

## **Green Modernism: *The Irony of the Modern Garden Cities in Southeast Asia***

### **Introduction**

Green Urbanism is in vogue, and cities around the world are currently in a competition to out-sustainable and out-green each other. It seems that every city both in the developing and developed world has a goal to become a green city. Chicago has greened the roof of its city hall, Beijing has created a park twice the size of Versailles for the 2008 Olympics, Abu Dhabi has just unveiled a plan, Masdar City, a zero-emission, zero-waste community, and Cairo has transformed a former slum and landfill into a sleek new park. While many of these efforts are attempts to mitigate the adverse impacts of urbanization such as disease, environmental degradation, overcrowding, poor sanitation and increase inequality and social stratification, these efforts are symbolic emblems in which these cities can market and brand their respective cities in an increasingly globalized world.

This discussion of the fusion between greenery and modernity in newly industrialized and global cities is the central thrust of this paper. This paper first chronicles green modernity as it arose in response to 19<sup>th</sup> and 20<sup>th</sup> century urbanization and industrialization in the west.

Using Singapore and Putrajaya, this paper shows how many of these western schemes of green modernity are being “reapplied” with distinctly different agendas in the developing world. Paradoxically, while these cities in Southeast Asia have undergone significant and tangible green modernization schemes, the processes of modernization in transportation, housing, and retail have virtually negated many of the positive benefits that these greenery schemes seek to promote. Many of these new “green schemes” in Southeast Asia are nothing more than glossy efforts that hid a generic and sterile landscape of a newly modern global city

### **Garden City Precedents**

#### ***Reaction to Industrialization Process of Western Cities***

*Forget six counties overhung with smoke,  
Forget the snorting steam and piston stroke,  
Forget the spreading of the hideous town;  
Think rather of the pack-horse on the down,  
And dream of London, small and white and clean  
The clear Thames bordered by its garden green*

William Morris  
*The Earthly Paradise* (1868)

Problems of urbanization currently being felt in developing cities in Asia and Africa were also felt to an extent in cities in Europe and North America as they urbanized and industrialized in the mid-19<sup>th</sup> century.

19<sup>th</sup> century urbanization and industrialization in the west created conditions that were both exploitative and dangerous to human life, with massive



*"Over London by Rail" Illustration 1863*



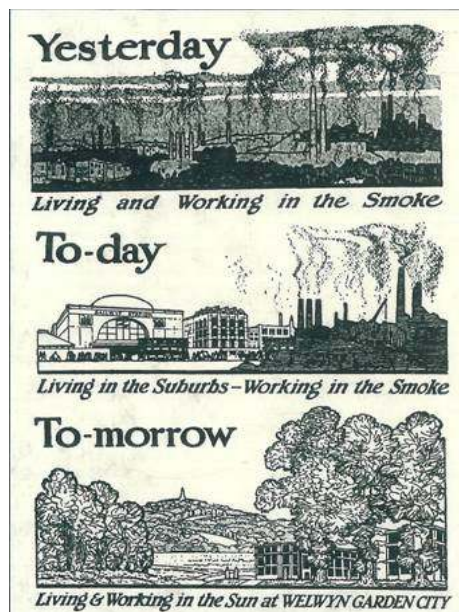
included uniform building heights, grand boulevards ending in anchoring elements including the Arc de Triumphe and the Grand Opera House.

Hausmann's plan for Paris inspired some of the most important architectural movements including the City Beautiful Movement in the United States. In fact, renowned American architect Daniel Burnham borrowed liberally from Hausmann's plan and even incorporated the diagonal street designs in his 1909 Plan of Chicago.

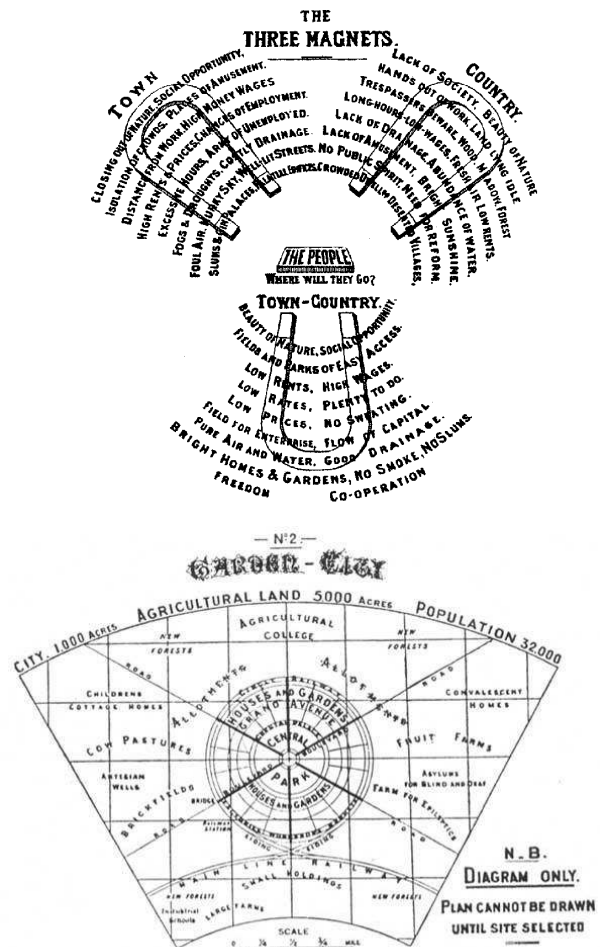
### Birth of the Garden City

Ebenezer Howard's book *Garden City of Tomorrow* succinctly summarizes much of the intellectual discussion and physical design of residential garden suburbs in burgeoning British industrialized cities. Howard's scheme was unique and important, not only because it laid the conceptual groundwork for the physical design of garden cities, but more importantly Howard's "Garden City" laid out a social egalitarian basis for these garden cities. Howard envisioned this model city less as enclaves for the rich, but believed greenery was a social equalizers imbued with a utilitarian spirit.

Howard's scheme outlined a nearly self-sufficient conceptual city of 6,000 acres for a population of 32,000 people. This city would take the best of both town and country-- a high density and highly structured urban town surrounded by a ring of agriculture and open/space. Housing, open space, employment, and financing were all thought about and detailed. While Howard's scheme was purely conceptual, the plan influenced to a large extent a series of new communities in both the US and Europe of "Garden Cities. These communities such as Letchworth and Hampstead while not necessarily based on his mixed-use idea nor the egalitarian spirit his Garden City, established a new paradigm for a suburban development that would take the best of both the town and country and combine into a privately funded development. This model would greatly impact western cities, and served as a prototype for suburb residential development that exploded after the growth of the car.



Promotional Poster (1918)



Howard. *Garden City of Tomorrow* (1902)



### **Green Monumental Capital Cities**

Much emphasis on greenery was incorporated into the development of the capital cities of Australia and the US, who both set out to build from scratch their respective national capital cities of Canberra and Washington DC.

Both the Griffith scheme for Canberra accepted in 1910, and the reworking of L'Enfant original plan for DC in the 1901 McMillan Plan were based much on the design principles of the City Beautiful movement. Both plans were very geometric and based on formal series of axial boulevards and plazas and open spaces that would bring a sense of grandeur to the monuments and municipal buildings that were emblematic of these newly emerging nation states. The design of greenery in these cities were less about mitigation of problems of urbanization, but greenery and open space were ideologically employed to project an image of a clean, orderly, and structured city that would symbolically define the image of a clean, orderly, and structured government.



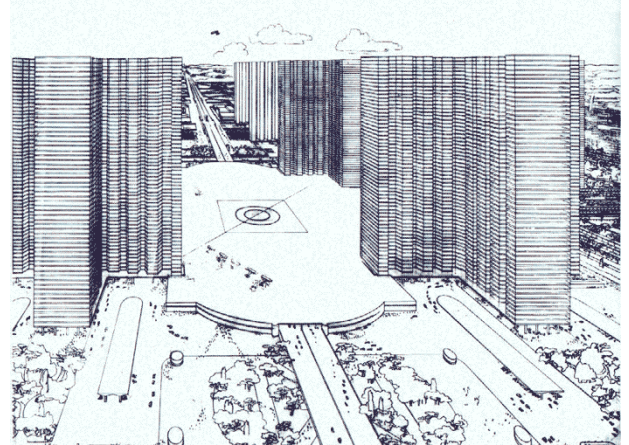
*Griffiths, Design Competition sketch of Canberra (1911 National Archives of Australia)*

### **Greenery and High Modernism**

*"Here is the CITY with its crowds living in peace and pure air, where the noise is smothered under the foliage of green trees. The chaos of New York is overcome. Here, bathed in light, stands the modern city."*  
*Le Corbusier- City of To-morrow (1925)*

Le Corbusier was the embodiment of high-modernist urban design. Active roughly between 1920-1960, he was less an architect than a visionary planner of planetary ambitions. If one were to look for a caricature—a mascot so to speak of the logic and reasoning characterizing high modernism schemes, Le Corbusier would be the man. The seminal works of the Modernist city planners are found in two documents, "The Athens Charter" of the Congrès Internationaux d'Architecture Moderne (CIAM), and "The Radiant City" (*La Ville Radieuse*) published in 1933.

Le Corbusier and the CIAM reviled the existing city, primarily because they thought the city was a slum ridden conglomeration characterized by, inadequacy of habitable space per person, a mediocrity of openings to the outside,



*Plan Voisin. Le Corbusier, The Radiant City (1933)*

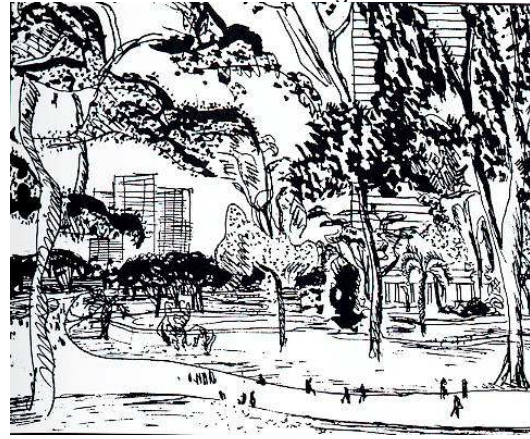
absence of sunlight, decay, promiscuity, and breeding grounds for deadly germs.

High modernist rejected a model that would improve upon or retrofit the existing city to make it better and demanded instead that the only solution was a completely fresh start, *Tabula Rasa*. The modernist felt that the built environment caused the squalor and slum conditions emblematic of the industrialized city. Only by using recent technological innovation to open up the city, creating taller buildings, wider roads, and more open space, urbanism would recover the open land, adequate sun and ventilation needed for cities to breathe and function correctly. They felt that only by totaling erasing and rebuilding the existing built fabric of the city, along scientific, rational and technological principles of light, air, traffic, and density could the pitfalls of the existing city be successfully remedied.

In the Radiant City, Le Corbusier details Plan Voisin, a plan for central Paris. No compromise is made with the preexisting city; the new cityscape completely supplants its predecessor. The city has striking sculptural properties; it is designed to make a powerful visual impact as a form. That impact, it is worth noting, can only be seen from afar. None of his plans make any reference to urban history, traditions, aesthetic taste of the place in which it is located. Le Corbusier's plan for Paris has no contextualized clues; it could in essence be located anywhere.

Le Corbusier plan for Paris also is startling in its open spaces. Le Corbusier believed the city should be a light and airy place to live with plenty of open space and fresh air. In his scheme, Le Corbusier was planning for the basic needs of his fellow men—needs that he felt were completely ignored or compromised in the existing city. In the Plan Voisin, Le Corbusier wanted to transcend the slum-ridden city filled with “decay,” “rot,” “scum,” and “refuse.” He deplored both the conditions of the slums and the people they had created. “How many of those five million [slum dwellers] are simply a dead weight on the city, an obstacle, a black clot of misery, of failure, of human garbage.” (The Athens Charter, 1933)

Le Corbusier's intellectual influence on architecture was out of proportion to his built work. His conceptual schemes to demolish and redesign the industrialized cities of the US and European never materialized. His only work was the new Punjabi city, Chandigarh which he took over halfway after the initial designer died.



*Le Corbusier's vision for Buenos Aires. 1929 (Artists Rights Society [ARSI]/SPADEM, 1995, Paris)*



*Plan Voisin. Le Corbusier, The Radiant City (1933)*

### **Brasilia, Brazil**



The ideas and the discussion of modernism influenced a whole generation of planners and municipal policymakers. Brasilia, the newly designed capital of Brazil is the city that is most commonly cited as representing the high modernist ideology. The city makes no reference to the habits, traditions, and practices of Brazil's past or of its great cities. It is completely emblematic of a new Brazil not tied to the squalor and inefficiency of its existing urban cities. With a clean geometric aesthetic, the designers banished the street and square and other references to traditional Brazilian spaces and replace it with sleek government buildings surrounded by massive open spaces.

To build the city, scores of workers had to be brought in from the surrounding areas. These workers never had a place in the city they designed and formed peripheral cities. By 1980, 75% of the population of Brasilia lived in settlements that had never been anticipated, while the planned city reached less than half its projected population. (Holston, 1989) If judged by the degree to which it departs from cities in older, urban Brazil, then its success is considerable. If judged by its capacity to transform the rest of Brazil or to inspire a love of a new way of life, then its success was minimal.



*Brasilia National Congress and Central Commons.  
James Holston, The Modernist City: An  
Anthropological Critique of Brasilia (1989)*

### **Modern Garden Cities of Asia**

Cities in Asia are going through a process of modernization based very much on modernist ideals advanced by the likes of Le Corbusier and other CIAM luminaries in the 1930's. Namely the decontextualization of the city from the existing environment, the use of new technology in an attempt to radically remedy the pitfalls of the existing urban fabric, and a forward looking perspective that seeks to erase physically the historical social/physical urban fabric on which the city was built. Interestingly, as can be seen in the cases of Singapore and Kuala Lumpur, these modernist processes are being packaged under the guise of a "garden city" although they have little in common with the "garden city" concepts that Howard first envisioned.

#### **Singapore:**

*To achieve First World standards in a Third World region, we set out to transform Singapore into a tropical garden city."*

*Lee Kuan Yew PM of Singapore 1959-1990. From Third World to First (2000)*

The transformation and modernization of Singapore epitomizes to an even greater degree than Brasilia, the modernist tenants outlined by Le Corbusier and others. Not only in its physical transformation, but perhaps more alarming is the rapid social transformation of the habits and lifestyle of most Singaporean citizens. Unlike Brasilia, the recent transformation of Singapore is rarely connected to the modernist ideology. This can be explained because much of the transformation was not promoted under modernism, but instead under the guise of "creating a green city"

Before 1960, Singapore was emblematic of much of the rest of Asian urbanity. The city was a port city categorized by its urban filth, teeming streetlife, its hustle of activity, and its unique shophouse lined streets. After 1960, the city has undergone a drastic and quite successful make-over to recreate itself as a modern efficient and clean city. Under the guidance of Lee Kuan Yew, the prime minister of Singapore, the city has diversified its roots as a port town and become a center for business, tourism, manufacturing, and education. In his autobiography, *From Third World to First*, Lee Kuan Yew outlines exactly how this transformation occurred:

*"After independence, I searched for some dramatic way to distinguish ourselves from other Third World countries. I settled for a clean and green Singapore. One arm of my strategy was to make Singapore into an oasis in Southeast Asia, for if we had First World standards than business-people and tourists would make us a base for their business and tours of the region. The physical infrastructure was easier to improve than the rough and ready ways of the people. Many of them had moved from shanty huts with a hole in the ground or a bucket in an outhouse to high-rise apartments with modern sanitation, but their behavior remained the same. We had to work hard to be rid of littering, noise nuisance, and rudeness, and get people to be considerate and courteous."*



Singapore Public Notice, 2004. Craig Johnson

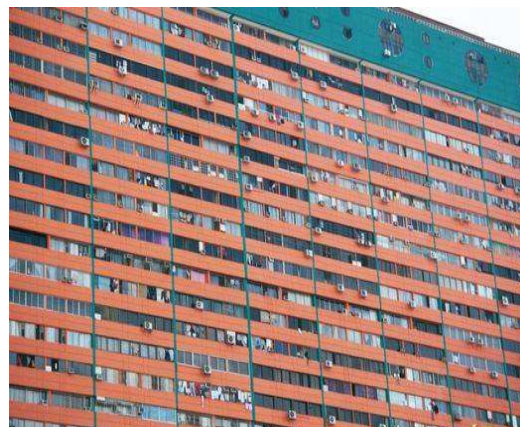
Under the simple goal of planting more trees, Lee Kuan Yew implemented a strategy with much larger implications. His main goal in the clean and green campaign was not to plant trees, but organize a wholesale transformation of Singaporean citizen's unrefined behavior, customs and the built environment into a euphemistically and politically savvy campaign. To a large extent, Lee Kuan Yew was very successful.

### **Singapore Tabula Rasa**

Like Le Corbusier, Lee Kuan Yew looked at the traditional patterns of Asian urbanization in Singapore and saw filth, density, lack of open space, and criminal behavior. Like the modernist he rejected a model that would improve upon or retrofit the existing city to make it better and demanded instead that the only solution was a completely fresh start, *Tabula Rasa*.

To accomplish this, Singapore engaged in a public housing building scheme never before undertaken on such a scale. The government set to build apartment buildings with adequate open-space, transportation linkages, and fresh air completely from scratch in new and existing urbanized areas of the city. Nothing was sacred, even cemeteries were destroyed and claimed graves were relocated to multi-store crematoriums. These HDB flats were built quickly with an eye towards efficiency and speed. These new towns quickly sprouted up all over the island and provided housing for those people whose homes were demolished, farmers unable to practice their livelihood, and the inevitable urban in-migration.

In a very short time, Singapore had demolished virtually



HDB Flats Chinatown Singapore 2004. Craig Johnson

70% of its existing urban fabric and created a new urban fabric that entirely unrelated to traditional architecture, streetscape, and mixed-use districts that had traditionally characterized Singapore. These had been replaced with monotonous and similarly design apartment buildings, surrounded by ample open space, concentrated hawker centers and business in the center that responded minimally to the existing climatic and cultural customs of the city. The scope was unbelievably successful as over 80% of Singaporean citizens live in public housing.

In many respects, the scheme was extremely successful and changing “unclean” behaviors, habits, and living conditions as shown in these HDB brochures outline the impacts. Under the guise of creating a “green modern city” Singapore was able in a very short time to fix many of its problems of sanitation, traffic, overcrowding, disease, and crime. The city cleaned up its image and as Lee Kuan Yew had predicted, Singapore became known as an ultra efficient and safe place for business and tourism in Southeast Asia.

In the process of this transformation, Singapore lost much of its gritty soul. Koolhaas in his essay, “Singapore Songlines: Potemkin Metropolis... or 30 years Tabula Rasa,” states that:

*“the irony of Singapore’s climate is that its tropical heat and humidity are at the same time the perfect alibi for a full-scale retreat into interior, generalized, non-specific, air-conditioned comfort.”*



Living Room before Relocation



Open Space Before Relocation



Living Room After Relocation



Open Space After Relocation

HDB Annual Report, 1985

### **Putrajaya: New Green Capital of Malaysia**

Putrajaya, like Washington DC, Brasilia, and Canberra is a built-from-scratch administrative capital and was built to both alleviate the congestion of Kuala Lumpur as well as be a new-nationalistic manifestation of Malaysia's transformation into a developed



Putrajaya, Main Boulevard 2004; Craig Johnson



country. The city is located halfway between the ultra-modernistic airport and the main city center and connected to both via a high-speed railway line. What is one of the most striking features of the whole design is the melding of the modernity, traditional Islamic architecture, and the tropical landscape. Putrajaya was designed to be “a city within a garden” and it surely lives up to its name.

The design of 'Putrajaya' was both designed to remedy the negative aspects of newly created capitals as well as embody many of the positive design elements of newly designed cities. Since 1995, the Malaysian government has been slowly transforming what was once a vast oil palm-oil tree plantation. The 11,300-acre metropolis is carefully landscaped and architect-sculpted. The city is centered on a massive artificial lake which takes up over ¼ of the entire land area. Nearly 40 percent of the meticulously designed, environment-friendly capital is set aside for parks, manicured hills and freshwater wetlands used to purify the extensive use of water in the city...

Within the city are a series of themed parks including a large botanical garden, an agricultural park, a forestry park, and a wetlands park. Government offices include buildings the size of city blocks that blend futuristic facilities with centuries-old Islamic architecture. Rows of cookie-cutter apartment blocks line wide boulevards, and cranes tower over many more under construction.



Putrajaya Aerial Perspective of Core Area; Ted Kheng Design Consultants, 1998

### **Marketing and Branding of Topicality**

*No other project has brought richer rewards to the region. Our neighbors have tried to out-green and out-bloom each other. Greening was positive competition that benefited everyone-- it was good for morale, tourism, and investors.”*  
 Lee Kuan Yew PM of Singapore 1959-1990. *From Third World to First* (2000)

Both the “Garden Cities” in Putrajaya and Singapore though implemented for different purposes are both attempts to create a glossy and marketable vision of a



Singapore Marketing Brochure; 2004. STB

future city that is defined more by its tropical greenness and less by the culture, customs, and traditions from which these cities have traditionally been perceived. The deliberate juxtaposition of tropical greenness with emblems of modernity such as airports, skyscrapers, and freeways is used extensively in tourist advertisements and marketing campaigns. In Singapore, the whole entry sequence into the country is a choreographed spectacle and manicured tropical greenness. Within the air-conditioned terminals of Changi airport (named after a tree) are numerous gardens scattered around the airport; a bamboo garden, an orchid garden, a roof garden, and a cactus garden. As one leaves the airport, the freeway is one of the most maintained and beautiful manicured tree-lined boulevard—rivalled only by the Angsana trees on Orchard road, another major tourist location.

Kuala Lumpur, not to be outdone by Singapore, transplanted in their new ultra-modern airport, a tropical rainforest, an island of lush verdant greenery completely surrounded by the glass and steel expanses of the airport. Even the Petronas Towers, the former tallest building in the world is set amid a beautifully designed park by Bruno Marx: a veritable frame for the sleek Islamic lines of the towering skyscraper.

Ironically, all these example of tropical greenery in both Kuala Lumpur and Singapore are best viewed and experienced from climate-controlled airport terminal and sky-bridges or from the confines of air conditioned cars. The intent of these landscapes is not to make the urban environment more habitable, but landscapes of marketing and of branding. As Koolhaas states in his essay, "Singapore Songlines: Potemkin Metropolis... or 30 years Tabula Rasa:"

*"The irony of Singapore's climate is that its tropical heat and humidity are at the same time the perfect alibi for a full-scale retreat into interior, generalized, non-specific, air-conditioned comfort – and the sole surviving element of authenticity, the only thing that makes Singapore tropical still. With indoors turned into a shopping Eden, outdoors becomes a Potemkin nature – a plantation of tropical emblems, palms, shrubs, which the very topicality of the weather makes ornamental."*

## Conclusion

Since the rise of the modern industrial cities, landscapes and the incorporation of landscapes have served the dual-purpose of alleviating the negative effects of rampant urbanization as well as serving as tangible emblems of progress and development. These landscapes are not solely beautification schemes, but are latent with ideological agendas. Worldwide, landscape has been used as a powerful ideological medium, more popular, more versatile, easier to implement than architecture or technical progress. These landscapes are capable of conveying the same signifiers as other more tangible emblems of modern progress. (Koolhaas, 1998)

Howard's garden city concepts were filled with utilitarianism ideas about the social equalizer of landscape. Le Corbusier's incorporation of greenery was filled with ideas of rational and scientific progress of greenery as well as methods to decontextualize the city from its surrounding environs.

In Singapore, landscape and the "garden city" has been employed on a multiple levels. On one level, the garden city concept has been used with the strategic intent to justify urban renewal and the cleansing and sanitizing of habits and lifestyle choices of urban inhabitants. On the other level, landscape has been a way to maximize tourism potential and rebrand a city based not on emblems of the past as a chaotic and dirty city but as a global city that can compete and function more efficiently with the likes of London, Tokyo, and New York.

Malaysia has used landscape to display and proclaim its national prominence in the form of a new capital city, Putrajaya, as well as juxtaposing it with architectural symbols of technological superiority such as the airport and the Petronas Tower.

Increasingly “sustainability” and green architecture”, are becoming the new ideological medium for which global cities, especially in the developing world, are showcasing their rise in national prominence. Masdir City in Abu Dhabi is a supposedly “sustainable city” of 50,000 with zero waste and zero energy. While the actual sustainability of such a city is questionable, there is no denying that Abu Dhabi is using this city to counteract its image as an energy-intensive oil-fueled wealthy enclave. As cities in the developing world continue to compete and outdo each other with green efforts, it is increasingly becoming apparent that the motivation for these initiatives is less about reducing tangible impacts on carbon footprints and global warming. Instead, new forms of green urbanism are more about projecting a manufactured image of sleek, modern, global and clean cities.

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