

Hugh Ferriss Drawing of the 1916 Ordinance of New York -

These large scale charcoal drawings capture the invisible city inscribed by the 1916 Ordinance of New York were intended to yield a 'visual proof' of the imaginary envelope of the building for a full city block in Manhattan. In a hypothetical site, measuring 200 x 600 feet, a building mass, reflecting all the requirements of zoning, evolves through a series of transfor-

mations to delineate a close representation of an architectural form that is aesthetically, legal and economically considered. According to the codes of the 1916 zoning ordinance, building mass was required to conform to a predetermined envelope, defined as the maximum volume within which a building was required to fit. The First stage drawing of the series represents the maximum permissible building mass under the zoning laws. As a simple expression of the

mass, the image describes a composition of the bulky, pyramidal forms arranged in an elegant manner. Stages 2-4 are further articulations of the first stage based on other zoning parameters. The final stage is no means the final building; it still requires the hand of the architect to articulate the form. These drawings, however, represent poetic renditions of the banal codes-taking textual information and turning them into works of art and urban form.

The Exposed City | inspiration for new urban form

Nadia Amoroso

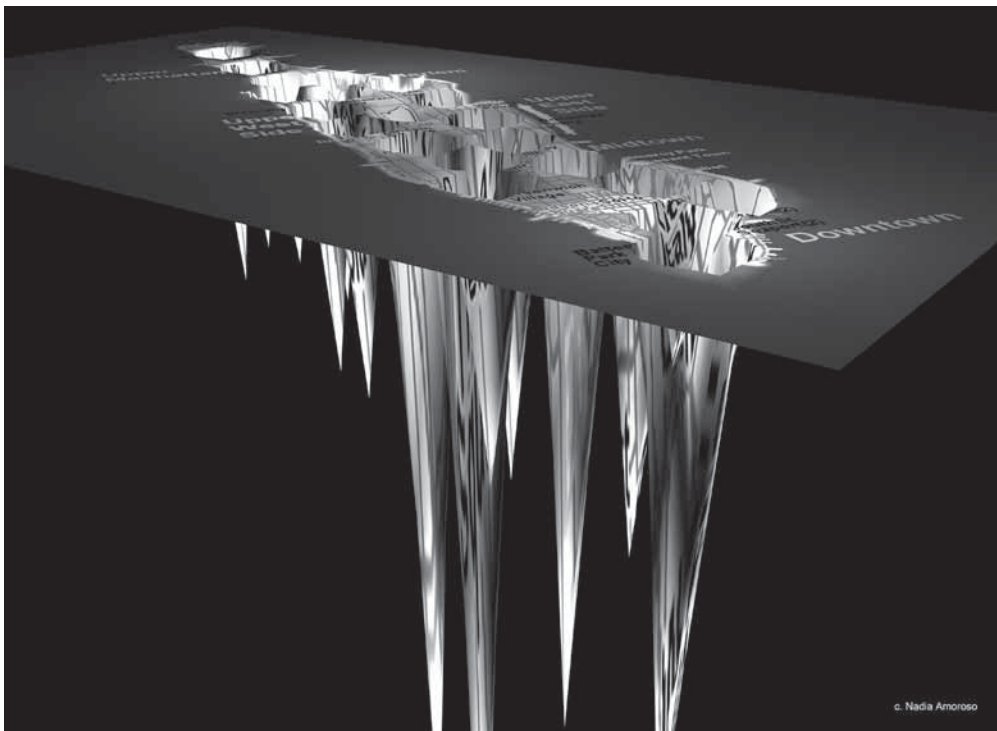
imagine a city invisible to the human eye and only manifested by its urban phenomena. What shape will it take? With the new urban forms represented as images, would they become new maps to the city? Could these images provide a means for more intelligent urban designs by revealing the city's hidden potentials? The invisible yet powerful forces that shape cities such as London, New York and Toronto are here drafted as portraits of the invisible city.

The images are also labeled as new maps for the 21st century metropolis—maps that guides us into the unknown through new form. Textual and pertinent quantifiable information is rendered in a poetic graphic of value to both the architect and urban dweller. These new maps are an alternative to mainstream spatial representations of the contemporary city: free from legends, text and hard line drafting convention, they provide an abstract building envelope of the city based on urban statistics and serve as a set of digital paintings/images to which the urban dweller can both relate and react.

This research tool is intended to inspire better urban design initiatives. It allows a cognitive connection between the potent unseen forces that shape the urban environment and representation. The images are composed within a field set (set of parameters), in which quantifiable data is examined and analyzed for visual abstraction. Throughout the experiments, the research explores the application—actual and pos-

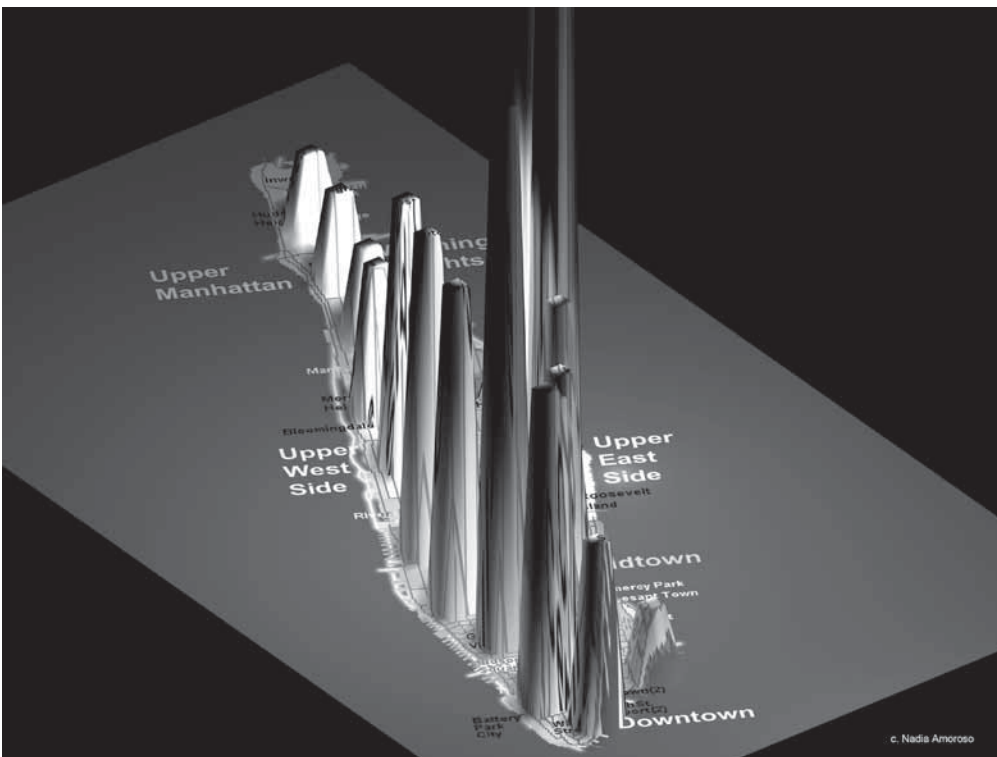
sible—of digital media in the creation of urban form. Information is obtained from census data, city planning offices, police departments and other published sources. Some of the forces visualized include socio-political aspects, such the dynamics of real estate development, crime rates and building envelopes. Others take shape through indicators such as air quality readings, density patterns, global patterns, and elements that affect the city structure. They begin to take shape through a digital process that takes a flat surface of embedded information, and tapers and bends this surface based on value systems¹. The plane is occupied by a tight grid of flexible bands, which can be manipulated into a new form depending on the inputted value. Slowly a new city envelope is created. An honest yet compelling interpretation of urban statistics is brought forth through these new figurations.

Inspired by the works of Hugh Ferriss and his graphic interpretations of the 1916 zoning ordinance of New York City, these images also express urban data in a tangible form. With artistic licence Ferriss put the uncertainties and confusions of the Ordinance into visual translations that could be understood by all. He used charcoal and chiaroscuro techniques to create a powerful a three-dimensional mapping of the zoning ordinance that communicates an architectural vision and a particularly strong link between the message of a drawing (the ordinance) and its technique of production (the art).



above: *CrimeScape New York*- The following urban form depicts the City of New York through the perception of crime.

below: *MarketValue New York*



To examine the ways in which maps function to reveal “hidden” aspects of the city, both historically (in Ferriss’s drawings) and in my own work, I have developed a set of criteria:

1 *Informative.* What types of urban information are being conveyed? Is the hidden data or urban phenomena expressed through the types of representations? The maps must provide some level of information.

Maps as guides provide a layer of geographical data that directs one through the city. They instruct the user in the space they represent and reveal specific parameters of the city. For example, the urban dweller can easily see where the highest crime is located in London or New

York. A cognitive connection is quickly made between the lowest submits and the pulled points as the areas of high crimes. As for surface density, the highest mound directly relates to the highest population per district in Toronto, New York, or London’s boroughs. These new maps provide a set of instructions that allow the architect, landscape architect, and urban dweller to “think” about their lived space.

2 *Revelatory.* How are the urban phenomena being revealed? Do the images reveal secrets of the city through their visual proofs? What is being revealed and what is being concealed? Do they provide new insights into the city?

Two further definitions are composed as both opposites and complementary in the discussion of these visualizations. Whereas the previous two criteria primarily deal with data-driven issues, the next two explain the creation of maps as artistic endeavours.

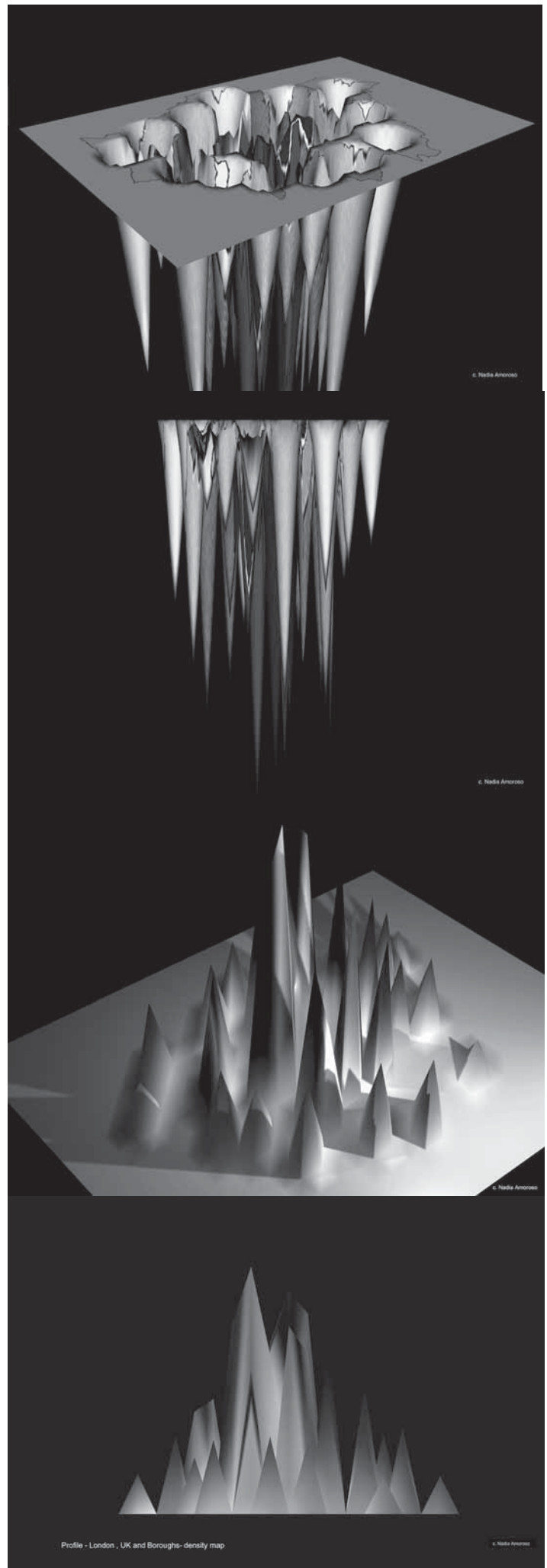
3 *Seductive*. The images must contain a level of attraction. The execution of a 'seductive' map is only possible through the hands of an artist and the manipulation of visual techniques. Colour, texture, form, lighting hues and style contribute to the creation of a visual presence that will attract an audience.

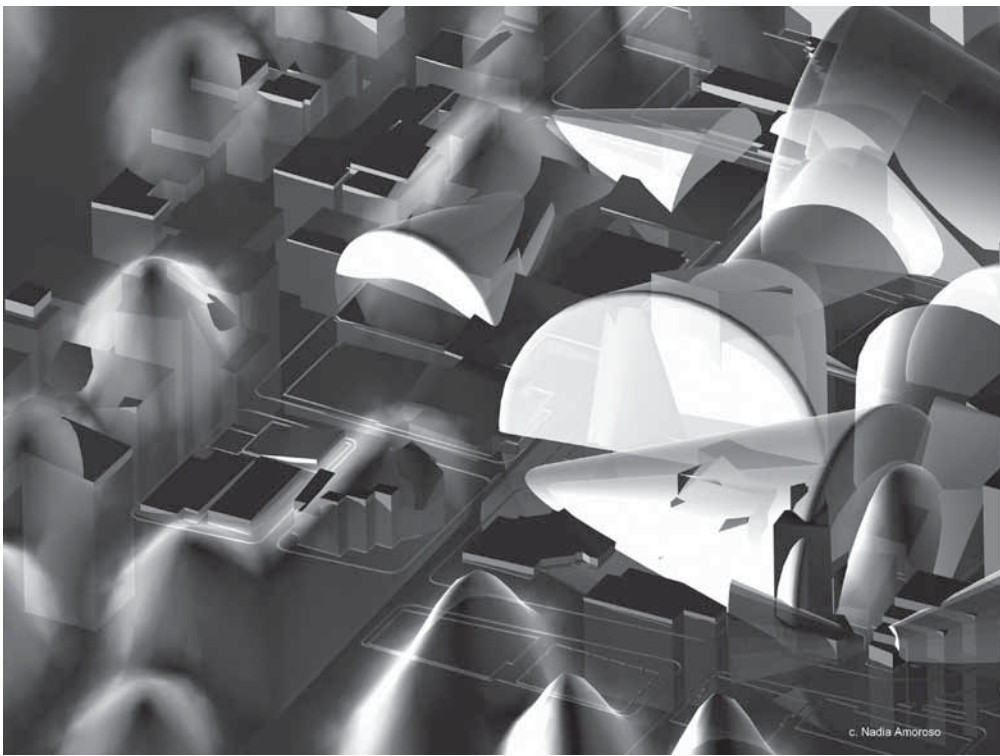
4 *Mysterious*. The works must exhibit a certain level of mystery, and although the notion of incompleteness is implied by this category, there is room for interpretation. The second criterion deals with revealing aspects of the hidden city.

Though in themselves not final urban designs, these maps prefigure suggestive form based on the city's unacknowledgeable potentials. The images become the new building envelope of the city for interpretation and intervention. Although the making of a map usually involves a lengthy process of gathering and synthesizing information, maps are highly controversial artifacts which register, in this case, the prevailing unknown of their cultural context and the personal input of the maker. When is something a work of art and when is it merely statistics? These new maps bridge the gap between the two realms, and suspend their tension—the tension between the expressed and the unexpressed, between fact and fiction, between idealisms of an ordered and perfect future and practicalities of design. In doing so, a third realm—urban design—is created. ■

¹ Value systems are a set of positive or negative integers that are equal to the empirical urban data (ie. for population density per district - 1000 people/hectare receives a value rating 100 where as 500/ hectare receives a value 50. The higher the number, the greater the peak of the surface becomes. The same applies for the negative values such as for the crime indicator (since this type of data is seen as a negative contributor). These values help create the physical form of each map. They are different from the four criteria which evaluate the map as a whole (artifact).

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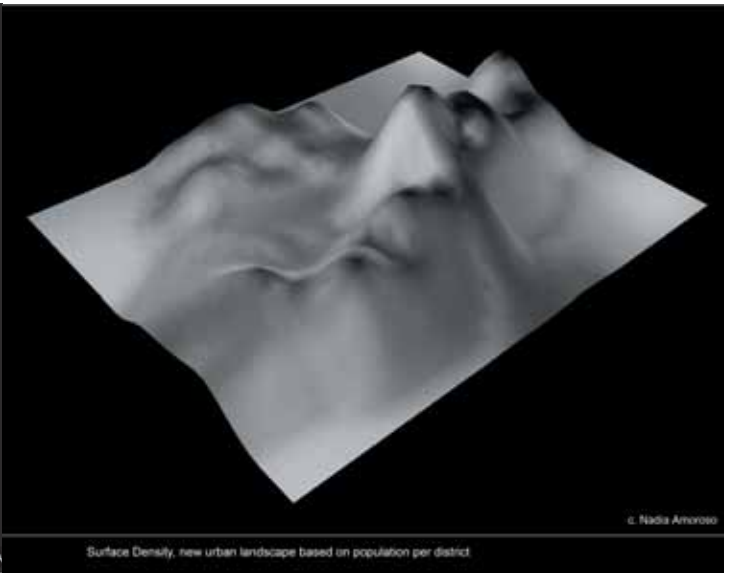
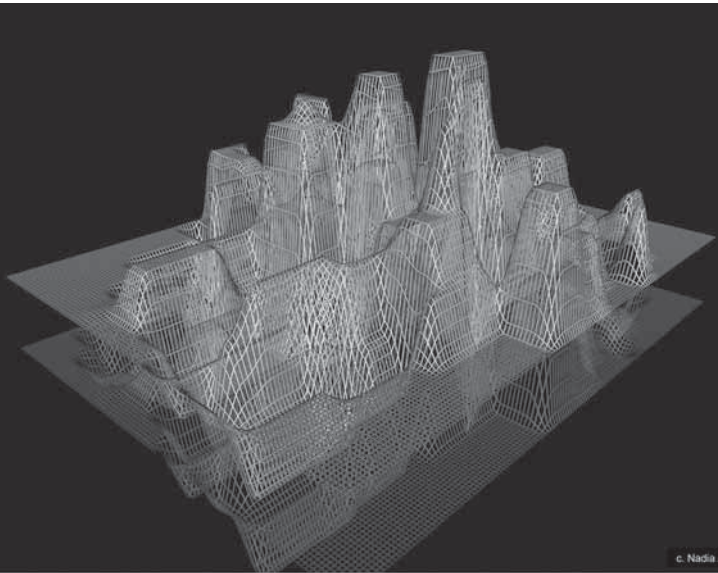




Surveillance City, Toronto. A city depicted through public surveillance camera downtown- the intensified areas of light represent intersecting cameras

Market Value Landscape. The City of Toronto is expressed as an digital urban artifact through the perception of commercial market value patterns.

Stage 3 — Built Form. Similar to Hugh Ferriss's interpretation of the zoning laws, this digital rendition captures the building envelope of a downtown block in Toronto based of height, sun angles and other code restrictions.



opposite page:

1 *Crimescape London. Pit-like points depict crime indexes of the city. Their light, shadow and sharp edges allude to a hell-like space — an eerie landscape. Points of depression are taken in the centre core of London's boroughs.*

2 *Crime Section London. A profile of London looking north through the perception of crime*

3 *DensityScape, London. Positive 'pullings' create a landscape city of peak and valleys.*

4 *Density Section, London. The following image profiles London's density (section looking north).*

