of gathering useful information and using them. Through these two, the main lacks of the Chongming experience can be filled up.

At the end of the research phase, a definition of the personas and some concepts were assumed as outputs:

a. Chongming island identity

The brand step is fundamental to let people appreciate all the possible experiences in Chongming Island, otherwise it's unlikely somebody will go there without any kind of previous advertising. It's all about making people aware of and charmed by what Chongming Island is. "Made in Chongming Island "should be built as a brand and synthesis of the island values. Its existence would help the understanding of what Chongming is and why it is attractive. This is not only a transversal element, it is also a prerequisite for any project.

b. Community website

The creation of a Chongming website would help in creating the Chongming Island lovers' community. In addition it would be the output of a strong network built through bed & breakfast, hostels, shops, and any kind of service available and it would help tourists plan their stay.

c. CM catalogue

The catalogue can be both printed and loaded on the website and it provides the list of all that you can find in Chongming - services, tours, offers. It would be a useful tool for Chongming visitors, with all the news and events about Chongming island.

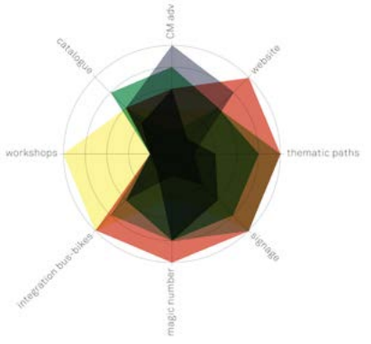
d. Paths and signs

The experience in Chongming Island is made unique, thanks to its inhabitants. Anyway it is important not to be strongly dependent on them. The municipality should distribute free, clear island maps with possible path to be followed. Furthermore, the path signals should be all around the island to help peoples' orientation.

e. Mobility integration

Working on the integration of the means of transport is one of the key

Samples from students' design research, envisioning service tools



elements for Chongming Island's success. Tourists should be able to reach any point of the island without having any problem. The integration of bus, bike, ferryboat is fundamental, but even working on the water means would be great to give another possible choice and to make the Chongming Island experience unique.

f. Magic number

Speaking Chinese is not that easy and hardly anybody in Chongming island can speak English. So, as it is already happening in Shanghai, providing a magic number to call when it's impossible to make a proficient communication would solve many misunderstandings.

Self Standing Proposals

The aim of this phase is to create a set of sustainable design solutions for exchanges between rural Chongming communities and urban Shanghai communities. This can be achieved by the design of systems that balance technology, activities and services that enrich the users' lives.

A series of design activities has been focused on envisioning and designing a network of new and creative services business ideas, able to create an entrepreneurial community in a village of the island, Xianqiao, which would act to develop sustainable tourism in the island. The results have been a set of 5 ideas in different fields:

Chongming water tour: A better mobility integration of different kinds of transportation and water paths.

Chongming real food: "Ping Heng Dao"is a service that aims to transform the village into the land of balance, where eating has a natural role in a healthy lifestyle. It provides the balance and the connection between food and life by discovering and exploiting traditional medical food. "Bio Ming" is a service that brings to the urban customer a choice of organic products from the island. Fruits and vegetables are locally seasonal and regularly delivered to different points of sale in Shanghai. Special labelling and packaging for Chongming original and organic food are to be spread inside and outside the island.

Public Chongming advertisement: Advertising campaign promoted directly by Chongming municipality.

Chongming activities for everyone: Different kinds of activities, such as picking fresh fruits or crab fishing, designed for both children and adults throughout the year.

Chongming hospitality: This is a service that valorises the local habits of the villagers in welcoming visitors. It encourages the renovation of traditional constructions for accommodating the visitors, instead of building new ones, and stimulates interactions and cooperation with villagers.

Chongming communication, images and branding: This design action was about linking design solutions in a local system, creating mutual connections, and relating them to the external environment. Here the design role has been to organize the project services network. This meant finding design solutions to connect the different services and to understand how they could support one another and frame a consistent scenario as well as finding synergies between analogous, complementary and compatible activities. This has been obtained by:

- sharing some operations and infrastructures and creating a critical mass;

- understanding if there are outputs of one activity that can become an input of another one;

- understanding which solutions, if combined, can generate mutual virtuous savings and reinforcement.

Conclusion and Future Steps

This contribution shows the application of a specific design approach to face the problem of how to address territorial development. It relies on convergence between strategic design tools and pillars and service design, including competence in spatial design. This is an approach under experimentation in several projects that the Politecnico of Milano - School of Design has been conducting for several years (Manzini, 2005, Meroni, 2007, Collina 2010, Piccinno, 2010, Crespi, 2011). It seems to suggest an interesting phenomenon: design for sustainability and sustainable territorial planning is converging. In fact, as preliminary project results suggest:

- Designed sustainable solutions tend to be localized. That is, they take account of the territorial specificities of the place where they have to be implanted and at the same time suggest spatial strategies to be applied in several contexts.

- Sustainable territorial planning tends to be articulated through self-standing proposals. That is, it has to be implemented through a variety of relatively autonomous small scale, self-standing projects coordinated and systemized by the means of some real and virtual networking platform (Baek, Manzini, Rizzo, 2010) based on a larger vision and framework.

Self standing proposals here (due to the early stage of the project) are taking the form of concepts for the context where they will be embedded. In another context, as in"Nutrire Milano - Feeding Milan", they are real service prototypes that are currently delivered in the city and existing processes of exchange between Milan and its rururban area (food delivery, eco-tourism, cultural heritage fruition). To be really implementable, self-standing proposals should be:

- Economically viable and, therefore, based on service ideas, capable of being left in the framework of the emerging distributed social economy;

- Technologically viable and, therefore, using, in an innovative way, the existing technologies and knowledge;

- Socially viable and, therefore, referring to locally already-existing active communities or to communities which are activated by the same project proposals;

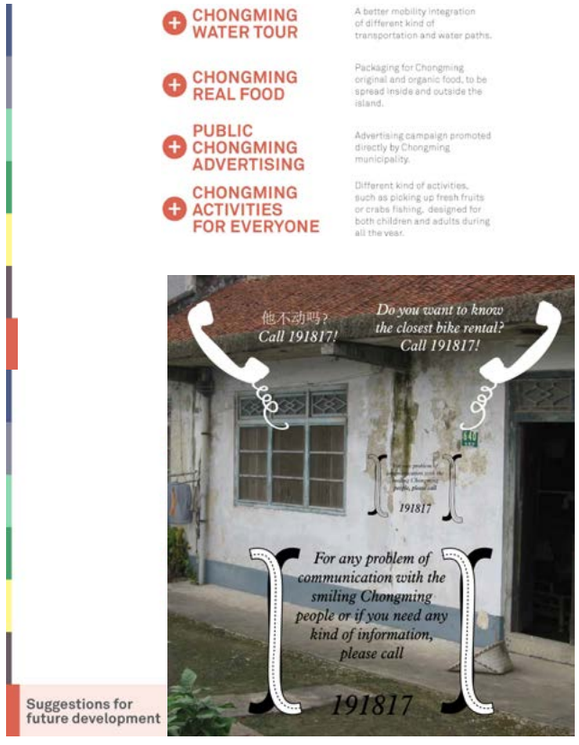
- They have to be based on local actors actively participating and create radically different ways of living and/or producing;

- They re-generate the ecology of the territory where they are embedded. In other words, they are local systems, thanks to their number and diversity, enrich the environmental and social resilience of the larger ecological system in which they are embedded;

- They have to implement a (tacit or explicit) design support in terms of appropriate strategic and service design skills and tools;

- They have to be able to "read" the spatial context in terms of spaces used by local people. This means discovering solutions which are at the same time site specific and part of a system to be applied in several contexts.

For the future we are planning to continue the project for Chongming Island by sharing the design proposals described above with all interested stakeholders from end-users to service providers. The most promising redesigned proposals will be used to elaborate a strategy of fund-raising in order to conduct the extensive and real experimentation on some of the envisioned solutions (as is currently happening for Nutrire Milano - Feeding Milan).



Suggestions for future development

NOTE

1 Andrea Cairati, Francesco Cavagnis, Marta Alice Fattorossi, Maria Franco, Li Nannan, Corina Macnovit, Aurelie Sabatier, Stefano Tedesco, Laura Varvello.

2 Alessandra Canella, Fabio Carnevale Maff è , Giuseppe Farina, Jonathan Fortunati, Maria Lo Bello, Luigi Partipilo (Politecnico di Milano), Jiong LEI, Chenchen LIAO, Yifan GAN, Yuzhou CHEN, Xin ZHANG, Jing XUE, Ting CAO, Lu WANG (Tongji University).

3 "Nutrire Milano – Feeding Milan" is a project supported by Fondazione Cariplo in which INDACO department of Politecnico di Milano (coordinated by prof. Anna Meroni) , Italy has a key role in developing solutions for a sustaina- ble development of Parco Agricolo Sud Milano (South Milan Agricoltural Park).

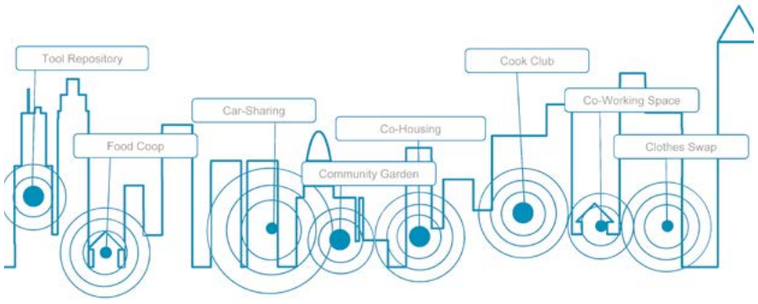
BRIDGE AND CONNECT //

DESIS NETWORK, DESIS CHINA AND THE CHONGMING PILOT CASE

Ezio Manzini, LOU Yongqi , ZHONG Fang, GONG Miaosen

In the complexity of contemporary societies it is possible to recognize promising cases of socio-technical innovation. They are, at one and the same time, solutions to current problems and meaningful steps towards sustainability. These cases can be found in a variety of fields: from the ecological reconversion of the production system to the social construction of a new welfare; from the empowerment of diffuse micro enterprises to local sustainable development programs. Many of these promising cases have a common denominator: they have been conceived and implemented (mainly) by the involved actors, moving from their direct knowledge of the problem, and from their own personal capabilities. They are the results of successful social innovation processes. (Manzini, 2010c)

Social innovation mobilizes diffuse social resources (in terms of creativity, skills, knowledge and entrepreneurship). For this reason, it is a major driver of change. And it could become a powerful promoter of sustainable ways of living and producing. Given its spontaneous nature, social innovation cannot be planned. Nevertheless, the "invention" of new ways of living and producing becomes more probable when creativity and design thinking are diffused and when there is a favourable social and institutional environment. In parallel to this, once new promising cases exist, they last longer and are more widely replicated when empowered



by appropriate sets of services, products, and communication. Favourable environments and enabling solutions are results of articulated co-design processes in which final users, local institutions, service providers, and dedicated product manufacturers are all actively involved.

Regarding social innovation and the emerging new design networks, the professional design community has a major role to play. Designers and design researchers must use their professional knowledge to empower the co-design processes—that is, to trigger new ideas, to orient the resulting initiatives and to conceive a new generation of enabling solutions, ie. services, products and communications specially conceived to support them. Design can give important contributions to social innovation, and vice versa. Social innovation can be a large and growing opportunity for a new generation of designers: professional designers and design researchers working to develop and sustain new networks, and feeding them with needed design knowledge.

Design

Scaling-up social innovation is, therefore, a design-led process, where "the designer" is not a single specialized figure, but a variety of actors who collaborate in co-designing more mature, lasting, replicable solutions. Among them a particular role must be played by design experts: the social actors who have received formal training in design. Indeed it is these design experts who are able to use their specific knowledge to stimulate the design capabilities of the other partners by triggering the innovation processes with scenarios and proposals, supporting them with specific design tools, and recognizing in the emerging social inventions the potentialities for new product-service systems. Some design-led initiatives already exist (for instance, in the areas of local food networks, collaborative housing, social services, mobility systems), but far more of them can and must be promoted. For the design community (professional designers, design researchers, design media and design schools) these interventions must be recognized as a new and challenging field of activity. In order to facilitate this recognition, and to promote new initiatives, a dedicated worldwide network on design for social innovation and sustainability has been established: the DESIS Network.

The DESIS Network

DESIS is a network of schools of design and other institutions, companies and non-profit organizations interested in promoting and supporting design for social innovation and sustainability. It is a light, non-profit organization, conceived as a network of partners collaborating in a peer-to-peer spirit.

This international network comprises several DESIS-Local sub-networks within specified regions. DESIS-International is therefore the framework within which the different DESIS-Locals coordinate themselves and undertake certain global initiatives.

DESIS has been founded in Italy and sub-networks (DESIS-Local) have been created – first in China and Brazil and then in the United States, Colombia, and Africa. Each sub-network connects primarily local design schools but also other institutions, companies and non-profit organizations around local projects, innovative teaching and research. DESIS operates, then, in what might be called a glocal spirit: it is based on the local sub networks, each one with its own story, specific research agenda and projects reflecting local needs, while continually dialoguing with its international peers, stimulating and being stimulated by them, in an on-going cross-cultural forum.

More precisely, DESIS has two main aims. The first and main one is to support social innovation (using design skills to give promising cases more visibility, to make them more effective, and to facilitate their replicability) and to help companies and institutions to understand the promising cases' potentialities in terms of enabling services, products and business ideas. Secondly, DESIS's main aim is to reinforce the design community's role in social innovation processes, operating both within the design community (developing dedicated design knowledge) and outside it (redefining design's perceived role and capabilities).

DESIS pursues its activities at three different levels:

- Fostering social innovation and sustainability by taking part in

support projects and programs, gathering together and offering greater visibility to significant cases;

• Promoting design for social innovation both within and outside the design community, developing appropriate design tools and organizing cultural and didactic activities;

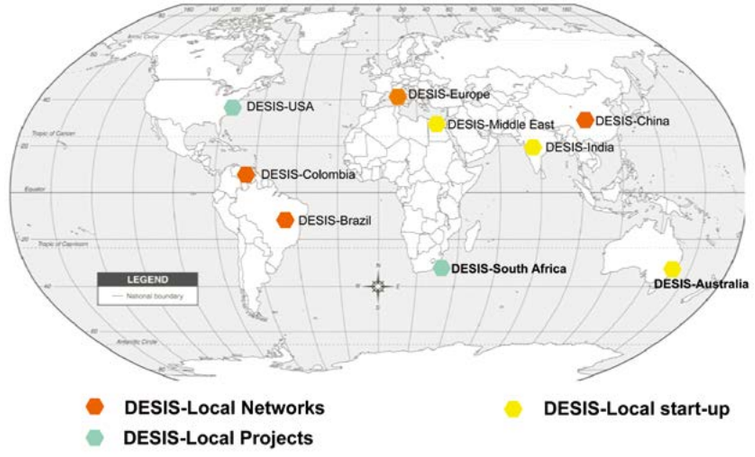
• Fostering the circulation of ideas and experiences, with a peer-to-peer approach between the different DESIS-Locals and carrying out comparative research and co-producing courses at an international level. These activities are mainly accomplished through the coordinating initiatives of the DESIS-Local, each of which organizes itself autonomously and freely.

A Social Innovative Platform: Network on Design for Social Innovation & Sustainability in China

The founding members of DESIS- China include six major Chinese design schools: Tongji University, Tsinghua University, Hunan University, Jiangnan University, Guangzhou Academy of Fine Arts and Hong Kong Polytechnic University, with further support by a group of selected partners. This organization focuses on promoting social innovation and sustainable design in China.

We do hope that the establishment of DESIS Network in China can promote "Innovation Communities" to develop interdisciplinary cooperation on innovation in all walks of life by means of design in the form of assembly, in order to build a supporting platform and a connecting network. The aim is to promote a more sustainable development throughout the entire society through collaboration and interaction with other DESIS-locals.

DESIS-China members are also conducting the Chongming Sustainable Community Project, a strategic design research project focusing on the rural community of Chongming Island in Shanghai. Here the emphasis is on how design can promote the value of rural localities and develop exchange networks with an urban-rural system. It is a part of broader DESIS-International program, Design for Social Innovation and Local Development (DESIS/LD), and extend prior work including the Parco Sud Milano project in Italy and the São Paulo project in Brazil.



Overview of DESIS network global initiatives till 2011 (see: desis-network.org)

DESIS-China webpage (www.desis-china.org)

BRIDGE AND CONNECT//

CONSUMER NEEDS RESEARCH

To understand what an object or a behaviour means in Chinese life, what do people think, say, feel and do? Through brainstorming, five opportunity areas identified the project's themes: Slow Life, Physical Wellness, Communal Farming, Authentic Chongming and Knowledge Exchange Programs. From these themes human subjects from both Chongming and Shanghai were chosen for further user investigation. Discussion Guides were formatted for each subject to serve as a reference for narrative inquiry. Interviews were done in pairs: one to lead the conversation and the other to take notes, record, and photograph.

Opportunity Area 1: Slow Life

Interviewee: Professional leading a fast-pace life
Topics: Life/work balance, how to slow down, how to relieve stress?

Interviewee: Farmer
Topics: Modernize or maintain traditional methods, aspiration for their family and themselves?

Interviewee: LOHAS (Lifestyles of Health and Sustainability) Lover
Topics: What does LOHAS mean to them, how do they live their LOHAS life?

Interviewee: Nongjiale (for a Chinese rural farm experience) Travel Agency
Topics: What customers look for when they want to get away from Shanghai, their perceptions of Nongjiale, how do they plan their trips?

Opportunity Area 2: Physical Wellness

Interviewee: Street Jogger
Topics: Indoor/outdoor, how and why they exercise, the role of exercise in their life, solitary or social, other fitness activities?

Interviewee: Yoga/Tai Chi Trainer
Topics: Ideal environment for practice, why do customers come to them, what do they teach, connection with their professional community?

Interviewee: Event Organizer/Sports Club Owner
Topics: Best practices, how their business developed, what kind of activities are offered, trends, how connected with customers, how do they understand their customers?

Opportunity Area 3: Communal Farming

Interviewee: Foodie
Topics: source of food and ingredients, impression of Chongming food, what do they trust, loyalty to brand?

Interviewee: Virtual Farming Gamer (Kaixin)
Topics: Motivation for playing, would they switch to real farming, socialization, adding reality to virtual gaming?

Interviewee: Garden Lover
Topics: Motivation for gardening, ways of gardening, solitary or social, what do they grow?

Opportunity Area 4: Authentic Chongming

Interviewee: For Shanghai Subjects
Topics: Their perception of Chongming, what makes Chongming different from or the same as other places, feeling of a Chongming experience and local products?

Interviewee: Business Manager of Chongming Attractions (Forest Park and Nongjiale at the Dongtan Wetlands)

Topics: How do they understand their customers, do they collaborate with other island attractions, how do they promote their service or brand, how could they improve their customers' experience?

Interviewee: Retail Chongming Store Salesperson
Topics: Customer motivation, best practice, what do they sell, what sells and what doesn't, what do customers care about before buying a Chongming product, how do customers talk about the store, purchasing experience, product journey?

Opportunity Area 5: Knowledge Exchange Programs

Interviewee: Local Residents
Topics: What do they want to learn, what do they want to share, what are their aspirations?

Interviewee: Village Leaders
Topics: What are they promoting/educating, what is the best way to engage village residents in education, what is culturally valuable in the village?

Interviewee: Cooking School Owner
Topics: What is their customer motivation, what works and doesn't work, how has the business developed, what is their business vision?

Consumer Research Results

All the interviews have been downloaded and the information has been shared with the rest of the team; the main key points for each opportunity area have been summarized. Common ideas and divergences have been grouped, and two big key areas that reflect the potential of Chongming as identified by users have been synthesized: "Fresh Food" and "Natural Wellness".

Most of the users are, in fact, concerned about food quality in Shanghai, perceived as unsafe, and see in Chongming a good environment for growing healthy food; moreover, traditional recipes are considered as an interesting heritage of that territory. Slowing-down for a short period in such a chaotic city life is also a necessity for Shanghai users that seem to be interested in experiencing the natural life of the island for a relaxing experience.

On the other side, Chongming villagers who have been interviewed are very proud of the food and air quality of the island; these two elements are seen as resources, even though they seemed to find it very hard to imagine how rural life can become interesting for city people.

Exploration of the consumer needs

BRANDING//

CREATING A CHONGMING BRAND

Jan Staël von Holstein

Background

The theme of branding has been presented throughout the investigation process and various workshops. The need of better income is clear, and as different activities and production have been analysed the question of creating a service and/or product brand has also been discussed and taken into consideration. Agricultural produce is a natural arena for creating a Chongming brand.

The normal food consumption products are already on the island. To these could be added a special organic range, medical herbs, and flowers. They are all potential ingredients for creating brands. The service aspect covers the use of existing buildings for bed and breakfast facilities and will offer a variety of activities as a destination to experience agricultural life, for "urbanites" and other visitors.

Chongming Branding/Marketing Strategy Platform

One of the core concepts for our village prototype development is to identify and create additional income streams for the people in the village

Step One - Using Available Crops/ Fresh Food Production

The predominant activity and source of income will remain as agricultural activities and production. Detailed analysis and plans have been developed to increase choices of produce and land use. It is probable that the village will need to pool their resources to achieve sufficient volume to sustain a flow of products–rapeseed, wheat, greens, pure rice, honey, etc, that can easily be packaged, and labelled in suitably sized containers for effective shelf display.

Step Two - Creating Additional and Special Product Ranges

Creation of an organic product range: In China, there is an ever-growing concern about our environment and healthy products. In the West there has been a dramatic increase in the production and sale of organic products through all major food distribution channels, as well as specialist smaller shops. The safe food demand arising from consumer needs can also be found happening in China. With some training and a few roasting machines, a healthy range of muesli-type mixes could be made and packaged in bags, just one example of a safe food product. The additional benefit to improved health is the potential premium pricing that allows better profit margins for producer and distributor alike.

This trend is now slowly entering the Chinese market and is bound to increase in the years ahead. There are already some organic products made and distributed in China, as well as imported goods from other countries. The first step is to identify these and the current distribution channels. Packaging and pricing policies need to be part of this review.

Creation of special medical herb range: There is already a long history in Chinese medical science of using natural products to cure health problems. A selection of basic herbs can start the process, matching the regular produce. This can take place in stages, when new plant and crop programs are introduced.

Eco Tourism

The island has the potential to become a desirable destination for city dwellers in Shanghai. The new bridge and tunnel makes the island

accessible by car within an hour. There are many families and children who do not have the opportunity to experience agricultural life.

The village can offer an everyday life experience and an opportunity to learn how to interact more with rural life, and to understand how products grow and come to market. Visitors can pick their own products and create new dishes by learning from local residents. Combining agriculture and recreation is another way to add to their daily life routines and to help bring city and countryside together. The residents' homes have been built over a number of years, but multi-story buildings are not fully used.

Most resident life is conducted on the ground floor. It would be easy to convert some of them to bed and breakfast lodgings. A simple combination of proper beds, furniture, and bathroom facilities can be designed to provide necessary comfort. This type of lodging can also be developed into a branded product through connection with a few specialized travel agencies providing package travel tours in Shanghai.

Brand Creation and the Brand Development Process of Sustainable Products and Services

A core brand identity strategy segmentation model should be developed along with consumer-oriented packaging design, allowing the first range and the future additional product ranges to be introduced, creating brand/ product names and testing availability and registration possibilities by designing basic graphic elements and making prototypes for market testing. The distribution system and ways to increase awareness can be done by using vans and trucks to display brand names and products. Simple handling trays and storage cartons can further add to the visible impact and presentation.

Distribution and Production

The innovation hub will work to identify potential companies who can channel the products through the packaging and distribution process. By making contact and interviewing prospective business partners, showing them the products, brand concept and packaging ideas, possibilities of building a realistic and profitable business venture for the village can be assessed. Exploring cooperation with neighbourhood villages will be beneficial for broadening the range and better volumes.

Conclusion

Brand building is a long-term process, but with a clear system and locally embedded brand names this can be achieved. A localized system will be an essential ingredient in providing a better village income stream.

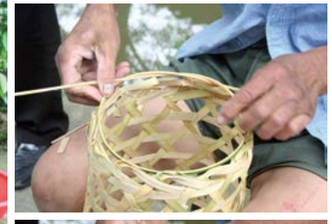
A brand in Chongming will engage residents in a different way and give them a better link to the outside world. It can also add to the residents' pride in their village, and justify their permanent presence there, creating a stronger reason to sustain their lifestyles while belonging to the countryside. A brand can also open the doors to a new generation, and offer them a possibility to reconnect with renewed aspects of their heritage.

BRANDING //

CREATING CONNECTION THROUGH THE BRANDING OF LOCAL HANDCRAFTS

One of the sub-projects of DESIGN Harvests is a brand for a collection of objects designed and produced in collaboration with local craftsmen. Traditional crafts are disappearing in Chongming, and activities such as weaving and sewing are carried out just by elderly people. One of our aims is to transform an activity that is considered not appealing and only aimed at the creation of daily-use tools for work in the field (mainly baskets), to a higher value design process, in which designers and producers cooperate to improve the technique and the aesthetics. The result will be a series of small objects which become the visible link between the rural and the urban communities. Around these objects different stories will be interlaced, and made visible by different communication techniques, both online and offline.

Local craftsmen demonstrating the bamboo entwining



BRANDING //
DESIS 2011 - DESIGN SUMMERCAMP

CONNECTING RURAL-URBAN TO PROMOTE SOCIAL INNOVATION

Francesca Valsecchi, Serena Pollastri

During the Summer of 2011, a Summer Camp on international design was organized, involving international universities that offer social innovation-related courses. It gained the support of the DESIS network. Starting from an in-depth field experience, students have been asked to experiment and develop prototype design solutions to rural-urban balance. More than forty student participants spent five days on the island and the other five days in the Sino-Finnish Centre to develop their concepts. During the workshop, three main research directions have been followed, to involve the students in design activities that could include communication, service, and product solutions and insights.

Among all the workshops that were organized in the last few years , this represents a step further in the type of educational activity provided and the general aim. The chosen topics, in fact, refer to on-going research directions being carried out by Studio Tao, most of them currently at the prototype stage. Real contacts, reference persons and practical directions have been given, in order to make the students work in a full-scale real environment.

In the following pages we describe the process and some of the results achieved.

Topic1: Designing Mobile Services for Rural Users to Enhance the Communication Between the Rural and Urban Areas.

Farmers do not normally use sophisticated mobile phones or advanced services. Their education level being very low, it is hard for them to understand new technology and its potential, and often language problems occur. The workshop investigates how to create an integrated solution (device and service) to enable the connection, on a communication level, between the city and the countryside, aimed to generate simple and applicable business ideas for local farmers.

Design Directions:

- *Interaction design for a communication device targeting inaccessible groups.*
  How to design an intuitive interface for someone with low or no technological literacy? Which functions are the core ones? How to make them accessible? The approach to the design of the produc, focuses on functions, rather than shape, to meet the specific needs of this particular group of users.

- *Service design to connect the city and the countryside.*
  Why do farmers need to communicate with urban people? How can this exchange generate new value? The group will design a service or a platform to connect the rural and the urban through the use of technology, to enhance small local business, or to improve communication with family or friends, solving specific needs found in the research.

Topic2: Reusable Design for Rural Family Idle Space

The extension of houses and the transfer of surplus labour power from countryside into city results in plenty of idle space in rural families. The workshop aims to think about how to reclaim the unused space and social-economic life through the design of space, function, and service.

Design Directions:

- The typologies of using empty houses based on the research of Xianqiao village.

- *Reuse of empty houses for rural tourism.*

Students are expected to design rural empty housing space and present a complete plan from spatial pattern to business model. Students will be provided with a local unused house and design for it.

- *Service design for the unused housing space.*

How to revitalize the rural unused housing space in a service design-oriented way? Think about giving more inputs for the local community and the rebuilt public life of villagers.

Topic3: Product and Branding Design Inspired by Rural Lifestyle.

Craftsmanship and local techniques belong to the immaterial cultural heritage of the place and represent a system of values of the communities that produce and use the artifacts. Immaterial heritage is functional, practical, and entwines a story that comes from the local place. Knowledge and techniques are disappearing in time due to the lack of attractiveness of countryside lifestyle. The workshop aims to explore ways to preserve and input new value to the local production of crafts, starting from a direct interaction with the people in the villages.

Design Directions:

- *Branding and distribution strategy of local products.*

How to add more value to local production? How to show the knowledge of the place? How the values and spirit of the place fold into products? (Communication and network oriented)

- *Market services between city and rural.*

Exchange of resources between rural and urban can enhance and facilitate dialogue to avoid exploitation. How to manage the local products as networking resources with the city? (Product-service system oriented)

- *Local products design.*

Through direct interaction with local craftsmen, how can the design skill and creativity learn and inspire craft techniques? (Product oriented)

Installation with bamboo objects and prototypes made during the workshop

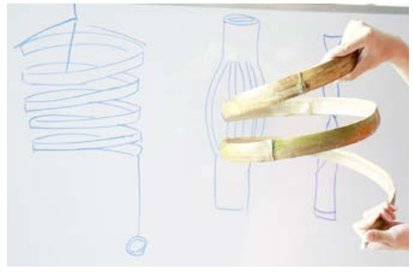
PROJECT 1:
LOCAL PRODUCTS CO-DESIGN

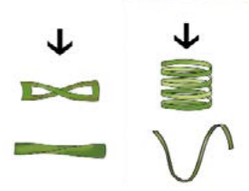
In this paragraph, we describe the process and the results of the students who have been working on the bamboo topic of the workshop. The field research conducted brought students to interact very closely with the craftsmen and to experience a full cycle design process, from concept design to implementation.

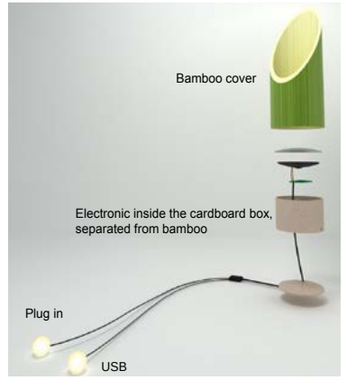
The work of these groups is based on mutual trust between them and the locals, which enhanced the quality and the detailed scale of the results.

These are two main relevant outcomes which will be further explored by the ongoing research within Studio TAO. The first outcome begins to develop a locally-based market strategy for already existing small-scale producers, offering them branding artifacts and tools to use in an enlarged market space.

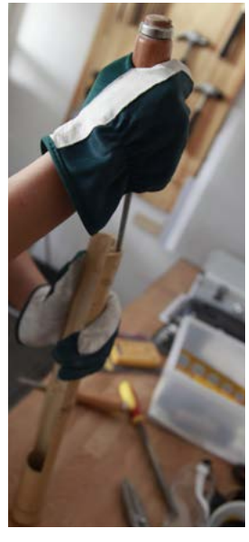
Another group focuses on the craft process itself and uses a very practical and do-it-yourself (DIY) approach. New product concepts have been envisioned during the one-week co-design with the students and craftsmen. We are currently developing with them the first collaborative collection of baskets, planters, and lamps.

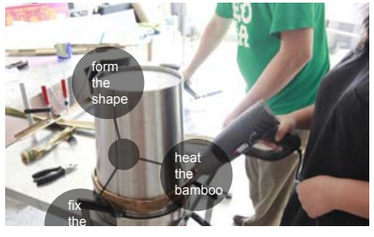


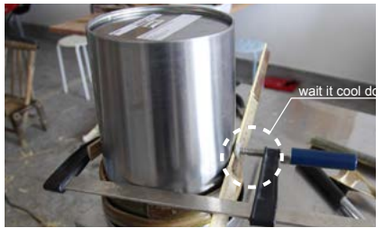




Studies and works on material properties of bamboo







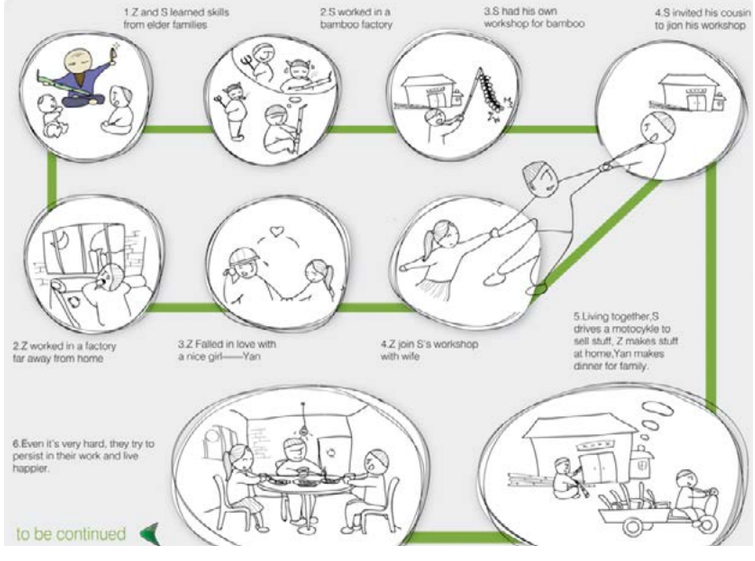
Working process of the workshop

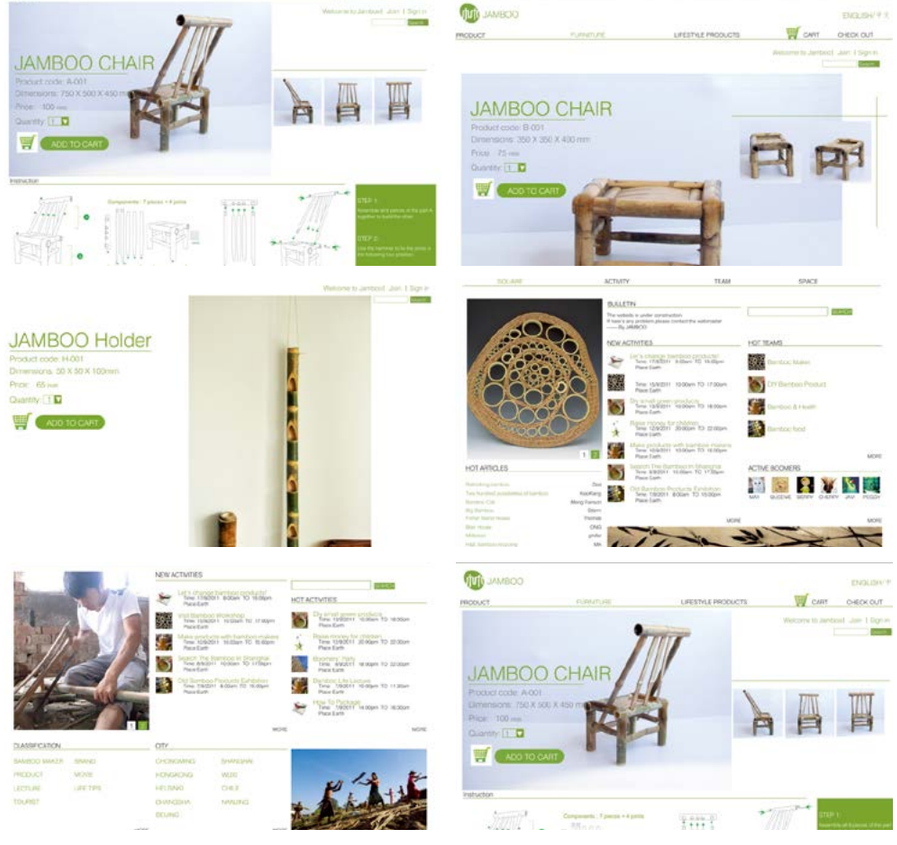
PROJECT 2:
BRANDING AND DISTRIBUTION STRATEGY OF LOCAL PRODUCTS

Students' final branding proposal of JAMBOO

In 2011, the two enthusiastic brothers Jiang created the brand JAMBOO, selling lifestyle bamboo furniture and daily life products. Every product is entirely made by hand, with sophisticated craftsmanship and passion.

Storyboard of JAM¬BOO bamboo workshop





4

FROM SKY TO EARTH

4.1

DESIGN HARVESTS

* Acupunctural Approach: Acupoints and Network
* Design Schools as Agents of Change
* Design Workshop as a Co-Creation Tool
* Outline of Different Subjects
* Project Structure Map
* Innovation Hub
* Virtual Hub: Building an Open Platform for Collaboration
* The Second Hub: New Jindai Elementary School

DESIGN HARVESTS: A NETWORK OF COMMUNITY-BASED OPEN INNOVATION PLATFORMS

LOU Yongqi

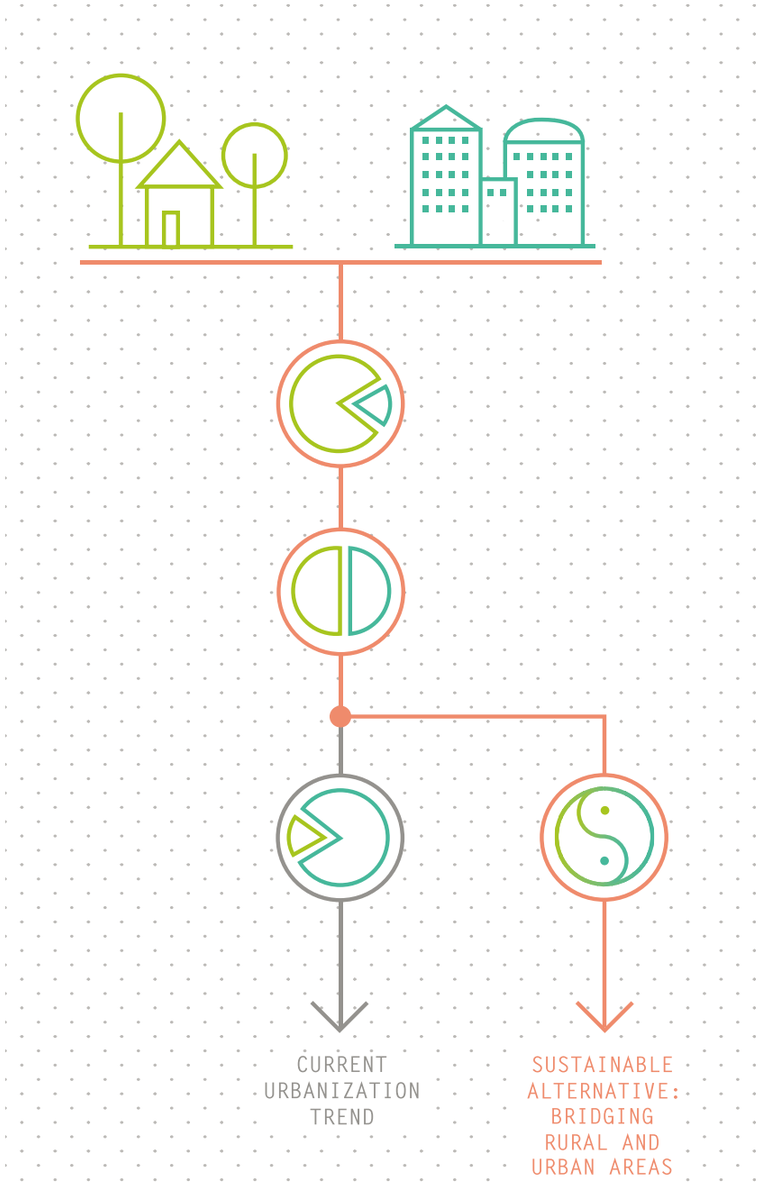
The aim of Chongming Sustainable Community project is to build a new developing model through "design thinking" to integrate rural and urban resources and improve social environments, economic situations and social relations, so as to blur the boundary between rural and urban, thereby achieving balanced development. All those design projects are prototypes of visions for the future. Just like acupuncture, that adequately stimulates the key acupoints to generate affection in the whole meridian system. All those projects will form a strong cooperative network, bringing inspiration and leadership simultaneously in urban and rural fields, so as to generate effects on the social system of the entire area.

It is rather difficult to build such a cooperation system involving numerous items by individuals, single organizations or companies alone. In modern society, precise division of resources, investment, knowledge and talent makes people have more and more cooperation in doing projects.

In this case, the network will be completed by innovation communities from various fields and backgrounds with industrial, interdisciplinary, and cross-cultural cooperation, based on which to establish an innovative platform integrating innovation, technology, and industry.

Hence, only with the establishment of a collaborative network of innovation communities composed of people and organizations from multiple backgrounds can this new approach of sustainable development be powerfully implemented and tested. The contemporary world is gradually becoming flat, becoming smaller and smaller. Individuals or organizations can get connected to the entire world via fiber optics and the Internet, communicate with people regardless of their colour, gender, beliefs and ethnicity, as well as cooperate with or compete with people, businesses, and states all over the world. This will become the primary way of development in the 21st century (Friedman, 2009). This is also why DESIS (Design for Social Innovation and Sustainability) network has come into existence. In this sense, the structure of the network of the innovative community will become central to the establishment of the urban-rural interactive system. This collaborative system will be completed by innovative communities from different backgrounds with inter-industry, inter-discipline, and inter-culture collaboration. On this platform, where creativity, technology and business can be integrated, the innovative community will deal with issues related to sustainable development, integrate resources of the urban and the rural, discover market opportunities, expertise and capital, so as to push forward the construction of a new mode of economy, a new way of living and producing, and a new living environment. At the end of 2009, Studio TAO decided to prototype a network of co-creative open innovation platform, and named it as "DESIGN Harvests". Here we use capitalised DESIGN to differentiate from the traditional artefact-based design.

An alternative solution from urbanization:
Urban-rural interaction



ACUPUNCTURAL APPROACH: ACUPOINTS AND NETWORK

LOU Yongqi

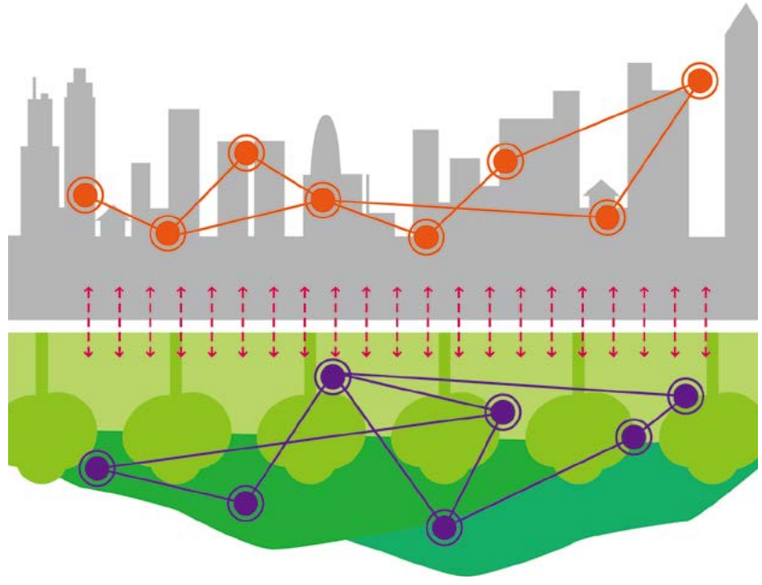
By immersing the design process into local circumstances and rural systems, and by discovering, improving, upgrading, and popularizing the potential of rural ways of living, the whole repertoire of projects that lie across the urban and the rural can be expected to become the key step toward sustainable development. These projects will develop into a powerful cooperative network that inspires and facilitates the interaction and exchanges in the urban and rural settings, so as to make impact on the social systems in the entire region.

Based on the acupunctural approach, acupoints and network are two key elements. They are also the key design objects. As a physical version of SLOC scenario (Manzini,E. 2008), a series of closely related "Innovation Hubs" will be developed in the cities and villages as small focused interventions. Each one will be developed in a certain context. The function of each hub can be a mixture of community centre, incubator for entrepreneurs, knowledge exchanging centre, meeting place, prototype of new business model, community-supported ecotourism centre, etc. It is a

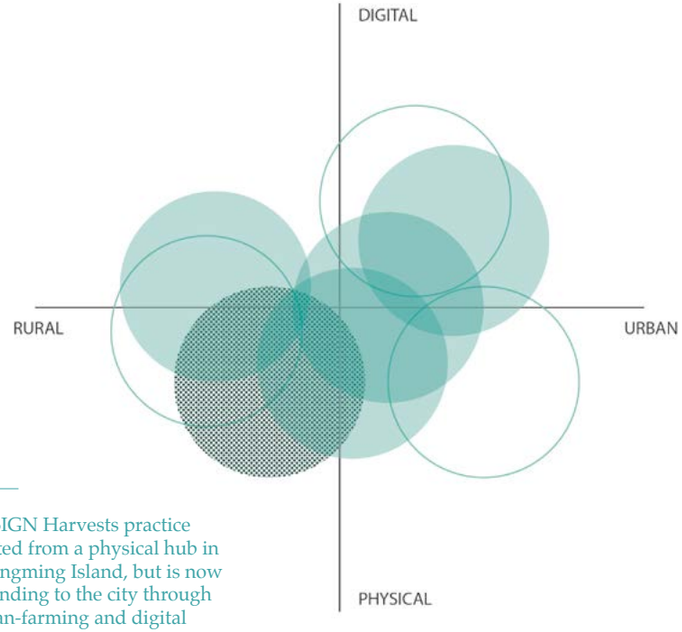
place where the needs of and resources from the city and countryside can meet. It can be a hotspot to stimulate the establishment of a cooperative network which will finally enable a mutually complementary urban-rural system.

According to the plan, the concept of "hub" can be defined by two poles: Rural-Urban, and Physical-Virtual. The first step we take is to establish a series of Innovation Hubs in the countryside, taking local characteristics into account. These innovation hubs will try to take advantage of local potentials, according to local disposition of resources. The key here is not just to provide products and services for the cities, what's more important is to incubate and showcase the new economy, boost local employment and attract urban intelligence, capital and resources to create business ventures in the countryside. This innovative community-based development approach will increase the attractiveness of rural life and lift the development capability of the rural areas economically, socially and culturally.

The system in the cities interacting with the rural innovation hubs are the "Life Experience Hubs". Their roles are to convert traditional Chinese culture and the healthy, fresh and natural way of living of rural areas into products and services. According to the system design, the innovation hubs located in the countryside and the cities will form a network that enables them to share experiences, resources and create synergy. The collaborative networks of the innovation hubs support each other, cover both the urban and the rural, and facilitate interaction across the entire region to attain the economic, social, and cultural exchanges and the interflow of human resources between the two, so as to blur the urban-rural boundary and achieve the goal of balanced development.



Innovation Hub Network to connect urban and rural area



DESIGN Harvests practice started from a physical hub in Chongming Island, but is now extending to the city through urban-farming and digital platform.

DESIGN SCHOOLS AS AGENTS OF CHANGE

Ezio Manzini

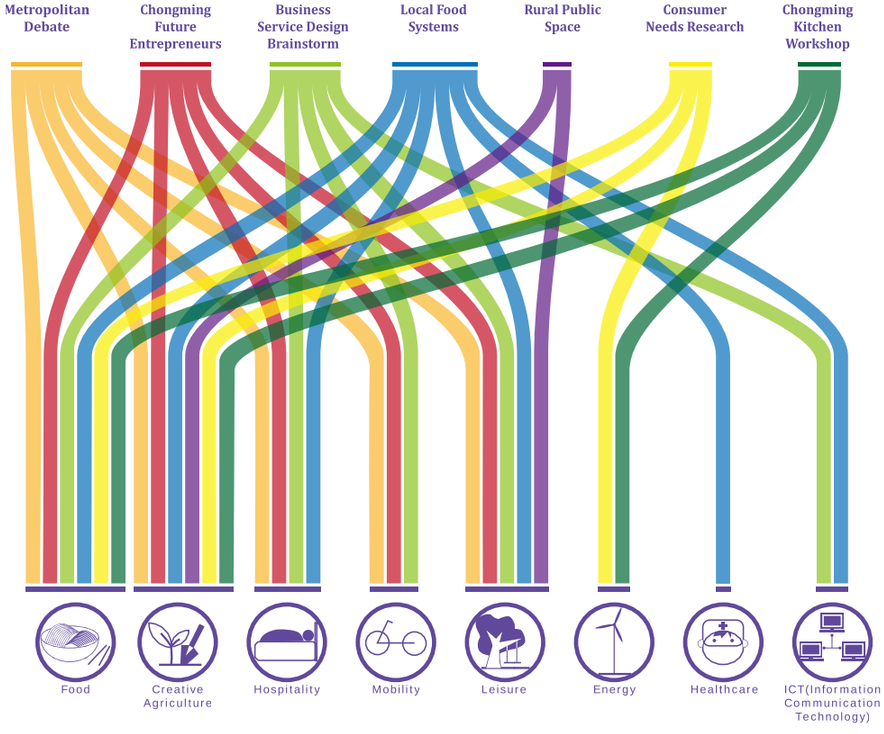
Design for social innovation can find in the design schools a major driver for its application and diffusion. In fact, design schools (and, more in general, all the design-oriented universities) can orient their didactic and research activities towards social innovation. That is, they can become design laboratories where new visions are generated, new tools are defined and tested and where new projects are started and supported. If a world-wide movement towards sustainability calls for the best possible use of all existing resources, design schools, with all their potential in terms of students' enthusiasm and faculty experience, should be considered a very promising social resource: a potentially powerful promoter of sustainable change.

DESIGN WORKSHOP AS A CO-CREATION TOOL

During the design and research phase of the process, a network of co-creators, including international design schools, universities, business partners, NGO, local communities, and individuals from other backgrounds, have been involved. The strength of the network, in fact, is the mix of actors from different disciplines, analysing with different eyes and sensibilities the same situation. The joint design workshop is a very efficient tool to enable a co-creation process within the network, especially in the conceptual and starting-up phase.

Studio TAO created a series of workshops based on different contexts in these years. Each of them was divided in multiple steps: theoretical research, field research and the proposal of one or more final concepts. Participants have been asked not only to carry on an immersive contextual research, but also to generate some concepts with a systemic approach. These solutions have been focused on one or more topics (like food, tourism, health care). The outcomes of the workshops are not detailed answers, but can be considered as open inspirations for future developments, to be distributed by Studio TAO and carried on by others.

As time went on, the establishment of a rich and multidisciplinary knowledge pool and idea heritage was realized, clustered and networked, including all the aspects of the context, and considering social, economic, technical, and territorial elements of the system. At the same time, the connections with the other aspects have been underlined. This process can only be realized with the support from a creative network. In this way, we also take the advantage of the existing resource and collect the energy from our partners' daily work and integrate them into the progress of the project.



Connections between workshops and research topics of DESIGN Harvests

OUTLINE OF DIFFERENT SUBJECTS

In the following pages we describe the main topics for current and future development of the project.

Food

The project focus is on the production and distribution network where special food from the island can be found in Shanghai, at distribution points or neighbourhood markets, online through a subscription service, or directly on the island, in homes, restaurants, or workshops. By shortening the food distributing chain and focusing on quality it is possible to provide healthy food at a fair price, both for customers and farmers.

Creative Agriculture

The main objective of the creative agriculture projects is to transform selected fields in public space for the community through the combination of traditional skills with ideas from the creative community and the use of ICT, to share the experience in the network. Different disciplines including agriculture, technology, design, and tourism are involved to create a landmark that can be an important part of the brand of the island.

Hospitality

Farmhouses which have not been used are considered an important resource in Chongming. Our projects design the product service system which takes advantage of local resources to provide a clean, warm, and welcoming environment for travelers who want to stay on the island. Here they can experience rural life, meet members of the local community, and participate in different activities. From a business point of view, diffused hospitality enables farmers to use their skills and resources to provide a remunerative service to customers, all the while being supported and trained by a central management team.

Mobility

A sustainable development of the island cannot forgo a careful design of an integrated transport system as a tool for local and regional scale mobility. This topic will be developed across all the projects, combining different solutions (bike, van, bus…), to make each proposal efficient and with the lowest environmental impact.

Leisure

Different activities to rediscover natural ways of living can take place in the island, creating a holistic experience for the customer and involving the villagers in a proactive way.

Some of these activities involve exploration of the island or outdoor physical fitness while some others are more focused on the experience of natural beauty care, local crafts, or cooking styles.

Energy

The analysis of all the resources on the island as well as their connections and impact on the general system is the preliminary step for understanding how to use the assets efficiently. Proper analysis and use will be important for the environmental sustainability of the project. Low-impact solutions for energy supply are integrated in the design of the physical space.

ICT

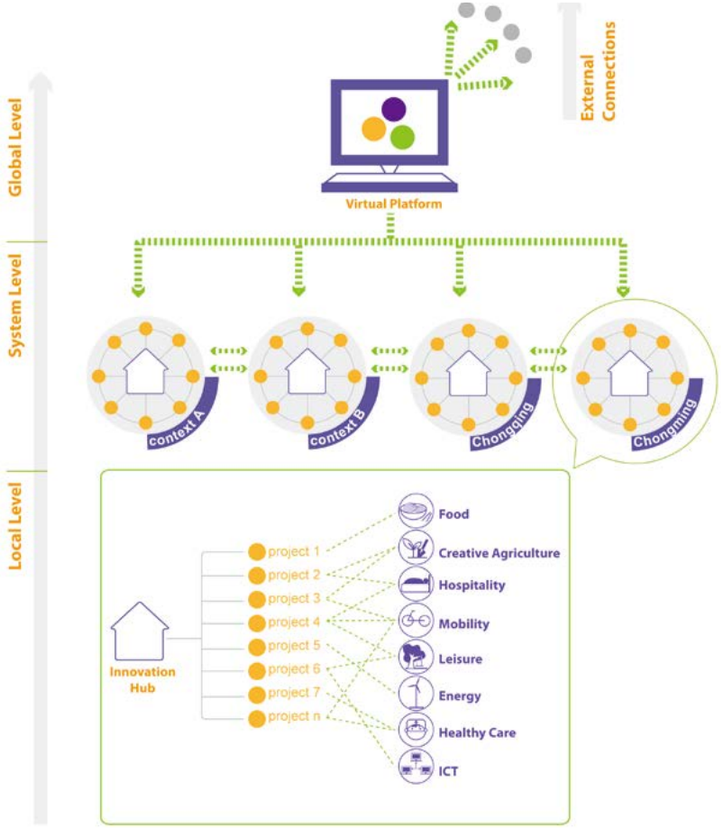
Information and Communication Technologies are used to connect the local reality with the network. Different online platforms are designed to enhance dialogue among members of the innovative community, exchange information, and develop tools related to the services offered (for example online purchase, virtual plot renting, bike route maps…)

PROJECT STRUCTURE MAP

After having identified different promising fields of action in the local context in the research phase, a system of small projects, each operating in one or more of these fields, has been developed to face specific needs of different targets. All these projects are in some way connected, and have relevant effects for the future of the local community of Xianqiao village.

The Innovation Hub is the central structure aimed to coordinate, integrate, manage, and promote all these small services. When this system is exported in different contexts, in the principle of holistically regulating the macro-scale system towards a sustainable direction, other local hubs can emerge, each with specific characteristics and a clear vocation, coherent with the territorial identity and the scenarios designed. They represent the nodes in the more global framework of networking projects. This system makes possible the so-called acupuncture approach that allows the designer to work on small, different micro-synergic projects, producing a systemic effect.

An important role in the management of the interactions among different local contexts and with external actors is played by the digital platform, that is the virtualised part of the service addressed to different target users. Three functions have been included: an information section, aimed at presenting the project and explaining its main characteristics; the portal that the final user can access to purchase products and experiences; the third section that connects and implements the network of the innovative community of researcher, designers, local authorities, local communities, entrepreneurs, other business partners, etc.



The content of Innovation Hub at different levels

INNOVATION HUB

Based on the acupunctural approach, the DESIGN Harvests team decided to implement the concept of an Innovation Hub in Chongming Island as a prototype. The Innovation Hub in the village is a multifunctional space and platform based on local features. According to the local potential resources and social-cultural characteristics, the innovation hubs are the result of using design thinking to develop a series of connected projects, build interaction and cooperation between different communities, and become the connecting point itself.

So that it "incubates" and demonstrates a new economic model, in this hub, the creative community who come from different backgrounds will work together to form a network that connects and propels knowledge, culture and resource exchanges between urban and rural. The innovation hub will continuously provide products and services which represent a rural, healthy, leisure lifestyle in order to improve the overall attraction of rural ways of living and life philosophy in the aspects of economy, culture, society, etc.

Meanwhile, a systematic network is formed among the rural innovation hubs, learning from each other, sharing resources, connecting with "Life Experience Hub" in the city, to push the development of whole territory.

The Principles for the Hub:

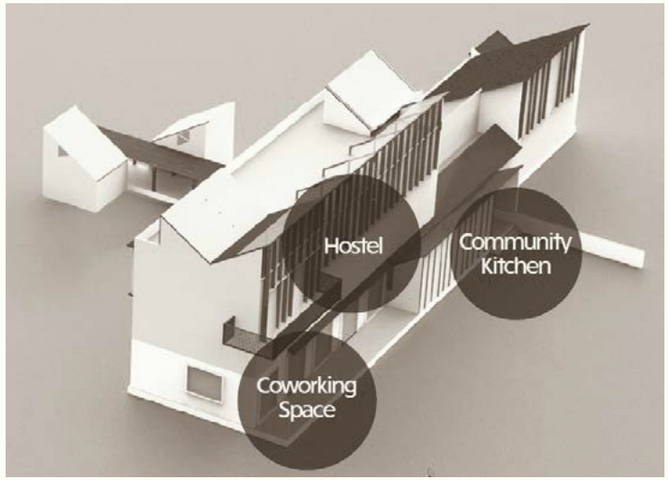
- Small: scalable unit, service-based points
- local:integrated with village input and context
- Open: active interaction with outsiders
- Connected: exchanging capital, knowledge, skills, services and products
- Sustainable: managed and maintained collaboratively by the community

The first attempt at establishing an innovation hub is based on an abandoned building of Xianqiao village in Chongming. It's a small building with three floors. The function of the HUB is a mixture of community Centre, incubation for the entrepreneur, community-based ecotourism centre, education and knowledge exchange centre, etc. The entire outside wall of the ground floor can be opened to outside nature space. And the main function is the kitchen, dining room and an open space for exhibition, communication and activities. Because the kitchen is a very important activity centre in the traditional rural lifestyle, so the open kitchen in the hub will be the centre, which connects other function areas.

The first floor is office space, which can be rented by other companies for working, and some public computer rooms for everyone to study, work, and share information. The second floor is living space with 6 separate rooms. The whole building is covered by wireless in order to keep connection and communication with the outside world. The innovation hub is a centre for communication and interaction, which opened to local villagers and all other people from Shanghai or other places.

Later, due to some reasons, the plan had to be changed. Based on the concept of "Small and Connected" as well as "Local and Open", we decided to deconstruct the space, function and service of the innovation hub into a networked set of fragmented spaces. Each individual fragmented space can be developed from surplus space in the village. In other words, the HUB combines rural surplus space together based on certain designed functions and accomplished the mutual supports and interaction through service design and other collaborative ways. It evolved from the radiation of a single huge hot spot into a network of multiple small hotspots. Thus the interaction between the newer function and the existing community can be greatly improved. The DESIGN Harvests team started seeking spaces and local partners in 2011. Now several projects are finished or on-going. A greenhouse was renovated as a multi-functional social space: planting, education, exhibition, canteen, communication and event venue. Several surplus houses were renovated with help from the villagers as community-support hospitality or incubator. Also, a handicraft workshop and knowledge exchange centre are in the planning phase. With these small design interventions, the village becomes much more lively and attractive than before.

The plan of functions of the first possible hub in Xianqiao village



Pictures of the model and landscape design of the first hub renovated from an unused warehouse

VIRTUAL HUB: BUILDING AN OPEN PLATFORM FOR COLLABORATION

Serena Pollastri, Francesca Valsecchi

As has already been explained in the previous paragraphs, various local and international partners have been involved at different stages and initiatives of the project, thanks to a model that allows and encourages open collaboration and the synergy among different small-scale interventions. Given the scale of the whole DESIGN Harvests project, one of its main characteristics is the effort of the core team to keep the research process as inclusive as possible, with regard to all the different interlocutors. This clearly affects and orients the communication level, that has always been a key strategic issue and is sometimes problematic; how to communicate the project on the local and global scale are both relevant issues, as well as to let potential partners and fellows clearly understand how to cooperate and get involved in specific activities.

Since the beginning of the project it has been clear that a mere website could fulfil basic communication tasks, like presenting content related to project overview, on-going activities, scheduled events and plans. The typical website structure is however not helpful in the strategic role of communication, and mainly cannot afford to describe and clarify the multifaceted aspect of DESIGN Harvests, whose on-going directions, in the short and medium term, change according to the opportunities that come along the way. So we can use the website (in its static contents and dynamic research blog) to express the visions and the long term research directions, as a mainly a verbal storytelling platform. Therefore, more deep and different intents are needed to develop the communication strategy that is required by each short-term micro project and collaboration.

When we think of the concept of a virtual hub we do not necessarily have in mind the digitization of communication process and artifacts. Moreover, we think about communication that overpasses distinction between analogue and digital artifacts. The idea of virtual includes the

capacity of communication to develop artifacts within a network of interlocutors, in which from time to time specific artifacts are required, or different process involved. The virtual hub represents in a symbolic way the collection and the system of our communication channels, contents, and strategies. The example of local collaboration with the partner (either villagers, farmers, party members, etc) in the field is particularly relevant: it requires for example much more than an online platform; it is much more based on word-of-mouth, meetings and visits, to create and improve the delicate system of connections and relations that are based on a trustworthy mechanisms and the ability to discover and share common interests.

These reasons clarify why we need to have a more complex and fluid platform than a website, to connect the communities we are working with. The concept of a virtual hub is never considered as a closed task, but includes the existing effort to develop specific communication assets for the layers of the projects, as well as envision future development of communication strategies. We are choosing in this chapter not to describe the details of the specific actions, but to give an overview of the playground of communication that we have to face in everyday practice and research. We offer a classification of the different groups within our network, to identify their characteristics and the way we connect, or would like to be connected to them.

Users

To inform and invite to open events and initiatives; DH website: Provides information on the general aspect of the project, shares latest news and aggregates material published on different social networking platform (mainly weibo, flickr and douban)

Business and associations

to seek partnerships to develop specific sub-projects; the DH website but also personal invitations to events. Face-to-face meetings to discuss different opportunities for collaboration.

Community

local Community (Shanghai) partnership, discussion, communication; DH website and events, both organization and participation, to involve different organizations in the discussion.

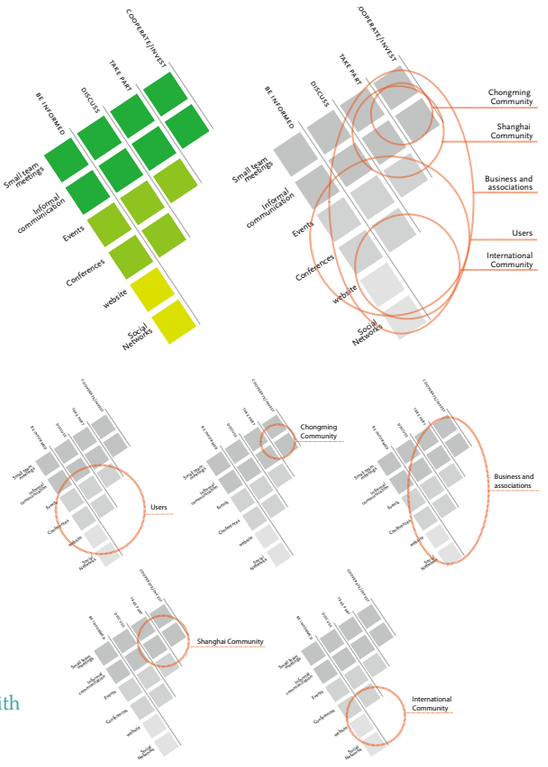
Local community

in Chongming island, cooperation, field work in the village, visualization of the process/project; Events on the island to connect us with the villagers and the urban community.

International community

important for research dissemination and research development; Conferences, papers, publications

A more systematic way to manage different levels of involvement and information needs to be developed, starting from the model we just presented. This might be a comprehensive digital platform, as well as a system to aggregate different communication tools.



Diagrams that represent our system of communication tools with stakeholders

DESIGNHARVESTS ONLINE TOOLS

Dissemination work and sharing platforms that we use on the internet

- HOMEPAGE *http://designharvests.com*
- FLICKR GALLERY *http://flickr.com/photos/designharvests*
- DOUBAN ACCOUNT *http://douban.com/people/tektao/*
- SINA MICROBLOG *http://weibo.com/studiotao*
- Tumblr Micro-sites for the development of specific subprojects. Currently active: *http://designentwines.tumblr.com/*
- GOOGLEGROUPS Daily discussion: *http://groups. google.ca/group/studio-tao?hl=en*
- OUR PUBLICATIONS *http://issuu.com/studiotao*

THE SECOND HUB: NEW JINDAI ELEMENTARY SCHOOL

LOU Yongqi, Yuval Zohar

In January 2010, the China-US Center for Sustainable Development approached TEKTAO to lead the design and construction coordination of a new sustainable school in Liangping County to replace one damaged in the 2008 earthquake.

The goals outlined from the onset of the project were to build a safe, sustainable, scalable, and cost-effective school. The school's brief specified 560 students (12 classes) and 5,000 m² of program was donated in part from the Liangping government and in part by charitable organizations. The site chosen was a beautiful plot of terraced agriculture in the rural Jindai County, just opposite the ancient Shuang Gui Temple. After a three-month design phase followed by a six-week construction document period, the school was under construction for 10 months and has been completed as of April 2011.

During the week directly preceding the opening ceremony, TEKTAO led a workshop along with Tongji University involving the Jindai school students and faculty, along with the local community, to facilitate the transition of the school's ecological and social design ideas into real-world practices.

In this project, our aim was to create an exemplary school that respects and interacts with nature, culture, and community through comprehensive yet cost-efficient sustainable methods that are both vernacular and replicable. We achieve this in the form of an educational 'playground' with integrated communal program. The main problem we identified was resolving the programmatic requirement of a running track while minimizing disturbance to a topographically intense site. Our design solution places the track at an optimum height that combines efficient grading with a minimal support structure to create an activity platform which transitions from floor to rooftop and becomes a protective barrier for 3,000 m²in the vegetated heart of the site. By redirecting seemingly conflicting elements, the program that most threatens the site becomes its guardian. The building layout, which organizes and distributes programs around the centre, maximizes the students' interaction with their environment while structurally supporting the track. The newly defined 'sky track' is a response of compounded program: combining the function of a running track, playground, hallway, viewing deck, and event stage in a geometry that embraces the site and emphasizes views of the temple. The entrance is combined with a public community centre as an addition to the conventional school program in order to promote interaction with the villagers.

Our sustainable planning focuses on low-cost, high impact conservation, recycling, and comfort strategies tailored to Liangping's humid subtropical climate. The terraced topography naturally lends itself to constructed wetlands; the site is adapted to treat both wastewater and rainwater, creating a low-maintenance, closed-loop organic infrastructure that treats 4,800 gallons of water every day. The rainwater that falls on the buildings and the track is collected in an adjacent wetland pond. When it rains, this wetland cleans the rain-water, which then cascades down several ponds to become a landscape feature that reaches all the way to the school's entrance. In addition, dual-flush toilets help regulate water use.

Buildings are optimally oriented to capture light and prevailing winds based on analysis of the local sun path and wind rose. Solar ray studies were performed using Ecotect to determine the placement of light shelves and ceiling pitches inside the classrooms. LED lighting is used throughout the school to lower electricity usage and costs. A passive HVAC system uses stable ground temperatures to condition the classroom buildings. The system is composed of several tubes dug 4-5 meters into the earth that are connected to the duct system in the ceiling. Fans are used to pump out and deliver air from the tubes into the classrooms to increase interior comfort and fresh air supply, thereby improving the overall air quality.

Revived agriculture fields in the landscape, including a crop roof on top of the kitchen, feature endemic crop species that provide fresh ingredients (cabbage, bakchoi, corn, rapeseed, and chives) for the cafeteria as well as dedicated areas for outdoor farming classrooms. A range of reclaimed, regional, and renewable materials are used throughout: Foam insulation panels are salvaged from defunct earthquake shelters in Beichuan and incorporated into the classroom walls. Bricks and floor tiles from a demolished on-site building are reused to create the landscape ponds. Bamboo, which grows abundantly in the region, is used extensively in the exterior of classroom stairwells and on the school gate. The community centre facade is composed of reused local stone.

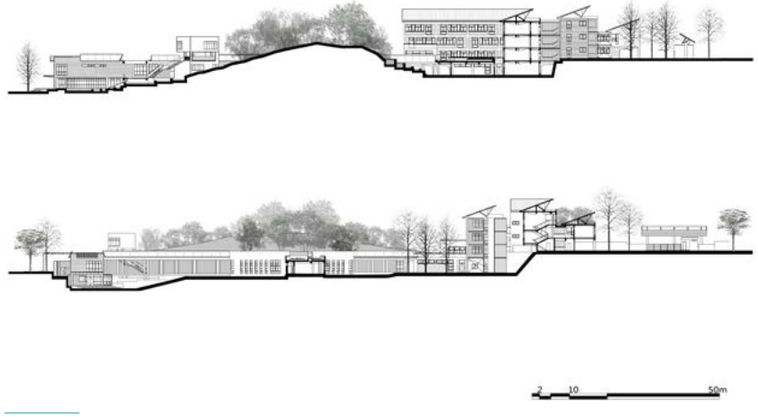
The New Jindai School is deeply rooted in the surrounding context. The relationship between building and nature echoes the physical characteristics of Chongqing – known as the "mountain city" – where peaks readily invade urban fabric. Our design provides the adjacent temple with a viewing platform that visually integrates it throughout the campus. The structure is engineered to meet the strictest seismic codes.

Since TEKTAO was granted control of the budget, we rigorously administered construction to achieve a cost-efficient and quality building, managing to keep the price of the finished school (including furniture and electronic equipment) very close to the Chinese national average for code-compliant elementary schools.

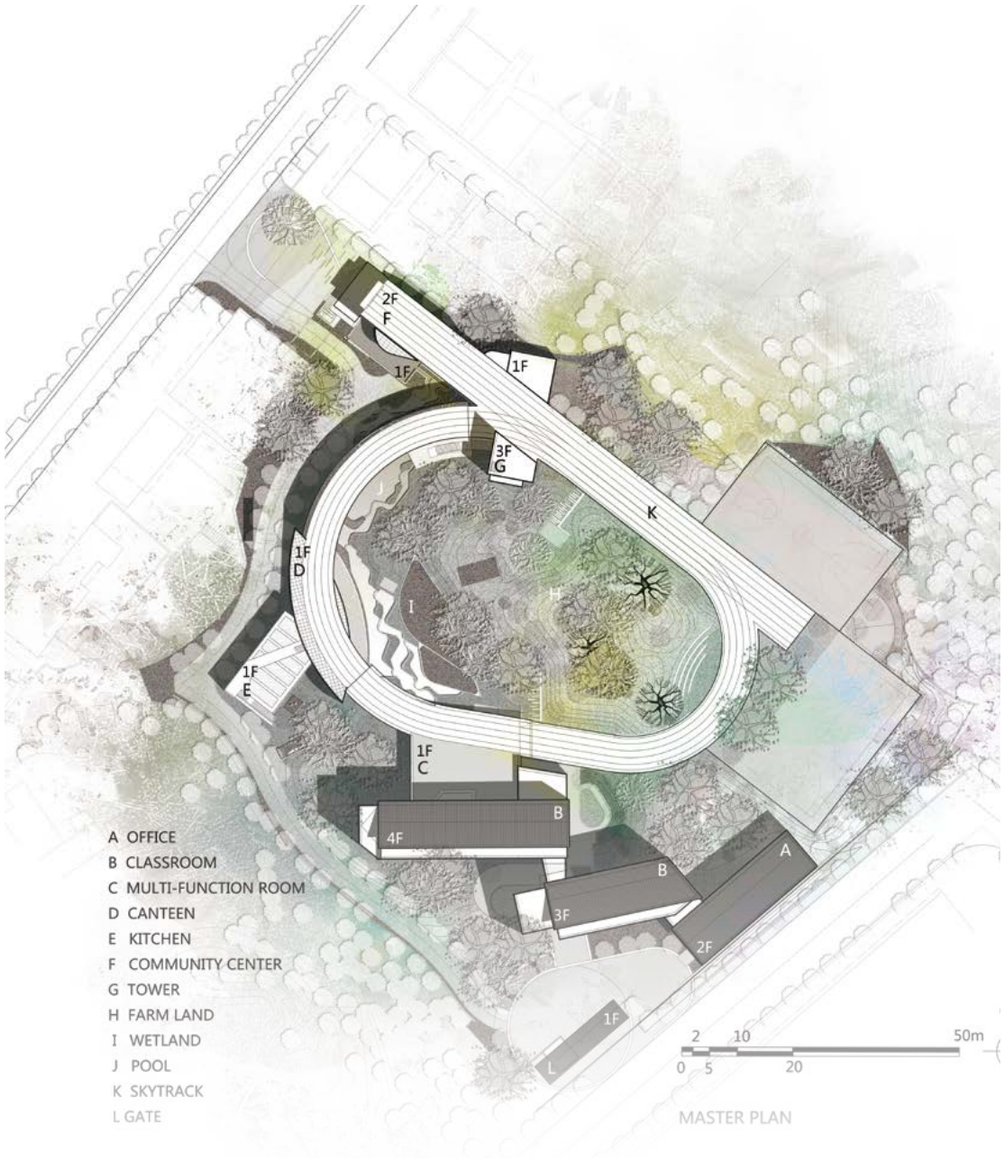
Nowhere are the lessons of sustainability more appropriate than in a school in a devastated region of the world's most populated country. We therefore propose the school as an experiential learning tool where students become 'green catalysts,' naturally absorbing the lessons of their surroundings and spreading them to their parents and the community to create a sustainable society from the ground up. Visitors are similarly exposed to lessons of sustainable development specific to both urban and rural China. The exhibition in the community centre uses reclaimed desks from the old school as display cases to explain each sustainable point through very simple visual analogies that both children and adults can understand. The desk explaining the passive lighting system, for example, compares one LED bulb to 30 standard incandescent bulbs taken from the students' homes that we exchanged for free with compact-fluorescent bulbs. Through these small but direct steps towards energy savings in the community, our goal is to promote an environmentally-responsible lifestyle that extends beyond the physical boundaries of our design.

The New Jindai Elementary School is a project where the conditions were aligned for a responsible sustainable design to have positive impacts in an earthquake-stricken, rural community in China. Rather than ending our involvement with the end of construction, our intentions are to establish a long-term relationship with the school and town in order to provide continued design intervention throughout the school's development. Now the DESIGN Harvests team is working together with the school to improve the sustainable experiences and create more interactions with the community and the outside world. New business modes and services have been developed through product service design to attract more resources for the school and enable public participation. The community centre of the school is now being upgraded to be an innovation centre, which can support local entrepreneurship focusing on the rural-urban interaction.

The community centre at the entrance

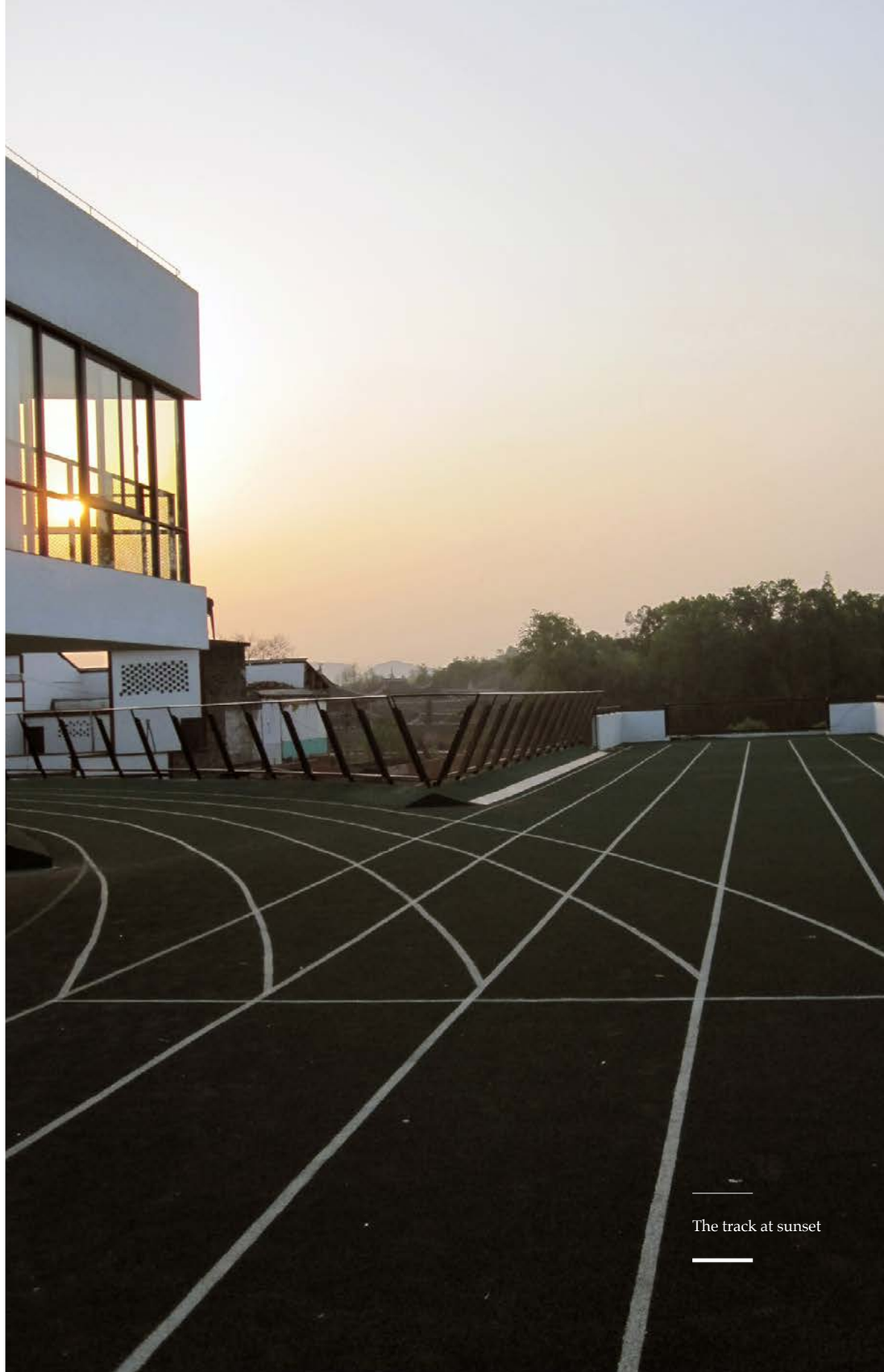


The sections of the site with buildings



MASTER PLAN

The sky track at sunset



The track at sunset

The view from the north gate

Exhibition on sustainable points using the old desks of the school

The school panorama

The constructed wetland in front of the canteen


保护
环境 重在今天

4.2

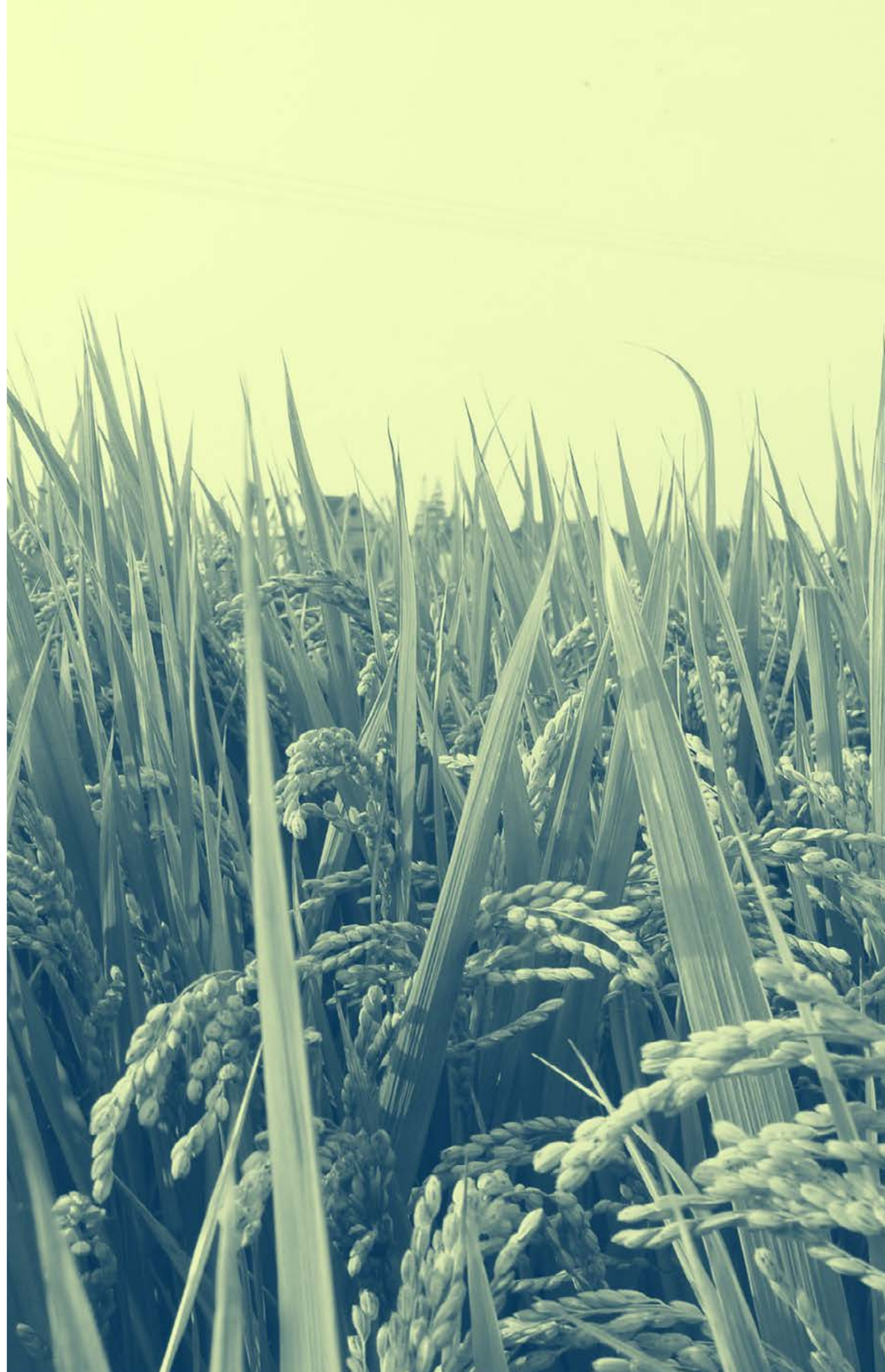
DESIGN HARVESTS RESEARCH ACTIVITIES

* Research Topics and Directions
* Field Research in Rural and Urban Context
* The Farmlands: Gardens, Greenhouses and Landscape Design
* Design in the Support of Local Craftsmanship
* Information Communication Technology Issues in Rural and Urban Context
* Designing the Public Usage of Rural Surplus Space (PURSS) in Xianqiao Village
* Identity Creation: The Logo Phase

RESEARCH TOPICS & DIRECTIONS

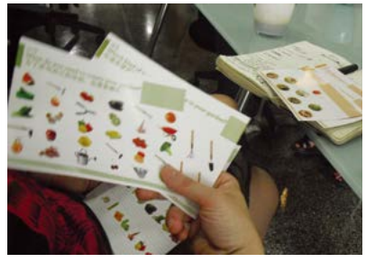
The research carried out in these years mainly developed services-based scenarios for the local community and intended to inform the design of a range of services that facilitate exchange between city-peoples' needs and local resources. So far, the scenario development has been used for the local villagers to start a conversation about an expanded and enriched future for the countryside. So we figured out services that directly involve local places, resources and people, and can make contribution to the experience of the city-people in respect of wellness, food chain and sustainability-oriented leisure and hospitality. We are currently moving from conception to design implementation, and some of our findings are going to be developed into real services, for example a direct market with craftsmen is provided, with the possibility to purchase objects and enjoy the workshop, with our guarantee of a fair and dis-intermediated trade platform. Old houses at the edge of the field land are being renovated and will be available for exploration and short term stays, as well as group hospitality. There is a strong focus on the farmland around, the countryside offering new scenery where the interest of tourists and visitors can be catalyzed, providing a leisure package that includes activities engaging with the countryside and participants are challenged on how to face the farmland and its opportunities.

Our plan for further research includes three main topics: techniques for field research and methodological framework construction, organic agriculture practices and networks, and ICT implementation in rural-based projects, through the application of Internet of Things solutions.



Therefore scenarios have been developed to help farmers and citizens, envisioning possible future realities in the urban-rural relationship, making them feel involved as main characters in the rural-urban transformation. Now is the time to produce knowledge related to these possible futures, and to provide locals and citizens with understanding, solutions and a participatory playground. We are continuously developing field research activities, going deeper on specific targets and developing a complete range of tools. In recent months we started an inquiry directed to citizens, and we are analysing food consumption habits, technology literacy and sustainability awareness, using game cards and similar discussion tools to get more in-depth knowledge from them. This expertise about rural context and development allows us to conduct partnership research with companies or other institutions.

In the following pages we will briefly show some of the tools, techniques and research situations we have created. More comprehensive description and results of these research topics have been published in past years in international conferences and symposiums.



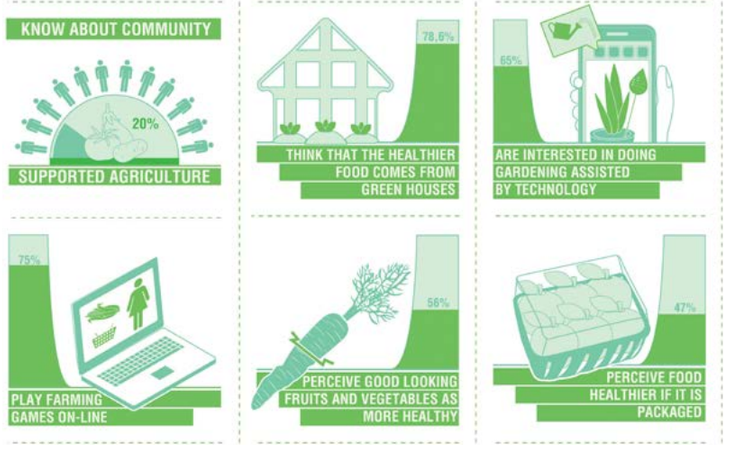
Images from interactive ethnography session and focus group on food habits. Cards design for the research and a snapshot of the discussion with the citizens.

FIELD RESEARCH IN RURAL AND URBAN CONTEXT

As mentioned above, for a deeper and more focused understanding of the context and users involved, an ethnographic research method has also been developed, and it runs across all of the projects; not all data are quantitatively measurable, and qualitative research also falls short when no participatory observation is employed. There is a clear difference between what people say (or what they do when interviewed or during focus group discussions) and what they actually do. The complexity of the ethnographic process allows the recognition of patterns of behavior in daily life contexts and helps to understand how these patterns are organized and change.

For this activity, a "hybrid" approach that uses a combination of qualitative and quantitative elements for data collection and analysis has been adopted. Quantitative data are used not only to gather information on habits and trends, but mainly as icebreakers for an in-depth conversation with the interviewee. Adopting ethnography is very helpful to the process of qualitative understanding of the target, based on direct interactions and conversation tools. In our mind, the research has been split into two different parts: one related to the urban target, in which we inquired about food habits and lifestyle patterns related to sustainable behaviors; the other focused on understanding the rural system and cultural implications within the social framework. From this distinction, a selection of research tools was derived. Neither the rural nor the urban subjects are considered as consumers but strictly addressed as users; we observed them trying to understand how devices and services they use are related to communication interactions and needs.

We conducted a series of field research activities, trying to get as familiar as possible with our subjects, through game-card based focus groups, in-depth interviews in real contexts and online surveys. Activities are more focused on interaction and conversation, through a game-card based tool developed for city users and more analytic ones for farmers and rural people. Starting from a general knowledge of the rural social environment, we developed specific tools to help us investigate the way rural subjects communicate, and the perception that urban subjects have about the countryside and existing connections. The overall strategy was to create as many open and spontaneous conversations as possible. For this reason we tried to inspire urban participants with scenarios, evaluation of activities and desirable services. With rural people we tried to explore topics and create dialogues in order to unearth hidden and tacit knowledge about agriculture practices, food chains and technological literacy.



It is necessary to understand why we split the target. Previous knowledge on the rural environment and its connections with the city didn't allow us to conceive the rural inhabitants as a unique and homogeneous type of technology users. In order to understand the scope of further design intervention both in the direction of device and service design, we need to focus on a better definition of our potential, relevant and significant users. The methodology of research was structured to define who our users are according to three different categories: technical literacy, the context of use of technological devices, and the habits and needs that emerge by observing daily interactions. We represented the results of focus groups and interviews through tables and info-graphics that were then used as a reference for the creation of design Personas.

Brief Description of Tools, Ethnography Cards

At the beginning of our ethnography research we wanted to have a general idea of users' relationship with technology, food and rural life. We chose a playful way to generate conversations with a sample group of people from the city of Shanghai. Different focus groups were organized, trying to gather people with different backgrounds in short interactive sessions. We designed a series of postcards, each one with a question, an image or a little game. Participants in brainstorming sessions were asked to fill in the card, adding some personal data on the back and further comments as they wished. This method allowed us to collect different kinds of data, both quantitative and qualitative. Cards can be used whenever we want to collect inspirations and data without having enough time to propose a more detailed research form. At the same time, though, these cards were used during focus groups as a starting point for dynamic discussions on different topics, selected from among the ones in the cards. Aside from the postcards, we developed an online survey to reach a wider target from a quantitative point of view but we were also looking for more unexpected citizen groups and representatives.

THE FARMLANDS: GARDENS, GREENHOUSES AND LANDSCAPE DESIGN

The Design Harvests area in Xianqiao village includes two open fields around which the community initiatives are organized. The smallest field surrounds the Hub building and has been created as a community garden and an open space to experiment with cooperative agriculture. The biggest one, orientated to the South, is where we practice a natural way of farming with villagers. Both fields are a core part of the Hub and represent public spaces in which the community's interests related to the Hub can be organized.

In the small field to the North we are creating a Hub garden through landscape design actions as well as direct intervention on the field. We started in the winter of 2010, with the tractor, weeding all the areas, planting our first bushes of spices and flower bulbs while waiting for the start of construction. The garden contains local crops as well as flowers, imported seeds, and organic varieties; the main intention of our community garden is to create sustainable activities, beyond cultivation, which can involve people in farming as well as sharing knowledge and practice from the process of agriculture and the harvest. In the last two years this small piece of land represented where we informally gathered together with our local partners, and where we hosted our public activities. It represents the symbolic crossroads of urban and rural encounters.

In the South field by contrast, since the spring of 2011 we have experimented with local farmers on using more natural ways of agriculture, inspired by the concept of organic and taking into account the knowledge mind-set of the local community and the environmental constraints posed by the condition of soils and waters in China. The purpose is to experiment with agriculture as a social and economic practice, and we aim to be able to bring more local products to the marketplace as well as giving value and contributing to the knowledge of the people about the meaning and value of what they are doing.

The farmer we collaborate with, named Lao Jia, a farmer on Chongming Island. Lao Jia applies natural farming demonstrating his priorities and love of the land. Without using any fertilizers or chemicals, he tries to plant based on an ancient agricultural philosophy of returning the land to mother nature. The DESIGN Harvests team designed the package and established the online shop in Taobao. Here, a series of design skills were adapted to create added values for the rice. For us, rice is a fundamental representative of agriculture productions. The DESIGN Harvests team designed the package, advertisements, website, market and services.

In the first year we produced organic rice which has been marketed mainly in Shanghai through sustainable purchase networks (farmers' market in town, online distribution, partnership with small restaurants and shops); the second year we included greenhouses with the double purposes of agricultural production as well as creating a recreation area and workshop space. This current direction of direct production of fruits and vegetables is strongly interlinked with the hospitality project, providing visitors a complete experience of the countryside, having a space for agricultural experiment, as well as an activity area.

Both of the fields are characterized by a hands-on approach, considering ourselves living prototypes of the space we provide through our design. Moreover we have the chance to connect with the existing network working on similar topics. That includes expert farmers, organic markets and shops, lectures, proposals, fairs, etc. We consider our fields as dots in a wider network of interest, aiming to contribute to it with more results.

USER SCENARIO: FOOD DISTRIBUTION SYSTEM

Food distribution includes organizing farmers to produce speciality foods from the Island that are then delivered to Shanghai, at distribution points or to neighbourhood markets.

1. Every day, at noon, Ming goes to the Family Mart near his office to buy his lunch. He never have much time to eat.

2. Today he finds something new: a stand selling fresh products from Chongming island.

3. Ming is a bit skeptical..will the products taste better than his foodbox? Emily, the promoter tells him that this products are healthy and delicious, so he decide to try to buy some fruit, to eat after lunch.

4. Emily gives him more information about the new agricultural system in Chongming; she provides him also a map, that he can use to localize the other C-fresh spots in the city.

USER SCENARIO: FOOD DELIVERY

Subscription to a weekly box with Chongming products, that the user can select on the Website, and receive at the nearest distribution point.It is important to create an emotional relation with the user; the box purchasing is not only a way to access healty and safe food, but an experience of a new lifestyle. The communication have to transfer this spirit. And also the additional tools, such as the recepies booklet, are important.

1. Betty is having her lunchbreack at the restaurant close to her office, in Bund No.1.

2. At the end of the lunch she receives a small sample box of fresh fruit, promoting “c-fresh food delivery box”.

3. She likes the fresh fruit. So she wants to know more, once at home she checks the website.

4. She decide to subscribe the service of weekly delivery, choosing to receive the products at her office; since she is always very busy, this solution is the most convenient for her.

5. Betty knows her fresh food box will be delivered every Friday afternoon.

6. During the weekend, helped by the recipes booklet she finds in the box, she can cook delicious dinners for her friends.

USER SCENARIO: VIRTUAL PLOT RENTING

A virtual field with a selection of products grown by different farmers. By paying a rent the user can support the economy of the farmers and eventually take part in some activities.

1. Zhen and Min are in Xianqiao for a trip; they decide to buy some rice from Ms Wang. Price is better than in the shop, and they already know the farmer, so they are sure about the quality

2. Ms Wang suggest them to have a look to the VF platform. With this service they can rent a portion of her field, and receive at home the seasonal products growing there.

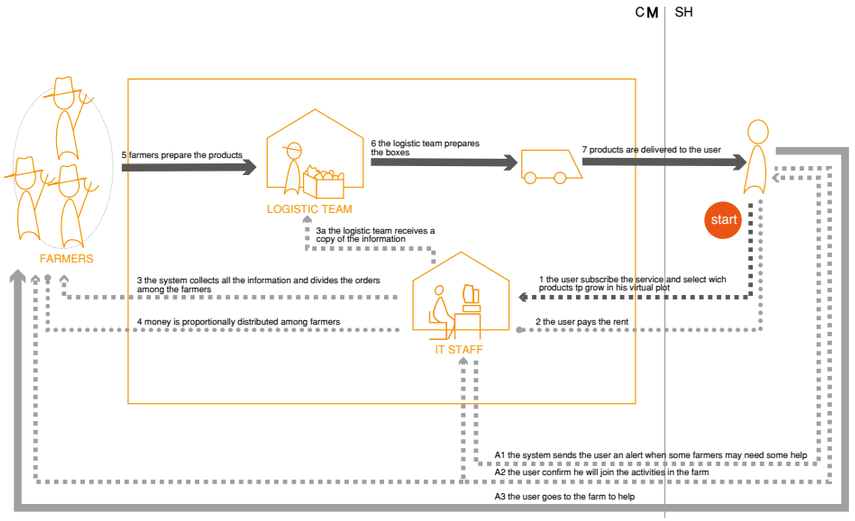
3. Once at home, Zhen and Min explore the platform, and decide to create their Virtual Field, collecting products from different farmers... Ms Wang included, of course!

4. Every saturday afternoon Min knows that the box, with seasonal products from their field is delivered.

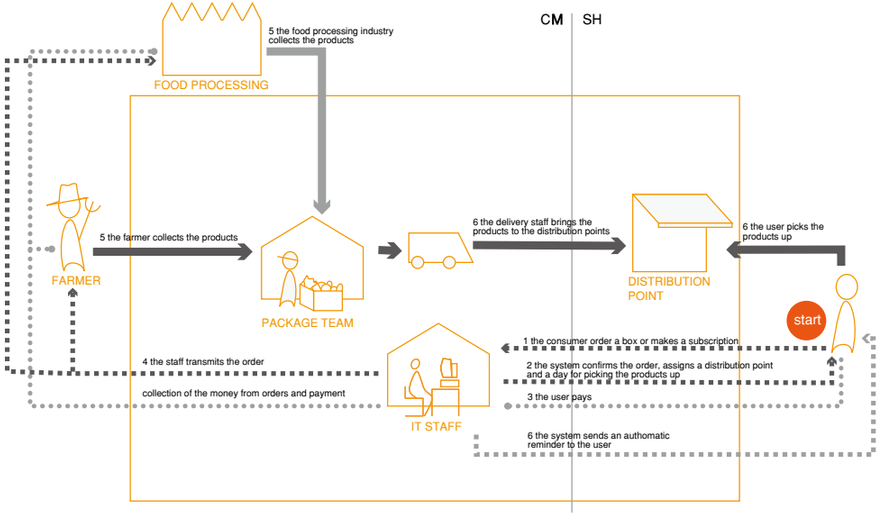
5. One day the Farm Calendar allerts them that one of their farmers needs some help with harvesting. They decide to spend the weekend there and help him to know more about what they eat!

6. They enjoy harvesting their products, and Ms Chou, the farmer, is pleased to offer them hospitality for the night.

VIRTUAL PLOT RENTING



FOOD DELIVERY SYSTEM



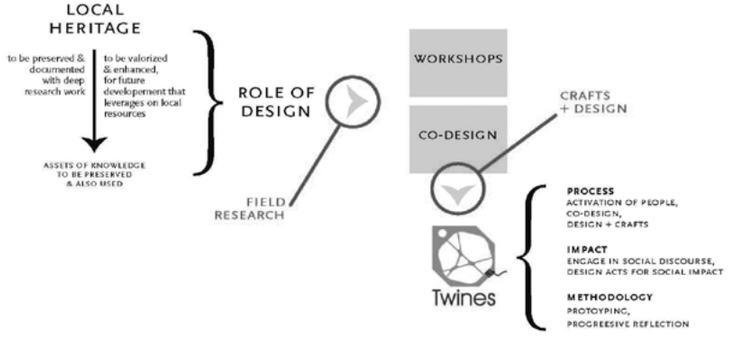
The system maps about different scenarios for new services on the island: Virtual plot renting and food delivery system

DESIGN IN THE SUPPORT OF LOCAL CRAFTSMANSHIP

In the context of the urban sprawl of China, the challenge of culture-based valorization is crucial, and bamboo can be considered as a strategic area of intervention (among the several that we could explore in China) rather than a formal heritage presidium. Our research Design "Entwines" explores ways to preserve and input values to the local production of crafts, starting from direct interaction with people in the villages and acting to reconstruct the social cohesion around a stronger local identity. We want to verify the hypothesis that the "use value" of local culture relies on the capacity of design to enhance and make accessible this heritage as a system and as a process for new uses and users. Therefore, the research question develops in two main directions. On one hand, design works to create experiences of the fruition of typical knowledge, making it accessible and understandable both inside and outside the community of creation (a process that is referred to in the literature as "storytelling of the distinctive resources as a means of creating a coordinated brand policy"). On the other hand, design enhances the value of local culture through new design solutions which cover products, services or strategies that respect the connection with tradition and empower new knowledge users. Design action focuses on the territorial capital in order to highlight features and implement a strategy for an appropriate competitive positioning.

Mainly, the objective is to encourage people to recognize and manipulate the social fabric, through co-design initiatives between design and crafts (the main users being the local community). The process of co-design enables the embodiment in the artifacts of typical crafts knowledge.

Thus the open-ended system of immaterial heritage is made factual. At a deeper level, the co-design action more easily empowers social discourse about the immaterial heritage, with design intervention contributing to extend the use value of the artifacts as well as expanding the community of interests around the production community (the main users being society and the citizenry). This is pursued through a process of progressive reflection and small-scale prototyping in a design process that lacks structured management but abounds with serendipity. In one word, Design Entwines expresses specificity and goals at the level of creative process (co-design), as well as the social impact (urban-rural sustainable engagement) and the methodology statement (progressive prototyping).



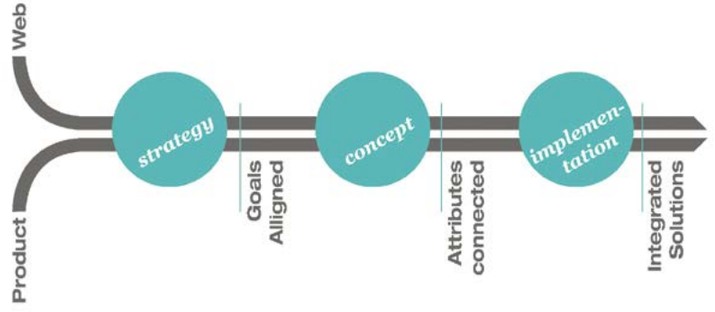
One of the most relevant outputs in the present phase is the brand for a collection of objects designed and produced in collaboration with local craftsmen. The final result will be a series of small objects that become a visible link between the rural and the urban communities. Around these objects different stories will be interlaced and made visible by different communication techniques, both online and offline. The brand has been conceived to give more importance to the production process than to the product itself. Objects have a story embedded; it is the story of their creation. Every object tells the story of the encounter between the designer and the craftsman. So objects are alive, warm, and humanized. The process of weaving symbolically refers to the building of a relationship. First, we applied the concept to a house basket conceived for urban gardening that allows direct transfer of soil bags from one basket to a bigger basket. Then we applied it to a bamboo pot for steaming rice with minimum use of resources. Next, to an exhibition decoration appliance for a picture showcase. The design plan doesn't include clear foresight of the final collection, and as previously mentioned, the process mainly follows unpredictable creation directions. Nevertheless, the process is showing a progressive consolidation of the interaction with craftsmen and a more clear and shared discourse about the directions themselves. While this affects and slows the efficiency of the whole process, it is absolutely positive for the consolidation of a sustainable co-design backstage.

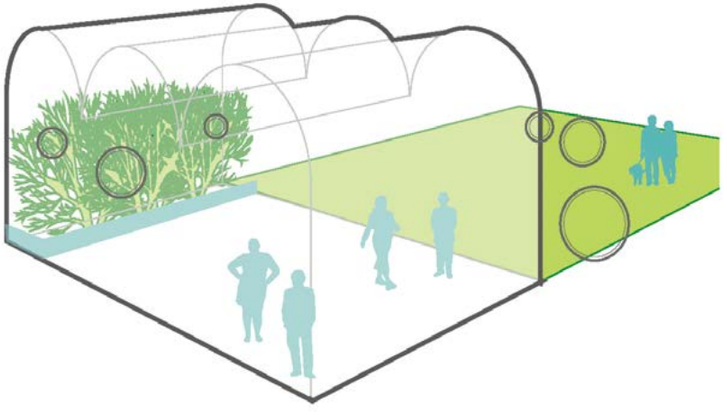
Co-design process and hand weaving craftmanship

INFORMATION COMMUNICATION TECHNOLOGY ISSUES IN RURAL AND URBAN CONTEXT

One significant direction of the research is the exploration of what role ICT can play in contributing to the quality and the experience of bridging city and countryside. The use of social network platforms and online services is massive in the Chinese population, even if there is not an appropriate system design and a significant architecture of information. Besides several concepts related to the Internet of Things research, originally funded by Nokia, we mainly focused on mobile technology and the role of remote communication networks across city and countryside. We were thus able to approach technology issues with a more serious and deep analysis that led us to create TianTian.

Different interaction with a central hub that connects the rural and the urban community





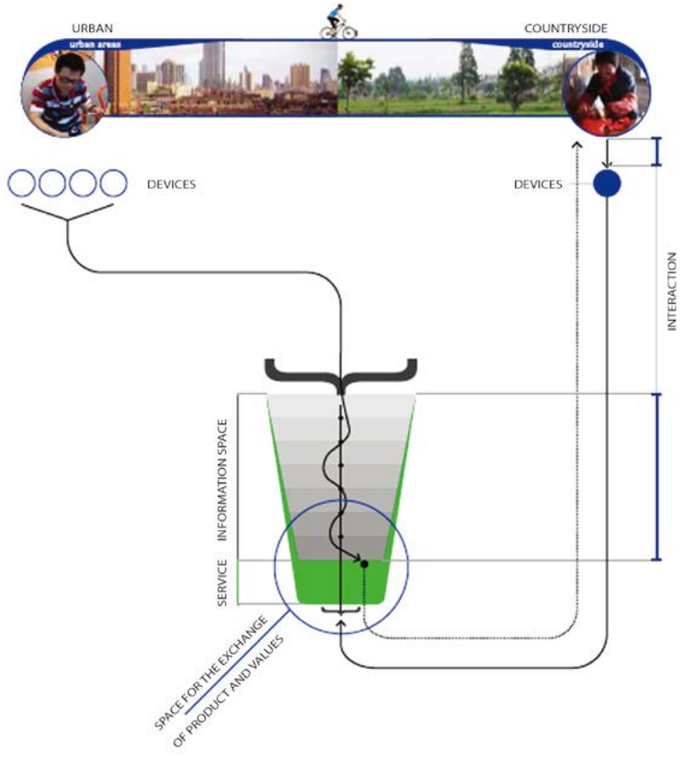
From the Internet of Things based research and schemas of field-technology connections and possible applications.

TIANTIAN:

MOBILE SUSTAINABLE MARKETPLACE BETWEEN RURAL AND URBAN CHINA

(A PROJECT BY STUDIOTAO FUNDED BY NOKIA RESEARCH CENTRE BEIJING, 2011)

Serena Pollastri, Francesca Valsecchi



Tian Tian is a solution designed to connect rural and urban communities of China in a mobile marketplace. At the design stage, it is the concept of a virtual market, where local farmers and city people can exchange products and experiences. TianTian is the main outcome of a research project conducted by StudioTAO &Tongji University in cooperation with Nokia. It investigates the potential of Mobile Information and Communication Technologies in bridging the divide between fast-developing Chinese cities and the surrounding countryside as it faces problems of emigration of young people and low investment in local potential.

After a preliminary context research, we identified food and food production as the most promising driver to create a connection between the two realities. In urban contexts food can be purchased at wet markets, grocery stores, or even online. In general, the food chain (producer to consumer) includes so many steps that it is very hard for the final consumer to trace it. A new type of market, where it is possible to find local products, can help consumers to become closer to the food they eat. At the same time, they get the added benefit of shortening the food chain, getting to know farmers and producers in their area, and supporting local business. Food production, in fact, is the most developed knowledge asset of the Chinese countryside, and agriculture is commonly practiced both at a professional and a domestic level. In particular, we decided to focus on small scale activities rather than big professional farms.

TianTian is designed to connect consumers with producers, and provide them with a rich user experience and a variety of choices and information. The system, on the other hand, has to take the farmers' needs into consideration. It is easy for them to use, so that they can participate in the service without it being too complicated or taking too much time from their work. The main design challenge in the project has been user interaction, since that has to be designed specifically for each of the two target groups.

TianTian is a product-service system that includes a device to be used by the farmers and online/mobile platforms developed for the urban users. The device allows the farmer to update his profile information on the database without using computers or complex electronic devices. A set of card sticks, each one representing a different product, is provided with the device. When a product is ready to for pick up, the farmer inserts the card stick in the device, and selects the quantity available. The device sends the information to the TianTian website, and the farmer's profile is updated. Urban users can use their mobile or computer to explore what

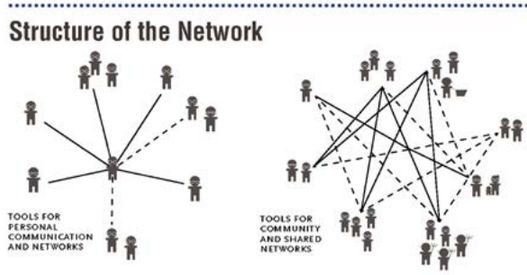
is available on TianTian. They can see the profile of farmers and get more information on their farms, production methods and the products they offer.

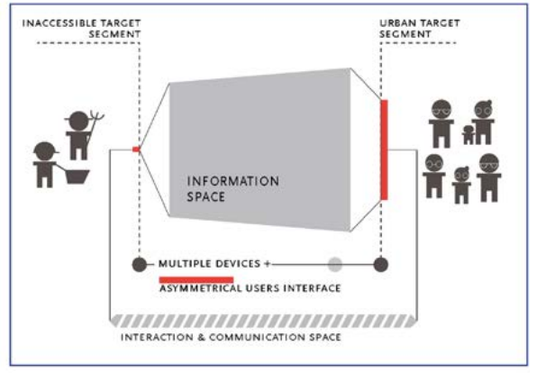
When an order is placed on the platform, the quantity available displayed on the farmer's device is automatically updated. The delivery is organized every week by the local community. The day before, the farmer receives a ticket with the list of products to prepare. This basic interaction can lead to further actions of territorial exploration, personal relations and involvement in the local food network, all facilitated by the TianTian platform.

Project Objectives

The main objective of this project had been the study and design of a system of device, interaction and mobile services, to connect the rural and city communities through a platform that can drive a sustainable approach to knowledge sharing, sustainable valorisation and fair trade of local food production.

The project produced models of interaction and service systems that create a synergetic connection among different resources of the urban and rural areas, exploring how Information Communication Technology can help bridge the divide between the two realities. The designed device is for people living in rural areas of China, and allows users with low technology education to access internet-based services and communication tools.





Analysis of interaction models

Prototype of Tiantian

Another important objective of the project is to provide citizens with rich information on local food and the rural community, to create a better connection with the food they eat and the social and environmental context where it comes from.

Moreover, the purpose of our design is to connect different groups through effective and positive reciprocal communication activities that are not isolated, but inserted in an already-existing framework of information and communication networks. Working with locals, we learnt once more that a deep knowledge of the context is needed to generate non-disruptive design interventions. Reducing the scale of intervention can also provide improved, localized tangible benefits.

Most Relevant Activities

The project lasted 12 months and have been articulated in different phases and research activities hereby summarized:

- Desk research on the Mobile and technology market in China;
- Ethnographic field research: rural people's needs, behaviour and expectations; comparison with local urban users, development of ethnographic tools;
- Territorial research: mapping of the island, communication streams between Chongming and Shanghai, promising case studies;
- Concept of interaction, product-service design and ideas sketching;
- International academic workshops and University course;
- Design vision and concept development.

Desk research has been conducted for a better understanding of mobile technology users, and to accumulate data on mobile markets and technology, user behaviour trends, mainly in the Chinese context. Different field research actions (interviews, focus groups, case studies, probes) have been conducted. All the activities have been documented through audio/video recording, transcripts, documentation and visual descriptions of people and contexts. The outcomes have been collected, analysed and represented in a report.

Starting from critical findings from the research process, different scenarios have been visualized and described. Different concepts have been developed within the chosen design direction. Preliminary concepts have been described through specific design tools (renders, diagrams, maps etc.). Finally, one concept (TianTian) was chosen and developed.

In parallel with the research project, academic activities have been organized. Chinese and international students have been involved in a workshop (DESIS Summer School 2011) and a university course at Tongji University. With the support of a series of lectures to provide the necessary background and methodology, the students have contributed to the research work by generating concepts and developing ideas.

Finally a research dissemination phase was organized. The intermediate report has been disseminated and discussed, and academic publication has been achieved. Research materials and documentation are meant to be public and publically disseminated. A final part is still missing: the completion of the technical prototype of the device and the platform. The next objective is a real-scale prototype of the system, its testing and evaluation.

DESIGNING THE PUBLIC USAGE OF RURAL SURPLUS SPACE (PURSS) IN CHONGMING XIANQIAO VILLAGE

(The project was supported by National Science Foundation of China, No.50908162)

LOU Yongqi

Background

Since 1992, the regional urbanization in the Yangtze River Delta has exhibited an accelerated process. One of the consequences is that the mass transferring of surplus labour power from the rural area to the urban area resulted directly in a large amount of surplus space in the locality; meanwhile, although most of the villages have built their public spaces such as community centres, culture centres and elder activity centres, the actual use of these spaces is not very much. Rural public life in the Yangtze River Delta, active in history, has now become stagnant, which is one of the factors inhibiting the sustainable development of the rural area. One possible solution to this problem could be transforming the surplus space for public use through redesigning the system, functions, spaces, services and business in a creative way. By this means, the surplus spaces could become a unique resource that can be used to activate the urban-rural interaction and exchange, to encourage entrepreneurship based on rural resources, and to improve rural social and economic life.

Connecting rural surplus space to potential social, economic and cultural needs from both urban and rural areas can not only activate the surplus space, but also promote diversity in rural social and economic life due to the incoming talents and capital. The reconstruction of diversity will bring new resources and motivate energy in the rural area, especially in fostering the formation of the local innovation community. Furthermore, it is a great opportunity for "Design" and "Innovation" to play crucial roles in the reconstruction process. Meantime, it also provides new solutions to Fei Xiaotong's (Fei, X. 1986) observation of the Social Erosion phenomenon.

Research Process

The "user insights tool (UIT)" developed by Vijay Kumar and Patrick Whitney, two professors at the institute of Design, Illinois Institute of Design, are adopted by this research (see Kumar, 2012). There are three issues regarding PURSS: Supply (the amount of rural surplus space), Demand (needs analysis for the rural surplus space) and the Solution (the possibility and feasibility of the transformation of the rural surplus space for public use). Based on the field research conducted in Xianqiao Village, we first collected the basic data and information in terms of the amount, forms and characteristics of the surplus spaces and stakeholders there, and then we analysed the needs and insights on the reuse of these spaces. During this process, great effort was made to dig out the true needs. At the same time, we developed strategies through data analysis, system mapping, etc. Combining needs and insights in a matrix helped us develop several reuse patterns. Filtered based on the criteria of values and effectiveness, these patterns eventually generated the final solution. Each solution can be developed through the Product Service System Design.

Types of Surplus Spaces

In terms of surplus space, there are two types: the objective (physical) surplus and the subjective (mental) surplus. The former concerns spaces which have seldom been used by the owners in their daily life; the latter denotes spaces that the owner identifies as surplus and is willing to provide for other functions or uses under appropriate conditions. According to our research, there is a close relationship between the input-output ratio and the identification of whether the space is subjective surplus or

not. As far as occupation is concerned, two forms of surplus space exist in the village: one totally surplus and the other partly surplus, which is the major form. In terms of function, however, these spaces are mainly spaces in families, in public and agricultural areas.

From the perspective of space supply and function, several common characteristics can be identified. These are as follows:

small in size: most of the spaces belong to the rural families; the houses are typically of brick masonry structure and the rooms are always small with many partitions; the bay width is normally less than 4 meters;

overlapped with residential functions: when the original owners provide their family space for public use, mixed use of the space and multifunctionality continue. It is difficult to avoid disturbance in daily life caused by tenants. Thus redesign of the internal traffic flow is one of the key issues;

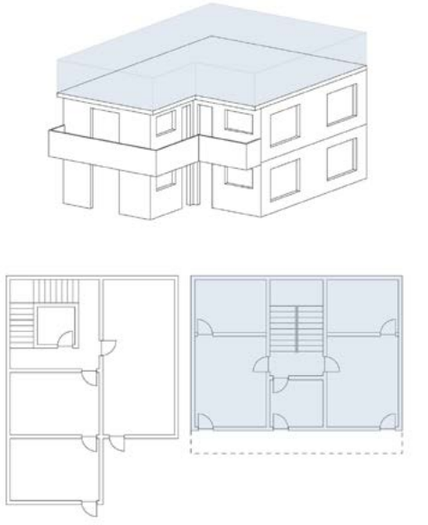
scattered spaces: available spaces are always dispersed within the community. Therefore, to correspond to different PURSS situations and to connect the individual spaces into a network should become the primary strategy.

There are three forms of rural houses in terms of their relationships with external traffic flow: punctuate, linear, and clustered, which respectively means scattered houses, houses built along the road, and a group of houses clustered around a common space with a path connecting to the main road. According to our research, the layout of the houses always has a comparatively close relationship with the social structure.

Stakeholder Analysis

The main stakeholders of the PURSS include:

- local space providers
- local service providers
- the local community
- external communities
- consumers from the city
- investors from the city
- government
- NGOs
- operators of the PURSS related business



Typical rural families house room- small and have lots of partitions

Scattered available spaces in the communities

While the operators of the PURSS are the "bridge" and "actor" of the urban-rural exchange, the consumers from the city are the key issues. People from the city are not only the customers of rural resources, but also the producers of the interaction between the rural and urban area. Some needs, such as setting up businesses, is at the same time also a production resource.

The consumer needs research aimed at urban residents consists of two parts: first, the categorization of the urban residents' needs; second, the existing resources and potential possibilities of the countryside which can fulfil or cultivate the needs coming from the city. Based on the case studies and the consumer-needs research workshops conducted by TEKTAO and IDEO Shanghai office in 2009, we found the target groups could be divided into four categories according to age and social roles: schoolchildren, university/college students, working adults and retired elderly. Our study show that the needs from the city mainly focus on five areas: learning, leisure, elderly care, food, and entrepreneurship. The table below displays city people's needs based on these five categories:

Role/ Needs	School children	University Students	Working adults	Retired Elderly
User Needs	natural/rural knowledge, social experience	knowledge, social contact, Social practice, entrepreneurship	food safety issues, physical and mental health, rural entrepreneurship, child rearing	health, sense of belonging, convalescence, vacation

Based on the needs research on different topics, we further identified the challenges and opportunities of the urban-rural interaction. On the one hand, this part of the work helped us form a comprehensive understanding of urban-rural needs; on the other hand, it also provided a basis to define the target user groups.

To conclude our investigation of urban/rural relationships and needs research, several findings are summarized:

- the needs covers all ages, but those of working adults are the most prominent;
- the needs of different target groups are notably different and thematically clustered;
- the interest in countryside and the rural ways of living increases with age;
- the middle class in the city, with higher education background and relatively more wealth, is the most important target group;
- the ways of participation mainly include consumption, experience, and entrepreneurship;
- the existing ways of PURSS solution cannot meet the demands of urban residents;
- the intensity of needs and the interest in the PURSS solution are two main aspects which direct our further action.

Insights: Challenges and Strategy

From the consumer's perspective, the main challenges to the PURSS can be described as follows:

Accessibility: accessibility including distance, time, and means of transport is one of the key challenges of motivating city people to go to the countryside. Especially in case of short stays, the easier the destination is to access, the more people want to go there. As for longer stays, say more than 3 days, the impact of accessibility weaken. To people who rely on public transport, the biggest concern is the "last kilometre"—the distance between the destination and the nearest station.

Information: it is clear that the needs are out there, but at present the relevant information and service are always difficult to get. This is another kind of accessibility. Normally, few consumers will spend their time on searching such kind of service proactively. In most cases, they are accustomed to being pushed by the service providers. This situation is somewhat similar with that of insurance buyers in China.

Trust: trust is a bottleneck in connecting the needs and possible PURSS solutions. People are not so inclined to believe advertisements as before. The trust issue arises if the needed information is missing. Increasing transparency with adequate information is an effective solution.

Cost: Our research indicates that people are sensitive to cost, no matter whether their incomes are high or not. But they are sensitive in different ways. The low-income group is more concerned with direct benefits. If the cost is visibly cheaper, this group of people are more willing to accept countryside living or services. In contrast, the high-income group is more concerned with the quality, especially the experience, of such living and services.

Viewed from the local perspective, the main challenges are:

Scale: the domestic spaces available are always very small, and they are scattered in different places. This greatly limits the possibilities of using the space for other purposes;

Know-how: the local community members generally lack necessary know-how on how to provide high quality service or to run a creative PURSS-related business;

Capital: local capital and resources are generally too limited to scale up and create PURSS businesses in a systemic way.

To rise to these challenges, the DESIGN Harvests team set up several strategies, which can be described as follows:

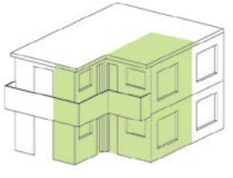
Community-supported: In view of various aspects, ranging from social impacts through operating costs to ecological footprint, the PURSS should adopt a community-supported strategy. That is to say, these aspects should be characterized by features of being in the community; belonging to the community, with the community (community-participant management), and by the community (to continuously achieve benefit). This strategy could optimize the resource allocation as well as help all related stakeholders get the benefits (Seyfang & Smith, 2007). The term "community" used here refers to both the local community and the community of the specific stakeholders such as the consumer, creative community, and so on;

Entrepreneurship-driven: There are two types of PURSS-related business models: one is the extension of the traditional business model, and the other is entrepreneurship-based. It is evident that the traditional economy has seen the opportunities in rural business and generally extended into the rural market. To date many large enterprises like Bright Food Group, for instance, have already enlarged their rural business in Chongming Island. At the same time, small economic bodies, starting from individual entrepreneurship, are also emerging. The entrepreneurs are mainly young people, intellectuals and local leaders with passion and ideas. As reported by lots of China's mainstream media, a great number of young people have formed the NEET group who do not want to go to work; 40% of the jobless in Shanghai are the youth. Most people regard it as a huge social problem nationwide. However, if we can consider this situation from a different point of view, these young people are huge societal resources. They are not those who accept any job without thinking. If their passion and motivation can be inspired, and if the environment is suitable, they might become the main force for positive social change, for example, as rural entrepreneurs. Both premises require us to investigate human needs and combine creativity, business, and technology to provide new innovative solutions;

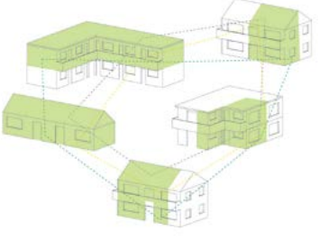
Ubiquitous information: The digital way of living has opened up new opportunities to bridge urban-rural resources and needs. Based on the internet and the internet of things, the ubiquitous ways of sharing, communication, learning, and materials circulation are reshaping many aspects of our daily life as well as social-economic relationships, both online and offline. In the meanwhile, ICT provides us with many new possibilities of democratic and innovative collaboration. For example, dispersed knowledge, information, goods and data could be connected, shared and exchanged on a commonly-shared open digital platform. The traditional game rule, defined by the location, capital, and brand, is facing great challenges. A brand new small-and-interconnected social-economic system is on its way;

Collective use of space: There are at least two situations in space use. Some functions make few demands on space, normally the space of a single house being enough. Such kind of reuse could be implemented immediately. Agritainment is a typical example of this situation. Other functions with greater space requirements need to employ a decentralized layout, integrating services and functions into a whole. For instance, one large-scale rural hostel or an elderly care centre with 50 beds might need to integrate several houses and even other types of spaces together. Such collective solutions could create a new meaning of "size"—"big" can be achieved through connecting "small" together;

Adaptation to changes: As the result of public use of rural surplus space, urban-rural population exchange will be stimulated. Such kind of exchange will bring higher quality services, more job opportunities, better education, and development opportunities into the countryside. Apart from its advantages with regard to the natural environment and life pace, the rural areas can attract more urban residents to come, and enable more entrepreneurs from both the locality and the



Agritainment as typical example of fewer demands of the space



Big space can be achieved through connecting small spaces together.

outside. Then, the diversity of both the social-economic situation and the members of the rural community will get enhanced. A multi-class society in the rural community will be formed, which will in turn introduce new demands and resources for rural development. One of the possibilities is that, when more immigrants move into the village, they enrich the role, function, and image of a community centre to satisfy their needs.

Patterns

Based on the background research including data collection and analysis, the needs and insights were elicited. Combining Needs and Insights in a matrix helps us to develop four PURSS patterns, which can be described as follows:

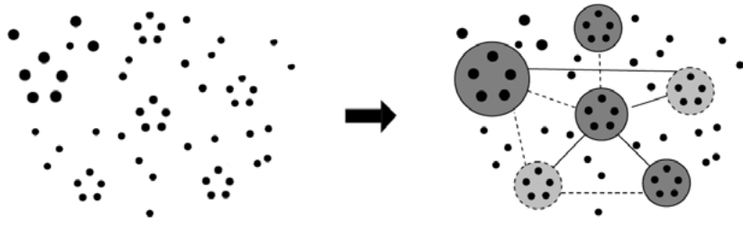
(A) Independent unit: This pattern mainly refers to the initiatives of turning the individual rural surplus spaces to some specific functions, such as leisure or summer house, elderly care house, and hostel for vacation and short-term stay. Agritainment is an example of this. This pattern relies little on the community. However, if the nearby community could offer the needed services, the relationship between such independent units and the surrounding communities are likely to become very active.

(B) Dependent unit: This pattern is normally the commercially-functioning PURSS, with strong dependence on external resources. In other words, these spaces are mainly service- and commerce-based. Successful realization and operation of such spaces depends on the activities of the urban-rural interaction. Their functions include catering, leisure, workshops, performances, and other services. The operators of these businesses can come from local as well as from outside of the village.

(C) Small and interconnected combo: Once the rural surplus spaces are opened to the rest of the world, the new incoming labour force, materials, capitals, and social relationships bring in the new energy to rural development and transformation. As mentioned above, although the amount of the surplus rural space is quite huge, the spaces tend to be scattered all over the villages and, normally, each is relatively small. How to connect this fragmented resource to a larger system by networking social, economic, information and logistical aspects, and through interacting with the local community, are crucial to realizing the fundamental changes. Moreover, the nodes connected by the network could generate new orders and produce a systemic impact.

As a result, a series of 'small and interconnected' combos (a combination of spaces, activities and businesses) could be developed in the scenarios of such a rural-urban interaction. These combos could form entities with the common identity and functionalities despite their different locations in the village. The corresponding functions include community-supported agriculture, community-supported hospitality, community-supported leisure, and community-supported elderly care.

(D) Hot spots with a centralizing function: These are the public places playing the role of hubs: collecting and providing information on services and public activities in the villages and beyond. Within the current scenario, one possible key strategy is to enable the current public spaces, including community centres, to function as "hot spots". It could be the community centre, service centre, education centre, and so on. Apart from the connection of the spaces and functions, these spaces also play a crucial role in social governance. These "hot spots" may have different characteristics during the process of the urban-rural interaction. For instance, the functions and image of the community centre were quite monotonous in the past because of the singular structure of the rural community. Nevertheless, with urban residents and entrepreneurs coming, community centres will raise new requests for their own functions and forms, the changes in which will further push the transition of these centres' roles in villages.



A series of 'small and interconnected' combos could be developed with the identity and functionalities.

Value and Criteria

The PURSS is the reuse and restructuring of fragmented resources that were previously neglected. According to the social economic changes of today, especially the features of being "small, local, open and connected"(see the SLOC Scenario - Manzini, 2010b), such kind of initiatives can have a collective effect on social changes through a process of social innovation. It also offers a new definition of the region, scale, quality of life, and possible ways of social change. Some ethical criteria for

various transitions are summarized below.

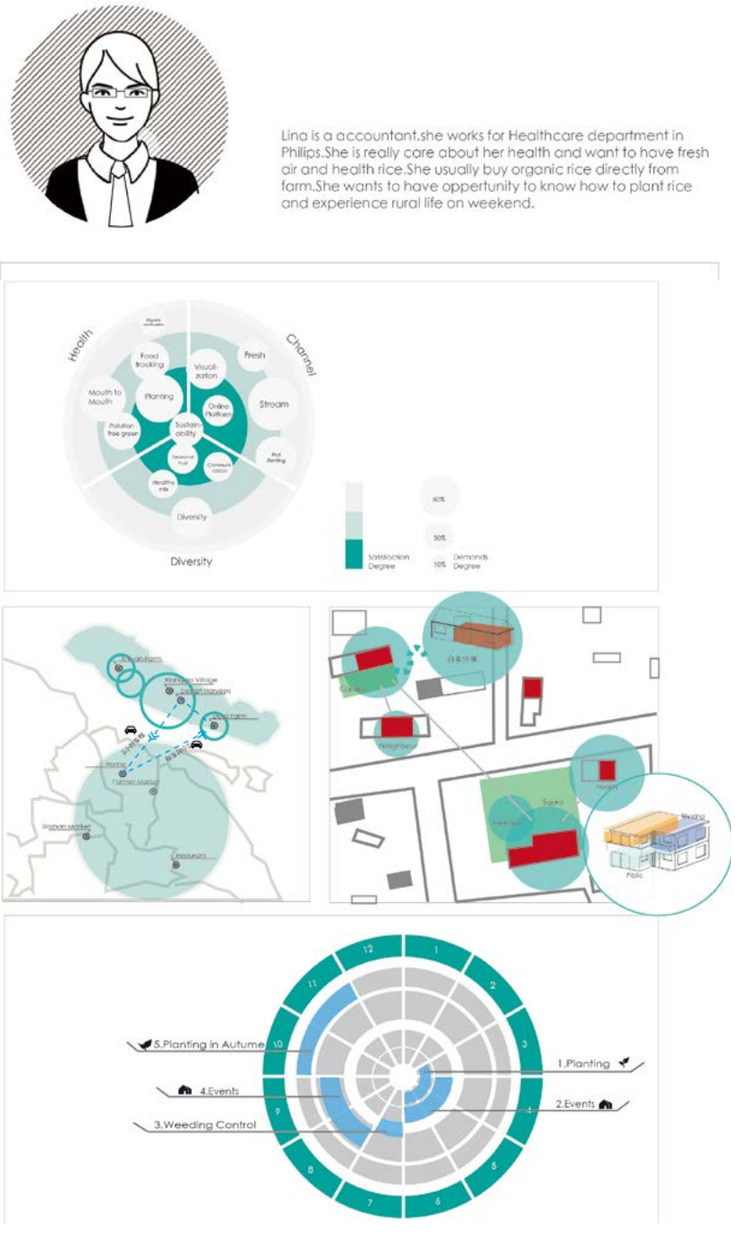
Restorative sustainability (see: Thackara, 2011): The public use of the rural surplus space will provide urban-rural interaction with a platform of resource exchange. In the flow of the exchange of urban and rural resources, numerous changes are inevitably brought into the original orders in the locality. Among these changes, frictions and conflicts are unavoidable. Seen from another perspective, however, these changes and the energy behind them also signal the new social and economic opportunities of rural development, and they offer a possible new urban-rural scenario apart from urbanization (Lou, 2010). It has been generally acknowledged that the current world economy and the dominant ways of living cannot lead to a sustainable future. The possibility of change is a mixed blessing: while it is a great asset, it could also make things even worse. How to design new ways of urban-rural interaction to enable restorative sustainable changes will become one of the biggest challenges, for instance, how to minimize ecological footprints during the urban-rural exchange.

Benefit-all: One of the main objectives is to secure participation, the interests of and benefits to most stakeholders (including rural residents, urban citizens, the entrepreneurs, the local community, governments, and enterprises). This means that an interconnected economic and social eco-system should be established. The creative community and cooperative network could create and enable a new system of interest and the related business and services based on the energy of social changes.

Duplicability: Addressing the identified common problem in rural surplus spaces, the design solution of the PURSS must be duplicable. The duplicability here is twofold: 1) it can produce a series of design solutions that can apply to various situations, and can be duplicated at the level of technology and operation; 2) it can go beyond the traditional mode of design-implementation-operation process. The traditional boundaries between clients, designers, and operators can be blurred and redefined. The task can become a bottom-up social innovation process, rather than a professional-driven issue. Here, the role of designers is mainly as mediator and the strategic planner. In this case, business design and entrepreneurship are the first priority.

The Product and Service System Design of PURSS

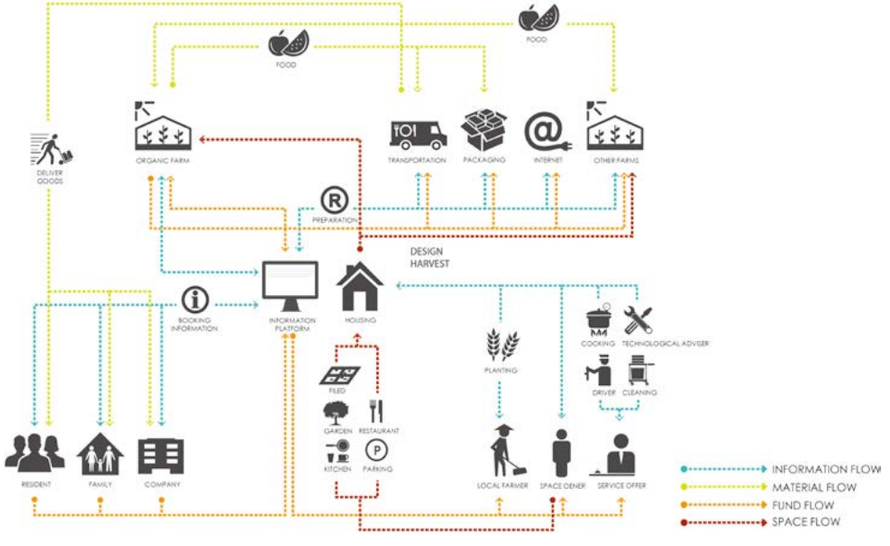
Based on the former analysis, we created several personas for concept development of the PURSS. In each case, in-depth interviews were adopted to test if the preconception of the persona was accurate and



Personas for each PURSS concept development.

representative. These Personas are the future actors and the eventual users of the PURSS artifacts and services scenarios that we developed.

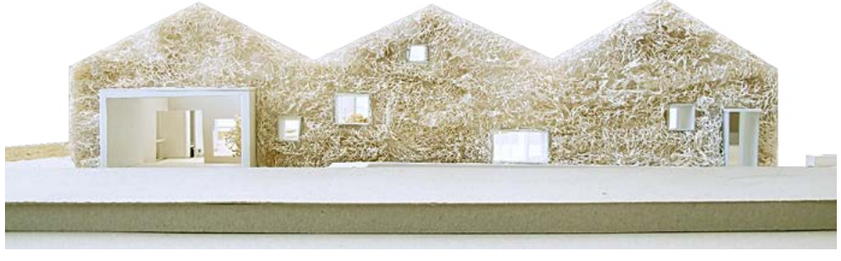
Each PURSS concept can be further developed, through the "Product service system design (PSSD)," into a holistic solution. In the village, several projects, supporting one another, can be connected to form an interactive system. The DESIGN Harvests team has developed a couple of PSSDs on the PURSS, which cover a collection of activities such as hospitality, community-supported agriculture, community supported eco-tourism, and knowledge exchange. The design of the “Touch Points” is extremely important, as it is about the interface between the user and the project. The DESIGN Harvests team started to implement this prototype project in Xianqiao village in 2010.

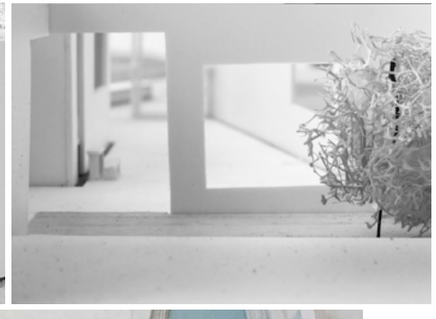


The system map and story board on one of the PURSS senarios

Designing the Touch Points: Practices of Xianqiao Innovation Hub

Innovation Hub is a multifunctional network, which integrates public service platform, entrepreneurship supporting centre, knowledge and social communication centre, and community centre. This platform can support the entrepreneurs both from local and outside to use and integrate the urban-rural social, economic, and cultural resources; foster urban-rural cooperation and the complementary network by means of a series of closely-connected projects; and further adjust the society in an acupunctural but systemic way (Lou, 2010). The first attempt of the DESIGN Harvests team is: a vacant warehouse in the village was renovated as the first innovation hub, which combines many necessary functions together. However, the process, due to several reasons, failed to continue. Therefore, based on the concept of SLOC (Small, Local, Open and Connected, see Manzini, 2010a), the team decided to deconstruct the space, function, and service of the innovation hub into a networked solution, namely shifting from pattern (D) to (C). Put another way, the necessary functions are realized by virtue of connecting rural surplus space in different locations together. We selected and designed some experimental touch points in Xianqiao Village. They are depicted below.





Prototype of Innovation Hub in the studio and images from the field working, the prototyping session and the render of workshop greenhouses

- **DESIGN Harvests Greenhouse:**

  Our research indicates that one of the key motivations for the urban residents' village visits is the attraction of rural experiences. Apart from the space for hospitality, eating, and outdoors activities, a multifunctional social space with an appropriate scale is vital. Such kind of space is very difficult to find in the villages since the space of the farmers' houses is generally not big enough. The DESIGN Harvests team found that the greenhouse commonly used in villages could serve as a special kind of space resource. It is large, open and flexible, so the problem of lacking large indoor open space in rural areas is resolved. Since 2012, the DESIGN Harvests team has successfully transformed one greenhouse to an open space with the multifunction of planting, education, exhibition, catering, communication, and event venue. These, working together, allow the greenhouse to become a platform to support the activities of in-depth rural experiences. The team has already organized many activities there, including the team-building, happy weekend, design workshops, rural knowledge safari for kids, and so on.

Green house as an open multifunctional space to organize activities

- **DESIGN Harvests "TianGeng" Farmhouse**

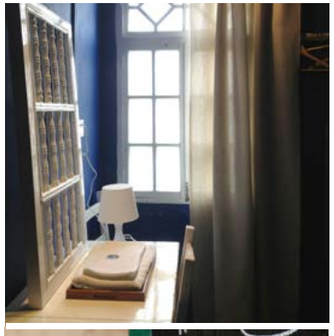
With the help of the local community, the DESIGN Harvests team renovated a vacant house with four rooms at the east end of Xianqiao Village, and named it "Tian Geng," which means "lane in the field." "Tian Geng" is a multifunctional space that provides the tourists and workers with accommodation, catering, public life, and communication. During the initial phase, the DESIGN Harvests team launched a two-week workshop in collaboration with Tongji University, Jiangnan University, Universitat Politecnica de Valencia, Escuela de Arte Superior de Diseno de Valencia, Politecnico di Milano, and Queensland University of Technology. The students were divided into several groups that worked respectively on systems of kitchen, bathroom, lighting, information, and landscape. Within the ten days, the students not only proposed contextualized concepts, but also partly implemented their concepts. In November 2012, the designers from TEKTAO finalized the design and implementation.

Simultaneously, several PSSDs were developed for "Tian Geng." Of course, these services can only be realized through the connection and interaction with other platforms such as DESIGN Harvests Greenhouse, DESIGN Harvests field, and other existing resources and activities in the village. In addition to business feasibility, one of the goals is to enable the urban residents to stay longer to minimize their daily footprint.

As the project unfolded, the DESIGN Harvests team also attracted several young designers to participate in the reformation of another vacant residential house, making it a holiday hostel. Moreover, a handcraft workshop and a knowledge exchange center have already been put on the agenda.

Entrance of "TianGeng"

Another vacant residential house reformed for holiday hostel.



Images of "TianGeng" farmhouse

The living room of "TianGeng" farmhouse

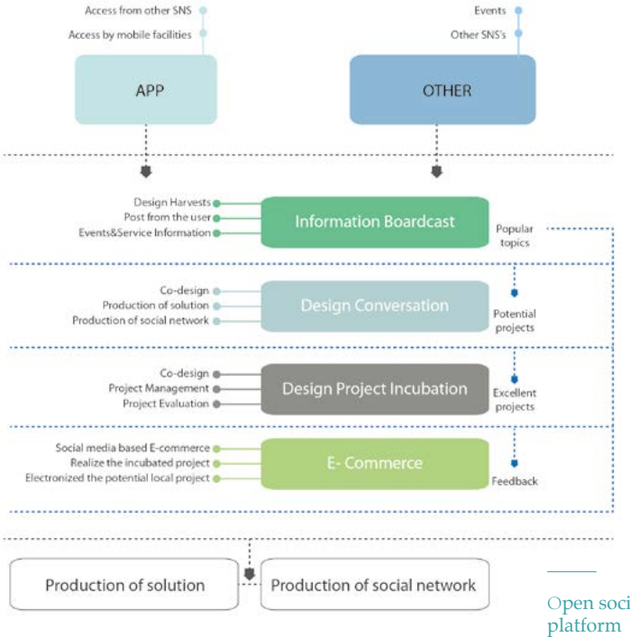
group 04

lighting_

Students' Work

- **DESIGN Harvests' Digital Platform**

Based on the principle of Collaborative Services, we redesigned the DESIGN Harvests digital platform. In the first step, it was converted into an interactive website. In addition to the function of information broadcasting, it conveys the relevant philosophies, strategies and outcomes of the DESIGN Harvest Project and also functions as a business platform for its products and services. Also, we intended to integrate the resources of different stakeholders to form a social-economic ecosystem. This website serves not only as the social network for the stakeholders, but also as a platform to support entrepreneurship. In terms of technology, it is the combination of the mainstream social media including Weibo and other B2C and B2B platforms such as Alipay, for example. It is our hope that this platform will be able to bear the peculiar characteristics of anti-competition and inclusiveness of the collaborative production (Cooper, 2005; Baek, 2010). In this network, these implicit bonds can facilitate the spreading of social innovation. In the long run, it not only serves the DESIGN Harvests project but will also be able to move itself closer towards becoming an open social innovation platform.



Open social innovation platform (by ZHOU Chunyi)

Conclusions

The public use of rural surplus space is the reuse of the spare and scattered resources. It goes in concert with the social and economic transformation from extensive modes to elaborate ones. The new socioeconomic model and sustainable ways of living require a new definition of quality of life. It will be the subversion of the prevailing resource-oriented, productive, consumptive, and top-down quality that is characterized by high speed, large quantity, and great efficiency. The sustainable development gives rise to the appreciation of an alternative quality of life, characterized by slow speed, high quality, integration, bottom-up, and service-orientation, and it provides the new understanding of the values of fragmented resources. In the context of sustainability, when the alternative quality becomes the solution to the crises caused by the currently-prevailing quality, a large-scale socioeconomic reform will inevitably happen. It is time that the design discipline and designers refocused and rethought the resources in our daily life, which were intentionally neglected in the past. It is designers' duty to use design and innovation to adjust and improve the social and economic circumstances and to foster active social change in sustainable, inclusive and creative ways. It provides a new meaning and fields for today's social design (Papanek, 1985; Margolin 2002). The PURSS project is just an example of this way of thinking.

IDENTITY CREATION: THE LOGO PHASE

As soon as DESIGN Harvests moved from being solely a research project to be more practice- and design-oriented, it became clear that a redesign of the logo was necessary. While in the early stages our audience was mainly composed of international universities and the research community, now local partners and direct users are becoming more and more important.

The new logo has been designed to be scalable, printed in different versions, readable and understandable for both local and international targets. We omitted the previous subtitle (Chongming Xianqiao Sustainable Community Design Research Project), reducing the text to the name of the project, both in English and Chinese.

The symbol of Design Harvests is a network that connects different geographical, cultural and disciplinary areas. The most important connection is between the rural and the urban context, defined by the two different colors, or color tones. The open attitude towards other opportunities, realities, and possible applications is represented by the dot.

Moreover, the logo can be expanded and adapted to the sub-projects to depict and include different meanings and refer to different products or artifacts over time. In the current ongoing activities we have started to design two specific sub-brands for agricultural production from our fields (rice and seeds), as well as for bamboo artifacts made with local craftsmen.

DESIGN
Harvests
设计丰收

38C 0M 100Y 0K
171R 208G 55B
HEX #ABD037

60C 51M 51Y 20K
102R 103G 102B
HEX #666766

English font: FR Hopper 430
Chinese font: 黑体

4.3

EVENTS IN THE VILLAGE

* Chongming Midsummer Festival
* Eco Global Party
* Greenhouse Events

CHONGMING MIDSUMMER FESTIVAL

Studio TAO's DESIGN HARVESTS in partnership with GoodtoShanghai created the Annual Chongming Midsummer Festival with the objective of bringing urban and rural residents together to experience sustainable living. The first annual event initiates the launch of the Design Harvests hub and the creation of a revitalized community, laying the project's foundation in reality.

Activities for the day including planting the village's first community garden through a farming workshop with local farmers, riding bicycles around the island, trying home-made Chongming food, and creating a collaborative art project. Musical bands from the village and Shanghai also performed at the festival.

In the first year, the festival attracted over 200 visitors, making its mark on the island concerning desirable communication exchanges. From just an experiment in the first year, the festival will continue to be built upon and enhanced annually.

ECO GLOBAL PARTY

Eco Global Party Chongming was held in Shuxin Town on 27th November,2010. Over 400 participants from Shanghai and 200 villagers from Xianqiao village and neighbouring villages together with ten organic farm hosts joined in the event. Interactive communication sessions were organized, with a market, exhibition, and concert.

The activity included a rock concert given by five famous bands from Shanghai, a sustainable product market, bicycle riding and tree planting. It's the first event connected with the Zero Carbon World Concert and Ride the Planet, to encourage people to live in a sustainable way and do good for living our life. The event was carried out in cooperation with GoodtoShanghai, a Shanghai-based organization that also works with and promotes sustainable development ideas and practices.

Moreover, the event attracted several organic farms such as Xiyuan, Mengtian, Nongyu to Chongming Island. They had an eco-agricultural fair and communicated with tourists from Shanghai to show them new economic and ecological culture. The social enterprise Greennovate that devotes itself to promoting sustainable development ideas gave an interesting class to over one hundred students in Xin Guang Middle School. The event was supported by the local government and Xianqiao committee and several commercial undertakings which devote themselves to sustainable development. Zhuluhefeng music club took charge of the stage setting, equipment and performance planning. Yimi Danche and Specialized provided a hundred bicycles and more than ten top competition bicycles for the participants.

GREENHOUSE EVENTS

Since late 2011, the DESIGN Harvests action team has been officially established. After the renovation of the DESIGN Harvests Creative Greenhouse, the team created a lot of activities based on this resource, including teambuilding, catering, training, meetings, workshops, exhibitions, etc. Most of these activities are actually the prototype of the business modes developed by the team. The Greenhouse also acts as a community centre and cultural exchange centre. Now the Greenhouse is widely used for different purposes, including regular movies for villagers, handicraft training for students, weaving classes for young people and an interactive workshop for people from the city and the village.

Up till now, the Greenhouse have received more than 2500 visitors from government, academia, business, agriculture, organizations, institutions, communities, etc. As an initiative in the first year, the Greenhouse will continue to be improved and developed. At the same time, the connection with the field, “Tian Geng” and other local resources will be reinforced.

4.4

EXHIBITIONS

* Exhibitions

EXHIBITIONS

Since 2012, Design Harvests has been invited to join many exhibitions, including Design World exhibition 2012 in the Design Museum of Helsinki in Finland, China Design Exhibition 2012 in Shenzhen, and International Design Biennale of Saint-Étienne 2013 in France, etc.

Each exhibition has many stories and good memories. It provides unique opportunities to communicate with others in certain contexts. For the Helsinki Design Museum exhibition, for instance, we decided to bring to Helsinki a relevant representation of Chongming Island, where the colours of the countryside and the community are the leading actors. We tried to create the exhibition through the stories of the everyday work as well as the milestone steps and failures of the project. We showcased three active projects (rice harvests, bamboo crafts, mobile literacy in the countryside) and future directions of the research, such as a common project about hydroponic and urban farming with local entrepreneurs. But most importantly, we dedicate a lot of space and words and images to talk about the people we do things with, from the local network of sustainable food-lovers, to all the schools involved in the workshops, and the world-wide partners. The photo exhibition frequently held in the village was also moved into the exhibition to create interactions with the visitors. People who visited this exhibition can really have a look around the island, check the pictures, and enter our stories.

In the Senzhen exhibition, we repeated the hydroponic theme as a metaphor of experience-based agriculture and put it at the centre of the booth. We poured a layer of rice husks on the ground, to slow down the visitors and create an interesting interaction between the exhibition and visitors. As the feet lightly touch the floor, you can feel the softness of the husks and hear the beautiful sound they make, reminding us of the rhythm and quality of life in the countryside.

DESIGN Harvests was invited to join the “EmpathiCITY, Making our City together” exhibition curated by Lætitia Wolff and Josyane Franc as

Design World Exhibition 2012 in the Design Museum of Helsinki in Finland

a part of Biennale of Saint-Étienne 2013 in France. EmpathiCITY consists of a project based on the activation of the UNESCO network of the eleven Creative Cities of Design. The exhibition begins with an urban problem, which is specific to each city and focuses on transversal questions (public spaces, health, sustainable development), in order to help change uses and behavior. Each city of the Creative Cities of Design network can present one project and two products in the exhibition. The DESIGN Harvests project was selected by the curators to represent Shanghai.

China Design Exhibition 2012
in Shenzhen

International Design Biennale of
Saint-Étienne 2013 in France

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It's a great pleasure to mention the names of people we have worked together during these years. Thanks for your great support to enable this dream journey to start and carry on. At the very beginning, this project has been connected with the Chongming Island. Without the support and help from local communities, the project would still be hanging in the sky.

Chongming Island and Shuxin Town:
LI Zhihong, Former Vice Mayor of Chongming Island
ZHANG Jianying, Party Secretary of Shuxin Town
CHEN Yao, Director of Shuxin Town
CHEN Qun, Former Vice Director of Shuxin Town

Chongming Xianqiao Committee:
GUAN Shizhong, ZHOU Jianlang, CHEN Zhongfang, HUANG Di, XU Lei, XU Nan, ZHONG Lixia

Chongming Xianqiao Community:
YU Meili, SONG Lanjuan, CAI Jufang, FAN Juping, WU Yongju, CHEN Xinfang, XU Xiaotao, HUANG Zhicheng, SHEN Miaochang, MEI Pinzhang, MEI Gang, SHI Jinbiao, SHI Linfu, SHI Liang, etc.

The book has been realized thanks to several months of efforts by a variety of contributors that participated in this research part of the design harvests project. Without this collective spirit this work couldn't be possible.

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The chapters include new written content as well as excerpts and revisions from previous published works, in these cases the authors and original references are mentioned. All the other texts and materials are written and produced by Studio TAO members.

Quoted Papers and External Contributors

1.1//
John Thackara, Keynote speech at Cumulus 2010 Shanghai Conference "Young Creators for Better City and Better Life" (8 September 2010)

Ezio Manzini, Keynote speech at Changing the Change Conference "Design visions proposals and tools" WORLD DESIGN CAPITAL TORINO 2008 | © ICSID, Torino, 10-12 July 2008

LOU Yongqi, Keynote speech at Changing the Change Conference "Design visions proposals and tools" WORLD DESIGN CAPITAL TORINO 2008 | © ICSID, Torino, 10-12 July 2008

1.2 //
FEI Xiaotong, Excerpt from Chapter I, Introduction "Peasant Life in China", 1938

1.3 //
Mark Veldman OMA Office for Metropolitan Architecture
Dirk Peters Barcode Architects
RAVB Rotterdam Academy of Architecture
LI Zhihong , Former Vice Mayor of Chongming Island

2.1 //
LOU Yongqi, Clarisa Diaz, Journal of Design Strategies, Vol.4
Parsons The New School for Design, January 2010

2.2 //
Louis Klein, Suk-Han Tang

3.1 //
Luigi Bistagnino, Professor of Department INDACO, Politecnico di Milano and the students from the workshop "Chongming Creative En- trepreneurs"
Francesca Carnevale, Antonella Espro, Francesco Spagnolo, Politong Students, System design

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CUMULUS, International association of Universities and Colleges of Art, Design and Media
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IDEO, Bayer, Haier, Plantagon, Forever, NOKIA, Philips, Jue.so, Vayable

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Consumer Research and Business Modeling
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WU Eddie, IDEO Business Designer

Social Systems Design Workshop
Coordinators: Dr. Louis Klein, Suk-Han Tang, LOU Yongqi
Participants: Clarisa Diaz, LI Min, YANG Emily, ZHOU Chuyi, ZHU Mingjie, Jan Stael von Hol- stein

Rural Public Space: Defining New Typologies Workshop
Organized by: Studio TAO of TEKTAO, D&I of Tongji University, Willem de Kooning Academy, International Product Design School, School of Architecture and Urban Design
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ELOPE Chongming Kitchen Workshop
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Chongming Creative Entrepreneurs Workshop
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IDEO Business Consumer Research Workshop
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Chongming International Research
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Aalto Lab Workshop
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DESIS Summer Camp 2012
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