An evaluation of the works of Mario Gandelsonas, as a design process of interpreting the city through representation

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Mario Gandelsonas, LA [source: Gandelsonas, Mario,- X-Urbanism, 1999]
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Abstract

This research aims to critically analyse a series of Mario Gandelsonas’s analytical computer and ink drawings of the urban environment. The research will develop a critique of the works of Mario Gandelsonas, evaluating their significance as a design process for interpreting the city through representation. The research will also test the suitability of his works as a design process and its applicability to current discourse in the architectural practice and theory of urbanism. This research will be conducted through critical analysis of the design process behind two different sets of analytical drawings by Gandelsonas; the city of Boston and Chicago. This research will source academic peer reviewed papers using a historical-interpretive methodology and logical argumentation. This dissertation will shed light on Gandelsonas’s works providing a new theoretical framework in which architects can interpret the city.
Introduction

The city has always occupied a privileged place in the architectonic dream - it is a place where all orders are possible. It is the mythical place where a myriad of different orders are projected, an unlimited repository of new possible orders.

—Diana Agrest, *The City as the Place of Representation* (1980)

From the beginning, art has been used as a vehicle to convey and evoke emotion and ideas providing the viewer with radically subjective perspectives. Art and architecture have remained close-knit counterparts being utilized as conduits within which theoretical ideologies can flow. The design process within architecture is an integral component in the realisation of these theories. Whether or not the physical or simply the conceptual realisations of these ideologies are produced, the process defines and validates these subjective outcomes.

Within architectural theory the urban environment of the West remains a realm that attracts such ideologies to be forced upon it. This has been a breeding ground since the renaissance period in which utopian ideologies were envisioned by architects, searching for the new way forward in the design of the urban fabric.¹ These fantasies return in numerous architectural theories. One of which first appears in the fourth book of Alberti’s *The Ten Books of Architecture* in which Alberti proposes that "thorough consideration should be given to the city’s layout, site, and outline."² This provides a new way forward in the thinking of designing the urban environment.

Throughout history we find architectural theories such as modernist urbanism reacting against previous ideologies: the *tabula rasa* becoming the point of

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¹ Diana Agrest, "The City as the Place of Representation", *Design Quarterly* 113/114 (1980)
² Agrest, "The City as the Place of Representation"
departure, eliminating that which went before. A pioneer of this mode of thinking was Le Corbusier and his proposal of the Plan Voisin in 1925\(^4\)

The city of today is far from the fantasies of architectural theory. Instead there can be found mutations of cultural, economic, political and social forces corrupting the purity of architecture.\(^5\) There are also find these factors infecting the design process and the role that architecture plays in re-writing the urban environment. It is evident that there has been a disjunction between architectural theory and practice in the realm of the urban environment, where architecture has been reduced to both stereotype and style.

From this, it is revealed that there are two particular issues to be explored throughout this research proposal; firstly, the critical analysis of recent discourse in urbanism and, secondly, the exploration of the role of the design process in understanding urban form in order to move forward in the theoretical and practical discourse of urbanism. This research will be conducted through the critical analysis of the academic works of Mario Gandelsonas.

\(^5\) Mario Gandelsonas, “The City as the Object of Architecture”, *Assemblage* 37 (1988)
Literature Review

Mario Gandelsonas and his counterpart Diana Agrest are both practicing architects residing in New York City. At present, Gandelsonas is a Professor at the Princeton University School of Architecture. Gandelsonas is also the founding director of the Centre for Architecture Urbanism and Infrastructure (CAUI) a collaborative research group based within Princeton’s University’s School of architecture. Gandelsonas is currently a professor at the Princeton University School of Architecture and has taught at many prestigious educational institutions within the United States, including Yale, Harvard, the University of Illinois and the University of Southern California. He and Agrest have made a large contribution to the field of urbanism, being amongst the first architectural theorists to acknowledge the French model of intellectual post-structuralism and engage with the theory of semiotics and the American neo-avant-garde.

Gandelsonas presents a new way to envision the city, which he calls "the architectural reading mechanism." This amounts to the abstraction of the city through the medium of drawings and images, as a form of analysing the urban fabric. His aim is that of "displacing the object of architectural practice from the building to the city".

These ideas are presented in Gandelsonas's The Urban Text, 1991. In this volume, he and Agrest (who at the time was teaching at the Institute of Architectural and Urban Studies in New York) asked students to "draw sequences of buildings or fragments of urban fabric that had not been architecturally conceived as such." Gandelsonas bases this theoretical notion

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8 Gandelsonas, "The City as the Object of Architecture."
on “design as reading”¹¹, thus analysing the city plan rather than the buildings themselves and employing the notion of Freud's floating attention. This is a process of visual drifting which allows the plan to be approached in a subjective manner, finding what is not expected and not already there, in an attempt to grasp a sense of the city's morphology and ideology.¹²

The Urban Text specifically explores the city of Chicago. Gandelsonas uses the known, or conscious, realities of the city as a backdrop, through the use of ground-figure diagrams and lines referring to “the ready-made” plan upon which the architectural writings—inscribed as simple diagrammatic forms—are imposed.¹³ Gandelsonas states that “[t]he drawings are written as a dialogue between two discourses”¹⁴, in an attempt to reveal the unknown and submerged contents of the urban fabric. The image above (Fig. 1.1) expresses a selected area of the one-mile grid of Chicago and focuses on the effects, where overlapping diagonals fracture and deviate from the grid producing a mutation within the city. These diagonals are created by the railroad that dismembers the grid. Robin Evans states:

¹¹ Mario Gandelsonas, X-Urbanism: Architecture and the American City (Princeton Architectural Press, 1999)
¹² Gandelsonas, X-Urbanism
¹³ Gandelsonas, “The City as the Object of Architecture”
There have been, and there still are, architects with seemingly unlimited faith in the power of geometry. They search for shapes and measures which they hope will divulge the mystery of their calling and at the same time lock the mystery into place as a professional secret, or even a personal secret.\textsuperscript{15}

Gandelsonas employs the use of two dimensional geometric forms as a design tool of investigation and analysis of the urban environment, longing to disclose mysterious obscurities the city has to offer. Without being lured into the stylistic realm of architecture, which in most cases responds to the immediate visualisation of the city (as well as political and economic pressures), Gandelsonas's work provides a sense of architectural rigour and nostalgia in the analysis. However, on the other hand, a sense ambiguity is preserved due to the abstract nature of the works and their unconventional nature.\textsuperscript{16}

The question is: does the analysis of the urban environment through abstract imagery contribute to an architectural theory of urbanism or provide a new method of design process which could be applied to the practice of architecture? Or does Gandelsonas' method of "reading the city" simply remain an evocative means to critically analyse the city as a form of research? This is the hypothesis that will structure this research.

\begin{figure}[h]
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\caption{Mario Gandelsonas, Boston Plan 5 [source: Gandelsonas, Mario, \textit{X-Urbanism}, 1999]}
\end{figure}

\textsuperscript{15} Even Robin, \textit{Translations from Drawing to Building and Other Essays} (London: Architectural Association, 1997)
\textsuperscript{16} Gandelsonas, ”The Master Plan as a Political Site”
Gandelsonas sheds light on the limitations of the current conventional politics of architecture describing the use of the master plan as a design tool which is simply used to fill a void, to mask the absence of architecture, providing a mechanism in which architecture is disempowered in its context within the city but relegated to its immediate site.\textsuperscript{17} Gandelsonas proposes that through this "mechanism of reading"\textsuperscript{18}, a vision plan opens the master plan to the architecture of the city and empowers architecture in the process.\textsuperscript{19}

George Baird, in a commentary of the work of Gandelsonas\textsuperscript{20}, questions the role of reality in these theoretical analyses as a direction for future practice. Baird argues that

\begin{displayquote}
few are the built projects, to date, that reflect the ideas promulgated in recent years in the celebrated arguments on urban design. It is in my view that these discussions must now be seen to have succeeded primarily as a critique, rather than as an effective direction for future practice.\textsuperscript{21}
\end{displayquote}

However the distinction must be made of the role of the architect upon the urban fabric. The architect's role in the theory of urbanism is much broader than that of the limitation of a singular built work and, as Stan Allen states "[t]he architect’s medium is not buildings, but drawings."\textsuperscript{22} Gandelsonas finds that the duty of the architect in the context of the city is that of an investigative role. The challenge is the representation of finding and findings within that representation. Gandelsonas states

\begin{displayquote}
It is both about freedom (the possibility of inventing a new articulation between city and architecture) and about duty (the necessity of
\end{displayquote}

\textsuperscript{17} Gandelsonas, \textit{X-Urbanism}
\textsuperscript{18} Gandelsonas, "The City as the Object of Architecture"
\textsuperscript{19} Gandelsonas, "The Master Plan as a Political Site"
\textsuperscript{20} Baird, "Urban Americana"
\textsuperscript{21} Gandelsonas, "The City as the Object of Architecture."
\textsuperscript{22} Stan Allen, Diana Agrest, \textit{Practice : architecture, technique and representation} (Amsterdam : G+B Arts International, 2000)
traversing the city if we are to deal with its historical suppression through architectural fantasy), and not about the affectivity of desire.²³

Gandelsonas's works are a theoretical representation of what could be without the confines of the current political planning ideology.²⁴ Agrest argues that "architecture in short has been denied its own object and has been cut off from its own specific knowledge, its own power to intervene."²⁵ This has been limited by the political, economic and social forces that tend to guide the architectural design process instead of the city, producing an unordered approach to urbanism. Agrest concludes that, "according to this model, urban chaos is a new kind of order."²⁶

Agrest describes these unfound mysteries as non-design: the element of the urban environment which is unconscious and continuously changing, creating a type of disorder within the city. For Agrest, "in disorder language is ruined, the common aspect of place and name is lost."²⁷ The analysis of the unconscious city cannot be labelled or confined within written text, where an analogy needs to emerge representing these "non-designed"²⁸ aspects of the city. Gandelsonas uses these abstractions and mutations as analogies to convey meaning and purpose to the urban environment. Anthony Vidler explores this in his text Warped Space (2000)²⁹, where he is interested in "how the convergence and collision of architectural and artistic media have produced unique forms of special warping."³⁰

²³ Baird, "Urban Americana"
²⁴ Gandelsonas, “The Master Plan as a Political Site”
²⁵ Diana Agrest, “The City as the Place of Representation”, Design Quarterly 113/114 (1980)
²⁶ Agrest, “The City as the Place of Representation”
²⁷ Agrest, “The City as the Place of Representation”
²⁸ Hays, Architecture theory since 1968
²⁹ Anthony: Art, Architecture and Anxiety in Modern Culture (Cambridge, Mass, MIT Press, 2000)
³⁰ Vidler, Warped Space
Vidler expresses two themes that pose a similarity to the theory of Gandelsonas’ process of reading the city. Vidler expresses two forms of warped space. Firstly, he describes an unconscious spatial warping which is purely psychological and which is “not empty but rather full of disturbing forms”, and especially those including architecture and the city. The second instance of warped space is created when the artist breaks the boundaries of a genre to depict space in new ways. These two themes are explicitly evident throughout Gandelsonas process of reading the city, where his process includes depicting space in new ways in order to read the unconscious aspects of the urban fabric.

Gandelsonas aims to represent a new vision through the abstraction of the past and the future, in contrast to Le Corbusier who looked to the future (tablau rasa) and Piranesi who looked to the past. Gandelsonas’s works tend to embrace both the past and present, bridging the gap in analysing the city. During the process of bridging this gap Agrest, suggests that “two forms of representation appear, the representation of the existing real and the representation of fantasy.” Providing an articulation of architecture and the city. Gandelsonas finds that through this architectural reading mechanism rewriting and writing the city is possible and provides a form of closure to the opposition between the avant-garde and traditionalism.

Agrest explains that the production of architecture occurs at three different levels, through the use of three different texts, that being drawing, a symbolic gesture, writing, a narrative of architecture and building a physical representation of drawing. Agrest states:

31 Vidler, Warped Space
32 Vidler, Warped Space
33 Vidler, Warped Space
34 Gandelsonas, “The City as the Object of Architecture”
35 Mario Gandelsonas, “The Order of the American City; Analytic Drawings of Boston”, Assemblage 3 (1987)
36 Agrest, “The City as the Place of Representation”
37 Hays, Architecture theory since 1968
projections are the architect’s means to negotiate the gap between ideas and material: a series of evasions, subterfuges and ruses through which the architects manages to transform reality by necessarily indirect means.\textsuperscript{38}

It is through ideologies and the representation of these ideologies that a theory emerges which enables the architect to visualise future possibilities and potential.

However George Baird argues that the figure-ground plan, in relation to Gandelsonas's works, is inappropriate as a design tool in North America, due to the irregularity of height, which dramatically changes the urban text in contrast to European cities, which have comparatively regulated heights. Baird argues that "this condition has limited considerably the applicability of the figure ground technique for urban proposals [in North America]."\textsuperscript{39} However, in contrast to Baird's previous comments, he also agrees that Gandelsonas's works constitute an important contribution to architectural theory, diverting from the urban interests of Kevin Lynch, Robert Venturi and Denise Scott Brown.\textsuperscript{40} He argues that

the primary urban interests of these observers was not geometrical or graphic. Gandelsonas on the other hand, brings a characteristically European methodological orientation of a whole series of American urban configurations and generates a fascinating series of transatlantic theoretical hybrids.\textsuperscript{41}

Gandelsonas's works hang in the balance between theoretical abstractions and reality as an analytic tool used as a design process for a new urbanism. As Gandelsonas's works lean closer to ideological abstractions, it could possibly aid urbanism if such a circumstance should enable it to. Gandelsonas argues

\textsuperscript{38} Allen, Agrest, Practice : architecture, technique and representation
\textsuperscript{39} Baird, “Urban Americana”
\textsuperscript{40} Robert Venturi, Denis Scott Brown, Learning from Las Vegas: The forgotten Symbolism of Architectural Form (Cambridge, Mass.: The MIT Press, 1977
\textsuperscript{41} Baird, “Urban Americana”
“reading the city is not aimed at an accurate representation but at starting the process of forging a new city.”\textsuperscript{42} This comprises a new way forward in the architecture of urbanism and a realm in which new ideas are potentially found. Agrest states

\begin{quote}
representation can thus be thought of as the place of articulation between architectural practice and theory. It is precisely in such moments of change where critical thought and new theories are produced and practice is radically restructured.\textsuperscript{43}
\end{quote}

The research statement will be developed into a critique of Mario Gandelsonas’s works and the suitability of his works as a method of a design process. This will evaluate the applicability of this model to current discourse in the architectural theory of urbanism.

\textsuperscript{42} Gandelsonas, “The City as the Object of Architecture”

\textsuperscript{43} Allen, Agrest, \textit{Practice: architecture, technique and representation}
Research Method

A qualitative research approach will be adopted for this dissertation through the use of critical theory analysis, interpretivism and also logical argumentation.\textsuperscript{44} This dissertation will critically analyse Mario Gandelsonas’s theoretical texts and drawings of Boston\textsuperscript{45} and Chicago\textsuperscript{46}. This research will utilise peer-reviewed resources on the works of Gandelsonas, providing alternative perspectives on the texts and revealing new interpretive frameworks for architecture and urbanism. The critical analysis and interpretation of Gandelsonas’s design process will be necessary in providing new perspectives on his works as a new paradigm in the process of urban design theory and practice.

The evaluation and synthesis of scholarly secondary evidence—such as the Chicago and Boston works— as well as scholarly peer-reviewed works of architectural theorists will verify the design process used and its relation to architectural theory and urbanism. This is in order to draw conclusions on the applicability of this analytical process as tool for design and the production of urban environments more specifically. Architectural writers such as Manfredo Tafuri and Catherine Ingraham both adopt forms of this methodological approach, developing dialogic through critique and interpretivism, extracting new ideologies in architectural theory.

An analysis on Gandelsonas’s analytical ink drawings of Boston will provide an inclusive and diverse overview of the analytical processes Gandelsonas uses. The drawings of Boston are almost a collage or a condensed expression of Gandelsonas’s analytical processes in his other works such as New York (which embodies the linear nature of the grid) and New Haven (which invites the analysis of the ground figure plan). This study will enable the dissertation to grasp and interpret the broad spectrum of analytical process that Gandelsonas uses.

\textsuperscript{44} Linda Groat, David Wang, \textit{Architectural Research Methods} (New York: J. Wiley, 2002)
\textsuperscript{45} Gandelsonas, \textit{X-Urbanism}. P.112 (a study developed between 1984 and 1994)
\textsuperscript{46} Gandelsonas, \textit{The Urban Text} (a study developed mid 1970’s)
Gandelsonas’s analytical study of Chicago is represented in a series of ink drawings similar to those of Boston. However, Gandelsonas also produced a series of computer-aided drawings. These computer-aided images present a design process that differs from the one deployed in his ink drawings. The development of these images is intended to produce the same result. However, this research will analyse the design process of these images in relation to the two other works selected and derive possible limitations, contradictions and deviations between the two sources.

This research aims to analyse Gandelsonas’s design process and its applicability to architectural practice within the urban environment. The use of this source aims to analyse and the transformations, applications and redundancies of Gandelsonas’s theoretical work over the period of 1970s-2001.

These two series of works by Gandelsonas will be analysed dialogically providing observation and interpretations with current discourse in urban theory in order to produce a new understanding of design process in urbanism. Conclusions will be produced on the effectiveness, limitations and ongoing relevance of Gandelsonas’s works.

Throughout this research, there are expected limitations to be found in the works of Gandelsonas. These findings may inform new or improved approaches within Gandelsonas’s paradigm framework. These limitations may also be found in peer reviewed papers and scholarly critiques on Gandelsonas’s works. These limitations are not expected to disqualify the suitability of Gandelsonas’s works. They do, however, provide a basis on which to develop new frameworks in current discourse of urbanism. Other limitations within this scope of research includes the selective nature of the study on Gandelsonas’s drawings. This paper is limited to the choice of strategic select few of his works, however each embodying a style represented in his other drawings. There is also a lack of comparative analysis with other models and relative lack of scholarly studies of Gandelsonas’s works.
Boston

Gandelsonas’s exploration of the plans of the American city of Boston (Fig 1.3) occurred between 1984 and 1994, alongside his other explorations of New York, Los Angeles, New Haven, Chicago, Des Moines and Atlantic City. Gandelsonas articulates his approach of analysing Boston through the process of abstraction and de-layering of the city plan, in order to un-cover “symptoms, disruptions, and discontinuities.”\(^{47}\) Gandelsonas’s aim is to uncover the ‘non-designed’ evolutions of Boston’s morphology providing a platform from which he argues the architect’s role in urban design can take place. Through this medium of an abstract art form, Gandelsonas presents an articulation between architecture, theory and the city. His work provides a dialectical process crossing boundaries of language, time and the unconscious.

Gandelsonas's works on Boston are almost a collage or a condensed expression of Gandelsonas's analytical processes in his other works. An exploration into the historical morphology and differential typologies of the New English city, uncovering the unforseen architecture of the urban text.

\(^{47}\) Gandelsonas, *X-Urbanism*, p77
The above image (Fig.1.4) is Gandelsonas’s first analytical drawing of Boston out of a series of twelve. He utilises the medium of hand drawn ink images, represented only in black and white. This is typical to all of his analytical studies of various cities, except in his second analysis of Chicago, in which he employs the use of the computer (these images will be explored in part two of the dissertation). This first image is viewed as a collection of real planed portions of Boston’s urban environment with perceived hidden elements of the city overlayed. To the viewer this image is both real, as districts, main roads and even prominent buildings can still be identified, as a series of abstract semi ambiguous geometric forms are extruded in a three dimensional form from the plan.

This analysis of Boston begins with the plan of the contemporary city as a backdrop or a departure point for his exploration which, he argues, “eliminates the familiar images of the vertical dimension and their sequential perception in time.”

Gandelsonas utilises the plan as the primary analytic tool in his drawings in order to remove the perception of the city from the three-dimensional stylistic realm, emphasising spatial density and enabling the conscious entrance into the urban text. Gandelsonas’s drawings bear witness to the figure-ground plan, which is one of the primary graphic forms through which

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48 Gandelsonas, X-Urbanism. p68
urban space is historically represented.\textsuperscript{49} The figure-ground plan depicts solid built form as white and open space as black, creating what Rowe describes as “a type of solid-void dialectic which might allow for the joint existence of the overtly planned and the genuinely unplanned, of the set-piece and the accident.”\textsuperscript{50} This reveals a new mental space in which the urban environment can be read revealing the palimpsest of embedded ideas that the city holds.

However it is evident that Gandelsonas quickly departs from the traditional form of the figure-ground by generating a perversion of this traditional two-dimensional representation. Where the figure ground plan, typically showing solid and void as black and white, is distorted as Gandelsonas uses a seemingly more tactile approach, where solid is simply viewed as white three dimensional extruded blocks. In the case of Boston we find that Gandelsonas purposefully abstracts the realities of Boston’s built form by extruding the urban fabric, becoming reminiscent of a three-dimensional form and extruding the intrusive grid while ignoring the built object.

Through this method Gandelsonas presents a new plan of Boston; an abstract representation rather than an accurate representation where he intentionally removes the three dimensional perception of space and architectural stylisation “by displacing the gaze to the plan”\textsuperscript{51}. This is in order to sever the aesthetical and experiential realm of three-dimensional space from the actualities of Boston’s morphology. This allows the subject an unconscious investment into the plan, whilst consciously still perceiving the city of Boston.

This first level of Gandelsonas’s analysis (Fig.1.4) retains the backdrop of the reality of the city’s plan, as seen as a flat two dimensional drawing sitting behind the extruded forms, holding the responder in tension between reality and abstraction. This is an attempt to gradually immerse the subject into the new plan of limitless possibilities, just as someone pulls away from reality as they fall

\textsuperscript{49} E.G Wever (1927), \textit{Figure and Ground in the Visual Perception of Form}” The American Journal of Psychology 38(2)
\textsuperscript{51} Gandelsonas, \textit{X-Urbanism}. p 66.
asleep and enter a dream. Gandelsonas’s approach is to displace the way in which the city is perceived, from architecture to the city.

Gandelsonas’s works can be described as a tool or a methodology to inform design, not a systematic tool in order produce design. His analysis becomes an alternative lens through which to view the urban environment. This lens transcends the confines of current political structures such as the systematic rules of the master plan and various regulatory controls. These controls relegate the architect to specific site and time, informing design from a system devoid of any true urban realisations, a system flawed in the understanding of the city. This system ignores the narrative of the urban fabric produced of history and the inherent possibilities that can be derived from it. Gandelsonas’s drawings begin to produce a dialogue by traversing between the present, historic and future realms of the urban text. Agrest states. “The city is a presence in perpetual oscillation between past and present”52 Agrest describes that urban design ought to hold a temporal dimension between past and future. Gandelsonas’s drawings harness this alternation, allowing the designer to interpret from the city. The existing plan is set, immovable, portraying built forms set in time, however this future abstraction of the urban text is projected upon the existing. There must be a harmonizing of these two dimensions. If the past is disregarded the illusive dimension of future is all that remains leaving the ‘tablua-rasa’, a blank canvas, rejecting what preceded, leaving failed attempts of urban design theories such as Le Cobusier’s Radiant City. Gandelsonas begins to traverse these two dimensions through an adopted method of the figure-ground, the process of delayering and abstracting the original plan providing a narrative to the urban text in which ideas and hidden inspiration can form.

Gandelsonas states that “architecture is too slow or too fast, it rebuilds the past or projects an impossible future, but can never insert itself into the contingency of the urban present.”53 As a result typical architectural practice resists the temporal dimension of the urban landscape, between past and present, where

52 Agrest, “The City as the Place of Representation”p12
53 Gandelsonas, X-Urbanism. P.61
hidden process takes place. Gandelsonas’s works aim to embrace both the past and present, bridging the gap in analysing the urban text. During the process of bridging this gap Agrest suggests that “two forms of representation appear the representation of the existing real and the representation of fantasy.” These two forms provide an articulation between architecture and the city. Gandelsonas finds that through this architectural reading mechanism, rewriting and writing the city is possible and provides a form of closure to the opposition between the avant-garde and traditionalism. Dianna Agrest states that space is read in depth “locating the spectator in front of and in the present, from which the distance/past is entered and traversed. Perspective establishes a temporal field that supports narrative history.”  

In Gandelsonas’s second process of analytic drawings (Fig 1.5), he confiscates the “ready-made” backdrop of Boston’s two dimensional plan whilst introducing a new black background. As this process continues it becomes increasingly more difficult to identify with the known built environment. Without Gandelsonas’s process of de-layering the plan beginning with the previous image (Fig 1.4) the viewer would become disoriented in the reading of the urban text. Therefore this process of removal slowly enables the viewer to embark on the journey

52 Agrest, “The City as the Place of Representation”
55 Allen,Agrest, Practice : architecture, technique and representation
from the real to the abstract. As the known realities of Boston fade the abstractly represented historical contrast of Boston’s morphology begins to emerge. Here, Gandelsonas begins to read the historical narrative through the extrusion of the plan and Boston’s morphology can clearly be read as the head and the neck. It is evident that the city expresses a collection of alternating sectors of urban fabric. The dense figure-ground like New English settlement and the new American grid, representative of a collision between two eras. We read the now compromised head figure of the drawing that the urban fabric of Boston was born on the foundation of the renaissance urban theory portrayed in Alberti’s treatise *The Ten Books of Architecture* 1755, where Alberti proposes that “thorough consideration should be given to the city’s layout, site, and outline.”  

The distinction between the two periods in time can be clearly read, with the radio-centric European settlement expanding from the centre, where the town hall is located. The viewer can also clearly read the intrusion of the linear nature of the continental grid, deriving from the aspirations of a New English settler’s wanting to build a new society and the establishment of this new urban experiment.

As the Renaissance city began to develop in Europe it was quickly understood that this urban fantasy could not be fully realised upon the already-established urban fabric, but limited and incomplete at best. However, America was a “virgin” land with limitless possibilities and experimentation, where New England became the canvas to these ideologies, Boston’s “neck” colliding with the “head” clearly being testament to this. This second layer process of Gandelsonas’s drawings enable the designer to interpret and respond in a more simplistic form to the historical narrative of the urban environments morphology. Gandelsonas’s method produces clarity in terms of breaking the ties of reality, expressed by the plan, and producing a space of hidden realisations.

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Departing from the conscious realm of the plan and suspended in a realm which the unconscious begins to explore. Upon this canvas, Gandelsonas represents major structural elements of the city fabric and grids as uniform extrusions. This begins to suppress the realities of the urban fabric and introduces a surrogate representative form of the urban text, allowing the unconscious to be explored.

In this second drawing, as the process continues, the subject is completely pulled away from the realities of the plan as the abstracted metaphor of the city is suspended in a black background, now forcing the reader to depart from the known city and involve themselves only in the new plan of Boston. This plan creates a new mental space, an urban dreamscape. In this urban dreamscape the reader can reference partialities of the known urban environment, still recognising streets and possibly particular buildings but these have been abstracted and are now not viewed as permanencies which cannot be disrupted. This new layer which has departed from the first performs as a surrogate, behaving as a replacement of the existing plan. The creation and isolation of this surrogate produces an un-precious realm of the urban text in which the subject can then interpret the city and force ideas upon it.

The architect has a specific role in interpreting and intervening upon the city. Gandelsonas’s drawings act as a surrogate for the true city itself, in which can be manipulated and exaggerated in order to allow the architect to gain clarity of the city in which he can impress upon the city an urban fantasy, the re-writing of the urban environment from the city. Now this surrogate has departed from reality it becomes a catalyst to inform design or further analysis.

This delayering and abstraction of the plan creates a realm of narrative, a fictional Boston, in which the urban fabric is read and conceived, a dialogue between reality and ideology. A new space for the design of the urban environment.
Above is Gandelsonas’s third set of Boston’s analytical drawings suitably titled *Triangular Leftovers* (Fig 1.6) This set of drawings depart from the previous two. It can be said that plan one (Fig 1.4) and two (Fig 1.5) were an analysis of the known structural elements of the urban environment, a journey into the city uncovering its historical morphology. However these two drawings begin to express a new notion, a deviation of attention from the structured to the non-structured elements. These drawings present a new visual chapter in Boston’s analysis.

The two drawings present only a faint outline of Boston’s water edge, in contrast to the previous drawings, providing a type of visual datum to enable the viewer to orientate themselves. This visual datum acts as a support for the investigation taking place, where a total of seventeen triangles, sixteen small and one large, are represented within a heavily shaded precinct of Boston’s Downtown, West End and Beacon Hill. This shaded fragment represents a portion of the city’s historical foundation, in which it highlights these triangular
disturbances. Gandelsonas describes these spaces as “series of triangular residual spaces – as an urbanisation of non-structural, interstitial areas or punctuations.” These spaces are a reactionary result or urban change and cannot be read through the typical plan. This can be described as the unconscious result of the changing urban environment.

This analysis of the unconscious city cannot be labelled or confined within written text. Therefore an analogy needs to emerge representing these unconscious formations of the city. Gandelsonas uses these abstractions and mutations as analogies to convey meaning and purpose to the urban environment.

Gandelsonas’s process produces a reading of what Diana Agrest describes as ”non-design” Gandelsonas presents his analytical drawings as two levels of reading. First, the plan (Fig.1.4), which provides a backdrop providing a conscious investment into the plan, portraying the known literal realities of a city which the plan represents. The second level of reading guides the responder by what Gandelsonas calls “Floating attenuation” where the architect’s unperceiving gaze is lead to the unknowns of the city. Diana Agrest describes the notion of design and non-design when she writes:

*Design, is that mode by which architecture relates to cultural systems outside itself: it is a normative process and embraces not only architectural but also urban design. The second which is more properly called non-design, describes the way in which different cultural systems interrelate and give form to the built world; it is not a direct product of any institutionalized design practice but rather the result of a general process of culture.*

These layers of analytical drawings express analogies of design, through Gandelsonas’s various methods of representative forms such as lines,

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57 Gandelsonas, X-Urbanism. p 114
extrusions, removal of elements and abstractions which result in the evolution of analogies for non-design.

The second drawing begins to disclose the reasoning behind these non-designed spaces. There is shown a direct correlation between the subterranean John F Fitzgerald Expressway and these interstitial triangulated areas. Even though the expressway is underground it dissects Boston’s historic centre, removing much of the urban fabric leaving scars upon the city. Gandelsonas expresses the finding of warped spaces as a result of alternating grids radiating from the city centre dissecting each other as they converge to a point, forming these fragmented triangulations.

Gandelsonas’s representational approach begins to open a door for the convergence of architectural theory and practice, without being confined to the box of either. In a sense, hanging in the non-space of the systemization of architectural and academic function. Architectural practice and architectural theory is possibly limited to the confines of design’s own ideologies, relegating design to a realm of its own and limiting it to a style, theory or method. Agrest considers the process of architectural design a system as closed and insular limited to its own created ideologies. She states that “design, considered as both a practice and a product, is in effect a closed system – not only in relation to culture as a whole, but also in relation to other cultural systems....condensing and crystallizing general cultural notions within its own distinct parameters”59

Agrest’s notion of non-design embodies the idea that there is no prescribed process. Where prescribed process exists there is closure. For Agrest, non-design is the production of meaning, not structure.60

Gandelsonas’s works, in nature are not used or created as a mechanism for the production of non-design, but rather a way to read non-design. His use of abstract geometrical forms is used as a framework or a language in order to extract and source non-designed elements in the urban environment. Therefore

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59 Hays, Oppositions reader, p. 333
60 Hays, Oppositions reader, p. 337
Gandelsonas’s works produce meaning and not a definable outcome or solution. This does, however, provide the designer with a new canvas; a new eye in which to view the city.

Agrest describes the nature of the metaphor as a filter or a process between the discourse of architecture and others. A type of door which opens one realm of theory and is translated through metaphor to then inhabit architecture. The door closes and this translation becomes a new code in the discourse of architecture. Agrest uses the example of Le Corbusier’s Villa Savoye as he uses the nautical metaphor to address his design. Agrest argues that non-design, delirious in nature, is repressed in design by stating.

*Design is once again a sieve which allows the passage of certain meanings and not others, while the metaphor, which is used as a translating device from other codes to architecture, provides a mechanism by which ideology operates through design.*

Robin Evans in his essay on *Translations from Drawing to Building* expresses his interest in the difference between architectural practice and other forms of creative expression such as art. An artist’s intervention on paper (or other mediums) results in the finished work, as the artist uses process as a means to completion. However the architect’s drawing “is a device for translation towards the act of building” where the architect never actually intervenes in the finished product, or uses it as a process to completion. Gandelsonas’s works lie in the realm of art; an interpretive process which results to what he calls a “reading mechanism”. It is an artistic interpretation; a result of a process of analysing the urban environment.

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61 Hays, *Oppositions reader*, p. 337-341
62 Hays, *Oppositions reader*, p. 344
63 Hays, *Oppositions reader*, p. 341-343
64 Robin, *Translations from Drawing to Building and Other Essays*
65 Robin, *Translations from Drawing to Building and Other Essays*
Gandelsonas’s works produce an analogy of urban building rather than an architectural building. Architectural being that of the singular three-dimensional aesthetic of a building, or the building relegated to a specific site.

where architecture traverses the urban discourse, where the city traverses the architectural discourse.\textsuperscript{66}

\textsuperscript{66} Gandelsonas, X-Urbanism
Chicago was the beginning of Gandelsonas’s exploration of the American city through design as reading. The first series of analytical drawings were a result of a design studio held at University of Illinois School of Architecture during 1984 when Gandelsonas and his partner Diana Agrest were teaching. Gandelsonas based a studio design exercise on Diana Agrest’s lessons which she had taught at the Institutes of Architectural and Urban studies in New York during the mid-1970’s on the concept of “Design as Reading”. These ink drawings were a result of students that had been asked by Gandelsonas to “redraw” the plan of Chicago as an architectural proposition. Students were asked to draw fragments and anomalies of the urban fabric that are not perceivable by the reality of the architectural plan. There were fifteen analytical ink drawings produced by the students which followed a process of layering and delayering, with each plan being a representation of specific unknowns of the city. These fifteen drawings were divided into two groups of investigations, one being the investigation into disruptions and intersection which deviate from the one mile grid of the American city, and the second being the investigation into

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67 Gandelsonas, The Urban Text, p. 22
topographical changes. During 1988 Gandelsonas held a second studio at the University of Illinois, where he began to explore the same notion of “design as reading” through the medium of computer-aided drawings, rather than the previous ink studies. Gandelsonas employed this method of investigation to shift the search for strong anomalies in the plan to a search for more specific weaker disruptions which affect the grid.68

Boston embodies the distinct collision of two periods in time, here Gandelsonas’s drawings discover urban fragments producing a narrative uncovering the history of the city; the European Urban Fabric of the 1650’s and the Modernist American grid. Gandelsonas’s drawings clearly represent this narrative and articulate this junction of history through the reading of the urban fabric, uncovering the un-designed realities the city has to present. This exploration of Boston aims to discover the historical morphology of Boston providing insights into the realm of the city in which current political methods of designing are unable to offer the designer. Whereas the plan of Chicago articulates a less chaotic structure – The city of Chicago doesn’t offer such a rich topographic history as Boston as it is a newer city born in the mid 1800’s, with the great fire of Chicago decimating the city in 1871, resulting in a complete rebuild and planning of the city upon the modernist American grid.69 Gandelsonas’s exploration of Chicago focuses on the Urban theory of the grid and aims to uncover the fragmentations and failures that the urban environment forces upon this theory. This shifts the focus off the fragmentations and collisions of two urban theories giving focus to the disruptions of the one theory, the grid.

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68 Gandelsonas, The Urban Text, p. 24
Ink Drawings of Chicago

Gandelsonas’s ink drawings of Chicago were the very beginnings of his quest to explore the city through drawing. A series of the drawings were published in both The Urban Text\textsuperscript{70} & X-Urbanism: Architecture and the American City (1999)\textsuperscript{71}. Gandelsonas and his students produced a total of fifteen drawings which were divided into two categories, eight of which explore the effect of a series of multiple diagonals which intersect and disrupt the grid plan, and seven drawings which discover the effect of topographic changes on the plan. This evaluation will focus on the former eight. A four-by-eight sector of the one mile grid which was selected (Fig.1.9) by Gandelsonas and the students due to major disruptions which intersect and dislocate the grid structure. This selection provides greater scope for exploration due to the enhanced activity within the grid.\textsuperscript{72}

This exploration of the American grid does not necessarily aim to uncover the historical morphology or narrative of the plan. However Gandelsonas aims to uncover the hidden forces that have deviated and deformed the grid, resulting in the pattern we currently see. Gandelsonas in his text X-Urbanism describes the act of architecture inhabiting the city, such as the one-mile grid being the formal architectural order in which the city is to abide by. However, the city inevitably inhabits the architecture resulting in an architecture produced by the

\begin{figure}
\centering
\includegraphics[width=\textwidth]{map.png}
\caption{Map of Chicago, Illinois, United States. The selected 4x8 segment by Gandelsonas and his students. [source: www.maps.google.com]}
\end{figure}

\textsuperscript{70} Gandelsonas, The Urban Text
\textsuperscript{71} Gandelsonas, X-Urbanism
\textsuperscript{72} Gandelsonas, The Urban Text, p. 23
city. This architecture produced of the city is consequential of social, political and economic external forces.

Gandelsonas’s drawings uncover or aim to represent this new architecture of the city. These forces are somewhat hidden beneath layers of the urban text. Through Gandelsonas’s process of abstracting the urban text the plan and its complexity become redundant in the process of discovering these deviations. Gandelsonas’s drawings become a form of layering the city, removing the irrelevant to uncover the significant. This removal of the redundant is similar to the figure-ground vernacular adopted by Gandelsonas in his investigation of Boston, where only solid and void is read leaving the permanencies of the built fabric and removing the temporal dimension of stylistic form.

In the delayering of Chicago the urban fabric and built form is completely disregarded where the grid and obvious diagonal fractions are all that remains. Gandelsonas uses simplistic white lines as a representation of the streets which do and do not conform to the grid; clearly articulating the uniformity and regularity of the grid against the stark contrast of any deviations that arise.
Essentially this simplistic method of line work which he uses becomes the backdrop to this portion of Chicago in which he begins his analysis. This bears similarities to his study of Boston where the actualities of Boston, such as the ‘realistic’ city plan or map, is used as a backdrop which is then departed from and de-layered for the production of discoveries. However in Gandelsonas’s study of Chicago he has seemed to reverse this method with having already de-layered the plan and decided to begin with the primary grids and streets. It is clear that he has decided to make particular findings informing the nature of the grid by limiting his pallet on which he will then layer upon, rather than de-layering. This removes a sense of distraction by unrelated information. Anthony Vidler refers to Walter Benjamin and his remarks about distraction in Warped Space, where Benjamin discusses his concept of the “loss of aura”, in which he refers to the distracted frame of mind usually held by the urban dweller. The urban dweller disconnected from the city distracted by the flood of visual and social stimuli becoming mentally absent, where the city becomes nothing more than a background through which is passed. It seems to Gandelsonas that the realities of the plan becomes this distraction, a realm in which the subject is overly distracted, thence missing the hidden morphologies.\textsuperscript{73} Vidler states.

\textit{In this sense cities are ‘invisible’ to us, felt rather than seen, moved through rather than visually taken in. A city might be hidden by landscape, distance, darkness, or atmosphere, or then again there may be some hidden influence at work in the observing subject to render it unseen or unseeable.}\textsuperscript{74}

Gandelsonas employs the use of these basic geometrical forms in order to displace the viewer’s attention to specifically the grid and its insertions, producing a language from which to interpret the city. Essentially as Gandelsonas limits his pallet he is limiting his vocabulary, removing all unnecessary interpretations of the urban text. This visual language as representation becomes a bridge for the articulation between architecture and

\textsuperscript{73} Vidler, \textit{Warped Space} . P.82.
\textsuperscript{74} Vidler, \textit{Warped Space} p. 81
a theory of the urban environment; between the architecture of the grid and of the city. Through Gandelsonas's images, the city becomes what Agrest describes as ‘the city as a place of representation”; a representative form of the architecture embedded in the urban environment in the order of design, empowering the Architect to view and design from the city. Agrest explains “Images are placed in charge of representing pleasures that words forbid.”

Gandelsonas’s process provides a language of the city through representation. Where a language of spoken word provides definition the language of the drawing becomes a new world of representation. This language traverses the boundaries of written text or spoken word, creating an ambiguous but limitless realm in which the architect reads the city. Anthony Vidler states

> this mixed status allows for the interpretation of the architectural element as something between a “letter” and a “hieroglyph”, and thence “de-ciphered”, as if it were a form of visual figure of speech.

These drawings become a form of representation which don’t become an end in and of itself such as a detailed map, which provides only the constructed realities and is representational only of what exists in the three dimensional realm. It therefore becomes a question of perception. Gandelsonas provides a new vehicle in which the viewer’s perception is unlocked.

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75 Agrest, “The City as the Place of Representation”
76 Agrest and Gandelsonas, Agrest and Gandelsonas.
77 Allen, Agrest, Practice : architecture, technique and representation
The above drawings (Fig 2.2) present a new layer, a thickening of the plot. They begin to present an articulation of minor streets formed within the grid. In the first image it is shown that the major diagonal dissections represented are the result of a heavy rail line. This train line completely fractures the neutrality of the one-mile grid, generating a mutation where the urban environment begins to form a new order, departing from the former. In order to uncover the finer disruptions that this line has on the grid and minor streets Gandelsonas removes the strong dissections allowing a concentration in revealing the reactions to these dissections. This layering process becomes an organic method in unveiling the urban architectural language. Architecture deals with the physical realities that it creates and creates for, however Gandelsonas is not interested in the production of architecture, but rather the processes through which the language of architecture can be extracted.
In order to disclose of the minor disruption of the plan, further focus is given to streets, alleys and service corridors, which form along the axis of the major dissections (Fig. 2.3) The first image the investigates the directionality of streets. Gandelsonas confiscates the primary grid in order to highlight the strong influences of the bold extruded diagonals. This image possibly suggests that this portion of the city can be read as an evolution of the deviation from the regiment grid, an urban reaction as opposed to an urban order. The second drawing reintroduces the grid to exaggerate the spur-like growths that have formed from the dissections. These investigative drawings propose a method of visual data discovery, a representational form without structure and system. It becomes a process of shifting perspective as the mode of encounter, a path which enables the stumbling of accidentals. Representing in order to describe the hidden elements of the urban text.

This visual form of representation creates a field where descriptive language finds itself out of bounds. Agrest argues that “Throughout architectures long
history, representation is one of the first areas in which ideological changes manifest themselves.”\textsuperscript{78} Through this almost filmic series of investigative ink drawings there have been shown these ideological shifts within the plan. These changes which have occurred by the dislocation of the grid order, creating a clear fracture through 4x9 portion of Chicago. These intrusive diagonals are the introduction of a new order (opposed to the grid), where then it can be seen the replication of this order. This new order almost becoming the more dominant over the grid. Gandelsonas’s drawings clearly uncover these non-designed orders through process. Once the process is over the city is viewed from a new perspective. Where the grid was once thought superior, these drawings provide perspective on what might actually be the case.

\textit{The drawings actually produce a different city since we re-enter the city with different eyes. One could think of two cities: one before and one after the drawings.}\textsuperscript{79}

\textsuperscript{78} Allen, Agrest, Practice : architecture, technique and representation
\textsuperscript{79} Gandelsonas, The Urban Text p.26
Gandelsonas and his students produced a secondary study of Chicago. Rather than using a process through ink drawings, computer generated processes were explored. There are fifty computer drawings which are divided into ten sets, each exploring different fascist of architecture produced by the city. This analysis begins by framing a 2x2 mile area of the Chicago city district (Fig 2.4), rather than the previous 4x8 mile segment, producing square a border which inhabits four equally dimensioned quadrants. This particular location of the 2x2 mile grid portion was chosen due to is geographical position; where the centre of the four quadrants coincide with the Chicago River intersection, and a historical notion; where one of the four quadrants is the original site of Chicago’s founding. These four quadrants produce the basis for Gandelsonas’s computer analysis.
Gandelsonas’s computer drawings begin in the first set (Fig.4.1) of four drawings portraying the basic elements of Chicago city, the street layout, the Chicago river, the one mile and grid and a drawing which is the combined result of all three.\textsuperscript{80} These drawings differ from previous ink drawings as the layering and de-layering process becomes temporary, rather than a permanent drawn line which cannot be removed without creating a whole new drawing. The computer generated drawings gave Gandelsonas and the student a new field of play, where layers can be added and removed at will. This process allows “an electronic equivalent to tracing paper”\textsuperscript{81} Where numerous discoveries can be made within the boundaries of one analytic frame.

![Fig. 2.5 Mario Gandelsonas, Chicago, Series 2 [source: Gandelsonas, Mario.: The Urban Text, 1991]](image)

The above four drawings (Fig.2.5) represent the first attempts at reading Chicago’s plan. The presence of colour is also enabled with this analysis in contrast to the hand drawn. In these drawings colour operates as a codifier

\textsuperscript{80} Gandelsonas, The Urban Text p27
\textsuperscript{81} Gandelsonas, The Urban Text p26
representing each of the four segments, this opens the view to a new scope of information within the one drawing. Colour being a new representational form, a new dimension altering the perception of the viewer. In Gandelsonas’s previous drawings of Boston, three dimensional extrusions were used as a representational tool in order to portray segments of discovered information, a tool of information categorization. Colour within the computer aided drawing become a type surrogate to these extrusions as it allows this same diversity and isolation of representing these forms of architecture in the city.

These drawings act as a progression of analysis, as Gandelsonas and his students write the story of these discoveries as they add and remove layers of information. They become in a sense a story board to their findings, which are easily read with little explanation. These images can be seen as a filmic notion of representation in what Vidler calls “a vision of the fusion of space and time”82 Where the designer and the viewer is immersed in a plot of the story, where the roles of the designer being the director and responder are in conjunction.

The first image (Fig.2.4) introduces three primary characters (codifiers) which take place in this story (analysis) Red in quadrant 4 and Green, quadrant 2, represents the directions streets in contradiction to the neutrality of Blue’s, quadrant 3, gridded structure. As the process continues there is the introduction of a new character, yellow, in quadrant 1. Yellow being a codifier of the antagonist, shown as disrupting the regularities of the other characters. Vidler argues that film in architecture begins to extend the sixth sense of an individual’s feeling for space in way which begins to transform reality itself.

82 Vidler, Warped Space P. 102.
The above images (Fig.2.6, 2.6) are a portion of series five of the computer drawings, named *invisible walls*. Gandelsonas seems to depart from his seemingly typical method of reading from the plan, where lines and geometric abstractions are extracted from the ‘real’. This series of drawings represent an element of the urban plan which cannot be perceived through a plan, especially if the designer is relegated to the confines of design to a site. Gandelsonas implements colours green and red, to represent the directional barricades within the city, impeding traffic flow and segregating communities and cultural groups. Through these images Gandelsonas uncovers the non-designed warped special realities of the urban environment, grasping a perspective through design analysis which typical political design strategies fail to view. Gandelsonas use of the computer is as an artistic design apparatus, just as the pen is in his previous drawings. However this apparatus removes the fluidity of the ink analysis’, such as in Boston. By removing the pen quite possibly removes accidental discoveries the computer relegates the analysis to a less organic nature. However is no system or structure about these drawings, vectors and colours are layered and removed in order to discover. Where accidental discoveries are found by the push of a button instead of the fluid pen. The outcomes or resolutions of these stories (analysis) are not pre-conceived. The storyline is discovered as it is written and re-written. Gandelsonas intention is
not to produce a system or structure in which to design; these analytical
drawings are not to become a destination in analysing the city, nor is it a
conclusion to an ideological stance on the theory or urbanism. However, Vidler
states

rather, that we should see the works themselves as standing in for, or
taking the place of, discursive theory: that the designs do not illustrate
theory but enact it.\textsuperscript{83}

Vidler argues that the analytical drawings are not a finished discussion on
urbanism, but rather they are to begin the discussion, based upon the context in
which this abstract representation has derived from. There is not one system, or
one method fits all approach to this type of analysis, it cannot be confined to a
stylistic box. It becomes a catalyst for new paradigms in the discourse of urban
theory. Gandelsonas states

The present urban conjuncture also presents opportunities for an
articulation, that is, for the development of a politically resistant form of
urban architecture that transforms itself while it questions – and
transforms - the status quo of a system committed solely to profit.\textsuperscript{84}

Gandelsonas argues that current practice in architecture become a stagnant
field of orders in which the Architect abides by and the liberation of the
Architect brings the release of design and theory in discovering unperceived
realism of the urban environment.

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\textsuperscript{83} Agrest and Gandelsonas, \textit{Agrest and Gandelsonas}.p9
\textsuperscript{84} Gandelsonas, \textit{X-Urbanism}
Conclusion

The urban environment has always been a fertile breeding ground for the illusive realm of architectural theory and urbanism. The city has a seductive nature which encourages ideologies to be forced upon it. Such ideologies have existed throughout time since the renaissance, in which utopian ideologies were envisioned by architects searching for a new way forward in the design of the urban fabric. The urban environment of present has failed to conceive the true realities of these architectonic fantasies as external forces such as cultural, economic, political and social forces inhabit the city forming mutations of these theories. There has been a disjunction between architectural theory and practice in the realm of the urban environment, where architecture has been reduced to both stereotype and style. Here Gandelsonas presents an un-systemised articulation between practices and theory through the process of abstract imagery as an urban analysing tool. Gandelsonas calls this “the reading mechanism”. Throughout history, the realm of art has been the mode in which to convey such ideologies. Where the limitations of language were unable to represent these fantasies the ambiguous and psychological dimension of the art space stepped in.

Gandelsonas presents a new direction in reading and representing the urban environment. Gandelsonas’s works break free of the traditional architectural form of articulating and understanding the built environment. He does this through the process of delayering the urban text by the use of abstract imagery, distortions and exaggerations of the real plan. This abstraction places the viewer and the designer to view and represent the city form through new perspectives. The drawings of Boston uncover its historical morphology resulting in found visual data explaining non-design shifts and violations in the city plan over time. These series of drawings become a dialogue between two periods in time. Gandelsonas works on Boston also engage the practice of the architect in understanding the city by articulating these temporal dimensions between time and space; a place in which architectural practice and the theory of urbanism
can co-exist for the production of understanding within the urban environment. Gandelsonas’s images present a narrative to the past and present dimensions of the city, forging a path to create the future without neglecting the former.

Gandelsonas’s use of simplistic black and white lines and geometrical forms allow the viewer and designer to break free from the preciousness of set urban structural elements. This allows a liberation for the discovery of non-designed elements the urban landscape has to offer. These formations of abstract shapes and coloured lines (as in the computer drawings) become codifiers where language is inadequate. His arrangement and filmic process allows for the representation of analogies for non-design. These analogies are not just a finished work but a discussion on the way to finding more complexities hidden beneath layers of the un-designed urban narrative.

Gandelsonas’s analytical drawings do not have regimented systematic process by which they are formed. They are not a merely a stylistic approach in representing the urban environment but rather a process interested in finding the warped spaces or hidden realms of architecture inhabited and created by the city. It is a process held in tension between the balance of theory, design and practice forming a conduit for the culmination of all three as a new form of representational visual language. In essence Gandelsonas’s explorative process is not a means to an end, but a means to a beginning.
Bibliography


Wever, E.G. “*Figure and Ground in the Visual Perception of Form.*” The American Journal of Psychology 38,2 (1927)
