中国的煤炭，正如中国政府在他们的21项议程中所陈述的一样，可以在现有的环境条件下以更为环保的方式被开发。这一目标已正式形成。尽管和其它的国家可持续发展的计划很像，这个计划同样可以反映现阶段中国对西方现代化的态度。这个计划可能会影响中国对西方现代化的态度，但中国与西方之间的传统关系。意识形态和政治力量在多大程度上会被中国所接受，将由中国的国家和人民想要什么样的将来，以及他们为可持续发展作出牺牲的认可。
Beijingers enjoy breathing fresh air for almost two out of every three days.

Chinese state media

A thick haze of pollution lingers over Jing Hu, the country's acceptable air-quality standard. Precipitation, it is estimated that 75% of China's city dwellers live below the current environmental conditions and human impacts. This objective, now formalized, arises out of a variety of complex interactions between the State, provincial and local constituents, and international governance regimes such as the UNDP and UNEP. Though similar to other national plans for sustainable development, it also reflects developments that extend from China's currently shifting attitudes towards Western modernization, and its (often conflicting) historical/traditional cultural attitudes towards the relationship between nature and society. While it is difficult to predict the outcome, this melding of ideological and political forces will present real world ecological consequences in the near future. How choices will be made about China's environmental future relies mainly on the kind of future it imagines for the nation, its people, and their environment, including a recognition of the sacrifices that will undoubtedly be needed to achieve sustainability.

The concept of an “imaginary” has been developed in anthropology and political ecology as a means to describe the body of ideological, ethical, and rhetorical forces that scientists, planners, decision-makers, and citizen activists (together referred to as "environmental subjects") must engage with to accomplish in their goals. Imaginaries are higher-order discursive systems that allow local environmental subjects to work through bind situations, such as creatively turning a “no-win” situation, presented by greening versus development (traditionally a paradox), into a “win-win” situation. Basically, environmental imaginaries provide environmental subjects with ways of expressing problems and solutions in new terms, concepts, metaphors, and symbols. That is, locally situated environmental subjects are “tapping into” systems that are sustained at a higher-order of magnitude or on a larger-scale than might be apparent if reading only the local context: a mode of thinking particularly important to sustainability.

Environmental imaginaries become a way to tap into new ways of understanding the world, and the invention of new modes to interpret what Kim Fortun calls the “languages for which there are no
The concept of the successful Chinese city has changed over the past 25 years from a centrally planned economy to a market-driven center of commodity production. The transition over the past decade from a planned economy to a market-driven economy (with “Chinese characteristics”) is the paramount driver for this switch. With it comes a de-emphasis on producing commodities to meet state objectives, and a greater emphasis on allowing the market to determine the efficiency and types of production in indigenous idioms. New environmental situations and political complexities beg new concepts that force the articulation of new terms. The concept of an environmental imaginary works to describe four environmentally charged concepts — such as a Green Olympics in Beijing, or xiao kang (a well-off society) — are conceptualized in the context of broader Chinese interests regarding the co-construction of society and nature, or what Ma Shijun and Wang Ronggang call the Social Economic Natural Complex Ecosystem (SENCE).

Two instantiations of environmental imaginaries are currently in rapid and potent circulation throughout the Beijing development mindset, namely the Green Olympics in the shorter term (to 2010), and the “Green City” or “Eco-City” in the longer term (to 2020).

Olympic hurdles

For the city of Beijing, its driving force behind current infrastructural, economic, cultural, and environmental developments is, without a doubt, the 2008 XXIX Olympic Games: These Olympics are being promoted as a Green Olympics, which aim to align themselves with the principles of green energy, recycling, and sustainable development. This aspect of the Beijing Olympics has proved to be fertile ground for increasing public awareness of “going green” in China, and has become a touchstone for “going green” new development throughout the city.

However, China’s exposure to the world of “eco-spirit” does not end with the 2008 Olympics. In 2010, Shanghai will host the World Expo, which is going to be another large-scale “green city” and “eco-friendly” urban development project. (“Eco-tourism” is also another very popular and contested instantiation of an environmental imaginary within the development of Chinese nature reserves.) While there has been much discussion of corporate “green-washing,” the “green-washing” of state-run endeavors appears to be an area where the central government is taking on baby steps. The efforts to which China, and Beijing specifically, is capable of achieving the goals for a Green Olympics and beyond, still, is the global arena, determine how much of “going green” is a shift in political rhetoric versus a shift in fundamental goals and capacity building in the eco-environmental domain. It needs to be acknowledged, however, that this shift in rhetoric does not come without sincere and focused pressures from scientists and the public to pay closer attention to the costs of environmental damage.

Greencity in Ecocity!

China’s energy sector is tremendously rich, and growing. In 2001 China consumed 9.9% of the world’s total energy output, and by 2022 it is projected to account for 14.2% of the world total (US DOR, 2004). As Article 3 of Electric Power Law of the People’s Republic of China states, “The electric power industry should meet the needs of the development of the national economy and society and should develop steadily ahead of the other sectors of the economy. The State encourages and provides guidance to cold storage in the development of power-related enterprises by economic, organizational, and individual investors and abroad. It is no wonder that most of the funding from the US, the UK, and the World Bank has gone into China’s energy sector: energy capacity does not meet the country’s needs’ (Brundtland 1987). In evaluating the status and dynamics of various elements of China’s economy and urbanism, the Central Government is currently very much concerned with its ability to develop continuously, perhaps more so than it ever has before. In the long-term, the government seems to be keen to address the needs of a growing population. The perception that the Central Government seems to the case that eco-development is not sustained then political unrest and instability are sure to follow. Such approaches to sustainable development would need to secure both short-term gains in economic development, while at the same time investing in the long-term security of eco-environmental resources and services.
Agricultural production has an extreme effect on overall water quality and quantity, though it is slowly being surpassed by industrial maps.1 However, agricultural consumption also plays a significant role in contributing to the release of greenhouse gases, namely CO2 and methane. Food scraps are the largest component of municipal solid waste (MSW), and are the easiest to carbon release (during decomposition) among the MSW. Various studies have demonstrated that carbon output per capita increases as per capita GDP of a city increases. This is in part, due to a richer diet; in particular an increase in the consumption of meat and rice.2 An increase in transportation is also implicit in wider distribution of food, particularly since you no longer need to have a road, railway card, or bus ticket, in a city, to buy food there.

**The green edge**

The two environmental imaginaries, the Green Olympics and eco-city Beijing, produce very real results, particularly in motivating planners and politicians towards more broadly and deeply about sustainability; green designs, public transportation, and energy efficiency. The current trend in urban development around Beijing, however, brings the question as to whether reasonable claims of sustainability can be met. For such shifts in development and use to occur requires not just a few key politicians to think green or have goals in accordance with sustainable concepts; rather, it implies a shift in the entire culture itself away from the direction it is currently heading — i.e. that of huge consumption of disposable material goods and neoliberal emphases on the success of the individual.

**There are no such robust examples of urban-scale sustainability we can point to in any major urban region of the world, so we are not entirely sure what success looks like in these regards. However, in the absence examples, environmental imaginaries provide us with conceptual frameworks and sets of goals that, hopefully, point us in the direction of what sustainable success might be.**

What is certain is that further experimentation is needed, both in enhancing education of the public about sustainability, and particularly in coming up with new designs for green living without erasing the invaluable characteristics and traditions of living within a community setting. It is in this context that we introduce the concept of the green edge — a term that not only refers to the perimeter of the urban development, but also functional green (eco-services, co-benefits and eco-communities). Furthermore, it embodies the dynamic green that brings men’s potential to its full play according to ecological principles. To achieve this, it is necessary to green not only the landscape, but also the process of production and consumption, as well as people’s minds and behavior, which means a further sublimation of the Olympic spirit.

### References


5. Rice production is one of the biggest edge cities in special all-drivers CNG receive.

6. According to the US DOE, which also released to an exceptionally important effect because China’s annual course is over 10% of the world’s average.

7. It is not uncommon for certain environmental reception to be halted or bankruptcy for the 7th or 8th time.

8. It is the process of producing goods and services in which the entire culture itself is driven by C02 release.
Appropriate designs: Gao Bei Dian (GBD) and Hybrid Hutong

Conclusion: Enhancing Community Capacity towards a Sustainable Future

Successes towards sustainability will begin by asking in all sincerity, what kind of collective life do the Chinese people want for themselves, and for others in the world? Embedded in this is the question about how much people are willing to risk, sacrifice, adapt, and innovate. How well the Chinese government is able to come out on the positive side of the question will most likely depend upon how equitably such sacrifices are distributed across China’s citizens.

Addressing that means facing the double-bind that promises ecosocial-liberalism’s emphasis on individualism and encounters when faced with serious consequences for the environmental commons. While China’s one-child policy was a policy in favor of protecting the environment, it has paradoxically hastened the rise of what has to be called a renaissance of the bicycle. Once the Chinese are able to address the important issue of the bicycle, the urban heat island effect and other problems of cities will be lessened, and the possibility for urban planning enhancement will be increased.

There are no sincerely robust examples of urban-scale sustainability we can point to in any major urban region in the world.

The two proposals here, GBD and the Hybrid Hutong, attempt to address many of the problems as well as opportunities that are presented by the green edge, i.e. thinking at the current plausible limit of urban greening.

The Leap Building, which draws its inspiration from the traditional and highly successful Beijing hutong*, introduces the concerns of the individual to planning approaches which often, given the inevitable granularity of big building projects, forget the relevance of issues like community. This mode of thinking takes the urbanism of the hutong habitat into a larger scale development, the GBD proposal for an area of East Beijing near the fifth ring-road, which attempts to bring a degree of coherence to the city by considering future transportation routes, the availability of public services, and the recirculation of waste. By imagining greening on levels that are relevant to both consumer satisfaction and consumer greening, urban spatial and social scales, and influence even the far reaches of biodiversity. Such traditional thinking at the current plausible limit of building design was shown to be unprecedented in terms of the extent of vegetation on levels that are relevant to both consumer satisfaction and consumer greening, as well as to the development of an ecological thought of conceiving sustainability and of living green.

Urbanisation is the single largest agglomeration of influences on China’s environment. Urban effects are found across all sectors of the economy, span multiple spatial and social scales, and influence even the far reaches of natural ecosystems as remote “undeveloped” regions. The rise of the urban middle class in China is driving the desire for newer more luxurious building stock, for private vehicles, for increased consumer-oriented production, for eco-tourism, which is transforming sleeping little towns into thriving magnets for urbanites thirsting for a bit of pristine nature. These forces are all major obstacles to the realization of China’s green imaginations.

Greening existing built-up areas is very difficult without deep investments in infrastructure or innovative approaches, such as vertical greening. This will likely come over the longer term, but near term paroys are far more achievable and effective when looking at the greening of areas currently undergoing development.

The two proposals here, GBD and the Hybrid Hutong*, attempt to address many of the problems as well as opportunities that are presented by the green edge, i.e. thinking at the current plausible limit of urban greening.
is not a cause without support, as sustainable terms are being translated into economic terms, such as
with the use of ecosystem services, so they can be included in wider political-economic valuations.
Comprehending what this means to an individual’s lifestyle choices, however, will require re-training
individuals in how they go about their daily business. Individual happiness and wealth needs to be
accounted for, but such happiness is tied into the well-being of the community as well.
As Bryan Norton lays out in his work on sustainability, aligning community goals with environmental
values becomes a driving condition for making effective sustainable choices. Establishing these
values would include, as Norton argues, taking responsibility for future consequences, making a
commitment to ‘future-oriented living’, evaluating how ‘citizens value parts of their environment at a
given time’ by ‘focusing on everyday communication’, and developing an empirical foundation to help communities ‘point a basis against which to judge public processes of adaptive management as they emerge and develop in real situations’. If we want to put an investment into sustainable development that will affect both the goals of urban level sustainability and individual level consumption patterns, it would be best done at a community level, and focused on communications which increase the awareness of environmental values and practices through greener designs for residential blocks.

Dwelling designs that support both environmental values and community participation will not only provide the conditions for moving towards a more sustainable urban/rurban lifestyle, but will also provide the foundations for a stronger civil society.

It is these goals that are infused in the Gao Bei Dian and L-building designs for Beijing. The green edge is the urgent context in which these building experiments need to be refined into successfully reproducible examples of sustainable design for the continually expanding boundaries of China’s cities.


11 Urban Heat Islands occur when a city is full of blacktop and concrete absorb and re-release significant quantities of solar radiation. Greenery absorbs this energy and also, through evaporation, keeps an area cool.

GBD

Factory
ES: What were the issues concerning you when you started the designs for the L-building and for the GRD Art and Design District?

NM: As a foreign designer working in China pushing a progressive sustainable agenda is one of the few added values we have to offer. China's impressive green ambitions for 2020 have produced an array of studies, suggestions and guidelines aimed at reducing emission levels. This is important, but the magnitude of China's problems demands a more profoundly integrated approach. At the outset of what is potentially a green revolution it is essential to aim for more than reducing the environmental impact with a myriad of greenification gimmicks. To achieve this, I believe efforts should include both ends of the scale, now largely ignored — the regional and the individual.

My concerns on the regional scale relate to the increasingly suburban landscape that is forming. We have coined the term splatter pattern* to describe the vast urban expansions taking place at village-level. Based on the premise that a significant proportion of future consumption is already determined once land use and urban form has been designated, this will constitute highly inefficient urban regions. The harsh reality China has to face is that even a collection...
of good green buildings can deliver a bad city. The anxious socio-economic context facilitates the almost instantaneous shift from a red to a green society — at least on paper. But coherence between the sea of new building projects is much more difficult to realize.

ES: What about individual level problems facing greening in China?

NM: About the problems at the individual scale I am less skeptical. A green society is not the product of laws and guidelines alone. The individual, or rather the consumer, will define the success of most green ambitions. Like so many aspects of China’s modernization it’s the combined result of top-down government interventions and bottom-up incentives that generate the hyper-speed transition. China’s double-digit economic growth can be argued to be at a standstill when the environmental squalor costs an estimated 10% GDP annually. At the same time air pollution is directly affecting the health of millions of individuals. According to the Chinese Academy on Environmental Planning (2003), air pollution is the cause of 411,000 premature deaths every year. This is particularly poignant when you consider that the average individual in China consumes only a fraction of what people in most Western countries do. We are faced with a rather paradoxical aim in terms of greenness: less to reduce individual consumption, but to serve and stimulate future green consumers.

Chinese society is in the process of a complete transformation. The objective is to accommodate the xiao kang* or well-off middle class in a new urban environment by 2020. This means we have to conceive what the urban environment should be now. Though cities like Beijing seem to be modern, in reality they are realized with just another upgrade of a monotonous housing stock. High-end green efforts are mostly aimed at prestigious office towers and tend to overlook the challenge of the explosive residential realm. In crude terms the housing program can be reduced to dormitory extrusions* and villa parks. As the Chinese home consumer diversifies this monotonity will be disastrous for the lifespan of a notoriously short-lived housing stock. Having completed a brand new urban environment at the scale of Europe in two decades, China would have to start all over again, green buildings or not.

Ultimately the individual and regional scales affect each other. China has embarked on a social revolution that can be summarized as a shift from a single society of radical equality to a radically segregated society. The scattered urban landscape that is forming is defining the modern Chinese way of life. For those who can afford it, this equals a car-dependent suburban lifestyle. While mass-consumption is on the rise for some, dismal conditions remain for many. Greenification schemes are mostly up-market, simply pushing primitive conditions to the edge of society. The fact that China has ventured on a path that is not socially sustainable will hinder its ambitions for environmental sustainability.

ES: I agree that a massive transformation is underway, but within the context of Chinese history neither inequality nor difficulties of scale are in themselves new. Do you put the radical aspect of these changes down to speed and the numbers involved, or is there a fundamental morphological change happening? If the landscape is undergoing complete transformation, are traditional and even current forms being lost?

NM: Traditionally Chinese cities were compact clear centers in the landscape. Even during the twentieth century cities did not expand beyond the reach of the bicycle. The neighborhood was integrated; work and living were closely aligned. Though not sustainable in a modern society this presents an ideal configuration on both the scale of the region and the individual home. Even today for the 200 million households that don’t have running hot water, economizing on energy
is painfully easy; more so for the 20,000 villages entirely cut off from the grid. Ironically the lack of the most basic amenities and infrastructure has accelerated the spread of sustainable technologies. China is the world’s largest producer of solar panels, and the number of people still off the grid have made it the world’s largest consumer. In the countryside a staggering 50 million collectors have been installed. However leapfrog developments have uprooted the urban fabric on many levels. The compact city and the social setting of the traditional neighborhood are all but lost in the expansion of the Chinese suburb.

China’s hukou* registration system divides the population into two distinct groups: urban and rural. This suggests two distinct spatial conditions: the city and the countryside. However the predominant development occurs on the threshold of these two and produces nothing more than a rurban* landscape—an indiscriminate fusion of rural and urban elements that lacks the qualities of either condition. To gain a grip on the landscape at least three basic conditions should be distinguished: rural, urban and suburban. The suburbs and the suburbanite define the residential median of China’s expansion. It is the most dynamic zone, with potentially the largest impact on the environment. Here the values of the traditional neighborhood and the compact city should be reintroduced.

ES: And so the suburbs are the “Green Edge”* your designs refer to?

NM: Originally the title of our research, the Green Edge*, was a cynical reference to one part of Beijing’s greenification scheme: a project that has edged major roads, particularly around international tourist attractions, overpasses, and the international airport expressway, with a thin sleeve of trees, plants and flowerbeds. In a notoriously dry city, this seems to be a water-thirsty fauna offensive to make Beijing look green from a car, while blocking the view onto dilapidated neighborhoods around the Third Ring Road. But we felt this name was more appropriate for the zone around cities with the particular green potential we have distinguished in our urban proposals*. The objective for this zone was to define the edge of the city in order to tackle sprawl. It became clear in China that the suburb has to be given a second chance — if only because of its success.

At the moment the Chinese suburb is no more than an indiscriminate region where fortunate home-owners, the forcefully relocated, and ever more middle-class citizens are finding refuge. The trend itself is thoroughly global — people either want to live in the suburbs or can’t afford to live anywhere else. But here, for young real estate refugees*, the flight to the suburb is the Chinese Dream*. It too has its roots in an economic revival and the success of mass-consumption and individual transportation. But the Chinese suburb is still distinct from its American counterpart. The Chinese suburbs still contain real social diversity and a variety of spatial conditions. This may be only temporary though, as an unseemly form of over-planning* dominated by highways and industrial parks is pushing small-scale developments out to the periphery leaving behind a sterile and inaccessible landscape. Still I feel there is hope. Unlike American suburbia, the Chinese suburbs often present remarkably compact building typologies. This is a potentially invaluable condition that China should nurture to give quality to its urban periphery.

Paradoxically urbanization, mass-migration and population growth can help to elevate the suburb to become an integrated part of a compact metropolitan environment.

To achieve this, suburbia should be confined to clear boundaries. Where suburbia starts and stops however is hard to define. We have suggested any urban expansion

Green楼宇的堆砌未必是绿色城市
beyond the reach of high-end public transport should be considered unsustainable. The zone within the mass-transit system which is not part of the center we have coined the Green Edge*, a transitional zone between the city and the countryside. Freed from its derogatory appellation and its image as a refuge for rich and poor, this part of the suburb can take on the role of being the city’s green heart, accommodating a rich mix of social classes, densities, urban functions and green space. The Green Edge* introduces a highly sought after urban quality: lush residential environment with fast access to the center.

ES: But aren’t suburbs normally perceived to be at the heart of the sprawl problem, rather than the green solution?

NM: True — we are claiming green building projects belong in the suburbs of large cities — and we are aware that this statement is counterintuitive. China is currently in the grip of a satellite fetish*. Somehow with satellite towns suburbanization is not a concern. Building more satellites and celebrated concept towns should compensate for the inexorable expansion of China’s semi-industrial, semi-modern, semi-urban landscape: the satellite town has become the focus of an eco-exodus.

And in principle it can work. China, the world’s most sophisticated developing country has signed a contract to build the world’s first completely sustainable city near Shanghai. Engineered by Ove Arup & Partners and located on an island it should be a successful, truly autonomous green city. However, most likely the countless other green planning projects will be less comprehensive and less autonomous. They will induce sprawl and demand longer commutes instead of enhancing the semi-developed periphery. This is why green projects belong in the suburbs, or rather the Green Edge*.

The eco-exodus and the concept of a sustainable satellite are not new. They are reminiscent of the ideologies of New Urbanism (NU); a movement which proclaimed the invention of a socially refined, walkable eco-town of human proportion with historical trimmings back in the eighties. However as a socially environmentally sustainable vision NU and its offspring Smart Growth are impaired by their car-dependency and price tag. Their walkable qualities entail only the stroll from the house to the church and the barbershop. They lack the critical mass* necessary to support high-end transit to the workplace. In addition they build on what was previously open space. This reduces New Urbanism to a gated community without walls; the result of carpet planning* with stylistic cues. Its most prominent examples — Celebration, Seaside, and The Glen — are tantamount to a privatization of public space at the town-wide level and create an encapsulated town rather than a mixed, interactive...

绿色战略应与市场和谐，它应有既省钱又催生绿色消费者的魅力

greenness must be marketable — i.e. must be both cost-effective, and have the attractive power to generate green consumers

The eco-exodus and the concept of a sustainable satellite are not new. They are reminiscent of the ideologies of New Urbanism (NU); a movement which proclaimed the invention of a socially refined, walkable eco-town of human proportion with historical trimmings back in the eighties. However as a socially environmentally sustainable vision NU and its offspring Smart Growth are impaired by their car-dependency and price tag. Their walkable qualities entail only the stroll from the house to the church and the barbershop. They lack the critical mass* necessary to support high-end transit to the workplace. In addition they build on what was previously open space. This reduces New Urbanism to a gated community without walls; the result of carpet planning* with stylistic cues. Its most prominent examples — Celebration, Seaside, and The Glen — are tantamount to a privatization of public space at the town-wide level and create an encapsulated town rather than a mixed, interactive...
community. Without the conspicuous walls of the Chinese condo their privacy depends on isolation, gentrification, and citizens' decrees. Some of these are light-hearted enough — for example in Celebration it's officially not permitted to be unhappy — but for China the success of 20,000 gated communities in the US presents a rather less frivolous scenario. As China progresses most likely similar desires for a neo-suburban lifestyle will burgeon. In the dichotomist Chinese environment, compounds sealed off from society threaten the durability of the suburb. The split cities* they produce prohibit the assimilation of migrants and low-income citizens into the suburban society.

ES: Okay, so tell me a little about the specific history of the actual designs themselves.

NM: Well, our first large urban commission in China was surprisingly progressive. We met a developer who from a commercial standpoint supported our ambitions for sustainability and urban diversity. The assignment was for an art and design district in Gao Bei Dian (GBD); an area of rapid change in east Beijing near the Fifth Ring Road. We felt this was a good example of the kind of space we aimed to capture with the Green Edge concept. The area is a leftover plot wedged between highways, train tracks, and semi-urbanized villages*, but with impressive green features.

In the first stage the project was intended to be purely an art district with large art studios, loft apartments, and galleries and offices for the creative sector. As you know in Beijing recently dozens of areas have been designated for the creative industry*; sometimes this is an effective method to elevate suburban areas struggling with their industrial heritage. But often it’s merely a government label void of real meaning, and applied to postpone any clear decision. This put us on the spot to answer the question if an art district could really be designed — would this kill the grass-roots qualities? Should artists be left to find urban niches themselves, as they have done successfully across the globe? Art districts come and go and nowhere faster than in Beijing, and this is only normal. But in Beijing they develop under strangely contradictory forces. Some like Dashanzi 798 have been acknowledged and flourish; others have been painfully short-lived and leveled without notification. This constant threat made us decide that a well-planned creative district which would provide individual artists with a safe environment in which to live and work was worthwhile.

But as the project evolved so did the assignment and even the actual site conditions. The reality of our central hypothesis of dynamic density* became all too apparent. Our challenge for the two designs we had made was to develop systems that would be flexible, yet diverse and detailed. The level of detail expected in a Chinese urban proposal approaches...
the architectural scale, and this unfortunately eradicates most flexibility from the design process. I believe this is one of the reasons why in China instant designs are commonplace. Our efforts to achieve extreme flexibility allowed us to safeguard the search for creative solutions. The systems we’ve engineered can withstand continuous alterations while maintaining their principle qualities. The two systems presented here are based on organic principles: one a backbone, the other a cell pattern.

ES: And how does this work out spatially?

NM: The backbone or Strip evolved from our desire to connect to the urban network via a public space at a time when the majority of real-estate projects turn away from the public domain. Providing a space that offers both circulatory and locational qualities can be the basis for a dynamic and diverse street life. The reality of the Beijing suburbs, however, literally left us looking for loose ends to connect. The project site is naturally as cut-off from its surroundings as any walled community. In response we have designed a single strip that is both origin and destination; a distinctly urban zone that forms the backbone for urban development in one direction, and a clear demarcation from the surrounding ecological park in the other. These two aspects of the project — city and park — work together as one ecological system that channels water flows and preserves energy. The ecological park replenishes the consumption of the urban strip. The park is a showcase for environmental design and encourages green consumers. The surface of the urban strip is almost entirely permeable and tapered to distort the perspective. From each end the total distance looks either very long or very short. Visitors are naturally drawn deep inside the area and then persuaded to wander around through the park.

The buildings are wrapped along the central axis or vista and connected by a continuous tensile sun-screen that protects the pedestrians against the hot Beijing summer. The built volume slopes down to offer maximum penetration of sunlight and an enhanced view over the park. Sustainable projects are generally only open to the south, but art studios require northern light. This provided an interesting opportunity to develop an intricate roofscape.

green buildings belong in the suburbs — or rather, the green edge of big cities

绿色建筑只存在于郊区，或者说是大城市的绿色边缘
Jagged strips of industrial style light wells cut through the entire district. The windows face north, the south facing facades are covered with solar panels, the flat parts become terraces and walkways, the soft slopes are covered with vegetation. The natural qualities of the site have been enhanced with indigenous plants and natural installations such as the solar aquatic system and reed beds.

Then the assignment grew, the site parameters shifted and the project gained a large amount of commercial and leisure program. The network of paths and designated routes we’d planned through the site became much more elaborate, while the available surface decreased. It’s an obvious solution to rely on tall structures to comply with Chinese building codes, and admittedly there are strong incentives behind the suburban skyscrapers we see emerging. But developed as single mega-compounds these environments more often resemble a form of Chinese Modernism — large blocks on a map of endless undefined cross-hatched grass; an urban approach which is leaving neighborhoods oddly inaccessible behind vast empty spaces. Within the context of the Green Edge* we proposed to aim for a low-rise solution without compromising the density.

Using cantilevers, bridges, decks, skywalks and extensive sunken retail streets and squares the available space is greatly increased. Cars are removed from sight and the distinction between above and below ground, the street and the terraces is permeated. To achieve this, a formula was created for a single cell of 2,500m² to be developed by a single architect. These cells are then grouped together to form larger patterns which can adapt to specific conditions such as trees or a river. The Chinese puzzle pattern of plazas and corridors is the result.

IES: Your proposals speak also about the social aspects of the design, suggesting even a resonance with ‘communist principles’, and offering a ‘soft transition’ from hutong* to skyscraper. How do you reconcile this with the market’s current fetishization of the new and apparent unconcern with demolishing previous environments? Communism in China has demonstrated a capacity to engage successfully in large-scale development projects, but this has not always produced an integrated approach to urban design.
The letter L in L-building embodies these qualities. L is the primary shape of the apartment, but it also stands for Luxury and for Loft. We have designed the units as lofts not merely as the epitome of the architect’s dream apartment, but as a space that can easily be adapted from one owner to the next. The apartments can be either completely compartmentalized or entirely open, and thus can be made suitable for couples, small families, or a new generation of single occupancy tenants born out of the one-child policy.

The L-building as a whole introduces the further aspect of social sustainability, often missing in China and in the general discussion. Nothing is more desirable than an apartment with amenities such as running hot and cold water, a toilet, and a view. But for the inhabitant the transfer from the ping fang — the simple derivative of the famous hutong — to the modern tower block is often less rewarding as time goes by. The traditional Chinese neighborhood, including the danwei, had an exceptional social coherence. Qualities of the ping fang that were taken for granted, particularly the sense of community, are disappearing. Recreating a community for the individual within an environment of large-scale developments will become increasingly important in China, as more and more people find themselves not only relocated, but also questioning the benefits of that relocation.

Both the GBD Art and Design District and the L-building mediate between China’s traditional urban environment and the contemporary trend of up-scaling, between low-rise and the modern tower block. First the L-building complies with some rudimentary suburban desires — a large private garden and your car at the door. But as a medium-sized, collectively developed, owned, and operated form, the L-building also resonates with more traditional principles.

NM: Yes. It seems a contradiction and failed attempts prevail, but the Chinese courtyard or siheyuan can be stacked. As a hybrid between a high-rise and a hutong, the L-building retains the three essential qualities of a sizable garden, close connection to the neighborhood, and privacy. This is achieved by fusing the typology of the patio with terrace housing. The long walls of the immense terrace function as a courtyard on your rooftop. The protruding semi-cantilevered gardens catch the sun even when it sets behind the building. Walking to the end of your courtyard you overlook the neighboring gardens, the park and the surroundings.
THE L-BUILDING

A hutong high-rise hybrid

The basic building block of the project is an L-shaped terrace apartment. The apartment is stacked in a pattern which is shifted diagonally. This shift makes it possible to introduce an entirely new housing type.

项目的基本建筑模式是L型公寓楼。公寓都是延斜线上移叠落在一起的。这样的移动使一种全方位的新房屋类型成为可能。
In China, low-density "solutions" such as the eco-village are essentially green chimaeras.

在中国，比如“生态村”之类低密度住宅的解决方案无异于狮头、羊身、蛇尾的绿色怪物。
Before padding a city out with insulation, we need to imagine what living environments we actually want to inhabit.

The outer sides of the L are closed; the inner side glazed. Apartments provide privacy for each other while terraces and interiors receive the maximum of direct sunlight. Orientation ensures shielding from prevailing winds. Views reach out to the park below.