

THE VERTICAL CITY: APPROACHES TO THE SKYSCRAPER CITY AS PHENOMENOLOGICAL SPACE AND SEMANTIC FIELD

Anders Troelsen

ABSTRACT

The article is a kind of “project essay” or “brain storm” concerning skyscraper cities. It proposes different approaches for the study of this subject. Starting with the observation that in Danish traditional houses are lying (*ligger*), whereas skyscrapers are “standing” (*står*), different phenomenological and discursive perspectives for the study are sketched. The article also suggests that the analysis of contemporary skyscraper cities can shed new light on more traditional cities in the same way as new media illuminate the characteristics of old media.

KEYWORDS

Skyscraper Cities, Skyscrapers, City Analysis, Urban Phenomenology, Urban Discourse

1. INTRODUCTION

The following article is about a work in progress and can be regarded as a kind of “project-essay” sketching some analytical approaches to the skyscraper city. The aim of my project is to produce new knowledge about the vertical city primarily in a phenomenological as well as a discursive perspective.¹ To this end, a conceptual effort is needed in order to qualify the international and Danish debate on skyscrapers and high-rises by developing more precise and sensitive analytic tools that can enhance the capability of observation. Taking into account that Denmark has no noticeable tradition for very high buildings, the city analyses will mostly deal with selected skyscraper cities or high-rise concentrations in other parts of the world. Surprisingly, the vertical city has only to a limited extent been subject for appropriate analysis—it is amazing considering the fact that in many ways, it is the epitome of late modernity. This is the reason for the rather broad formulation of the project. But I would also claim that a general survey of the skyscraper city can contribute to the understanding of previous city formations in the same

way as new media have proven capable of shedding new light on previous media forms.

In the existing literature, skyscrapers are predominantly discussed historically and as individual architectural works. Even though you can argue that the isolated skyscraper aspires to an almost urban scale, it is not single skyscrapers that are the focus for my survey, but the city they are part of and to the creation of which they contribute. It is part of the project's objective to examine the way in which skyscrapers are located in existing cities of substantially different provenance and diverse visual and functional design. The selected skyscraper concentrations, therefore, comprise various geographic areas and represent starting points in different types of street networks, unequal terrain conditions etc.

The project deals with aesthetic form, perception, and semantics, and its main approach is phenomenological and discursive. A simple linguistic observation (in Danish) has been my starting point: traditional buildings are *lying* ("ligger") on a specific place while skyscrapers (and towers) are *standing* ("står"). They are vigilant, alert, tense, in mutual competition.

The project includes a number of prior assumptions and preliminary theses about the ways we experience the vertical city and its semantic potential. In this context, I can only present some of them in a rather generalised form and without going into a more detailed discussion with the literature.

2. BACKGROUND AND RESEARCH FIELD

The skyscraper is a product of the late nineteenth century, made possible by newly developed iron and later steel constructions that released the walls from supporting functions and by the invention of the lift that shifted the building's vertical hierarchy and pushed the "piano nobile" or "bel étage" upwards towards the sky. In the twentieth century skyscrapers sprouted up proclaiming technical enthusiasm and drive for progress. The building type was the significant contribution of the USA to architectural history, and the skyline of skyscraper cities worldwide visualised the aspirations of financially powerful centres to emulate and even challenge American hegemony. Before the new millennium, the supremacy of the United States was broken as the baton was passed to the East in a general "translatio imperii." Supported by new construction principles that make more sculptural forms feasible, the skyscrapers of emerging market economies have entered a global dialogue as they negotiate international standards and

local identity markings. In this process, however, the world cities have taken over much supremacy from the nation-states.²

The financial crisis of the Western world has only temporarily weakened what sometimes has been described in disease metaphors as a veritable skyscraper fever that has spread to large parts of the world and sooner or later will reach Denmark—and perhaps already has done so.

In 1929 the Danish author Johannes V. Jensen was proposing high-rises for Copenhagen and for reasons that are still used in defence of skyscrapers: the dense and high city would dramatically reduce the need for transportation. Instead of invading the countryside with low row houses, these should be stacked and kept within the traditional limits of the city; by doubling the height of the houses, he claimed, it was possible to keep city and countryside separate and avoid city sprawl beyond its former walls. Noise from the streets would be reduced to almost nothing when you move upwards, and heavy traffic should be relegated to the underground.³

In Denmark the first high-rises (of modest height) were not office buildings owned by banks, insurance companies, or newspapers as in the US, but were in fact expressions of social community-oriented aspirations: Bellahøj, a Le Corbusier-inspired residential area, was a counterpoint to other buildings erected on hills in Copenhagen and associated with traditional powers: Frederiksberg Bakke (with a royal castle) and Bispebjerg (with the Church of Grundtvig).⁴ It is significant that later the high-rise almost became a typology for hospitals (run by the welfare state), the highest building in Denmark in fact still being Herlev Hospital (1976, 120 m).

Aesthetically it can be claimed that until the last developments in structural engineering, skyscrapers have hardly been catalysts for innovative (inner) spatial configurations. This also applies to the frequently gaudy lobbies that basically appeared as end stations for the space-consuming inner transportation system. Sociologically it has been argued that skyscrapers are raising themselves out of the city without contributing to its vitality.⁵ Regardless of what is the case, I would personally be reluctant to attribute inherent characteristics to a specific building type—a typology that probably should not be regarded as a single category, but ought to be subdivided into several types.⁶ To my surprise, I have found that a typology based on historical varieties of towers can be useful to some extent in relation to skyscrapers (but it is something that I cannot go into in this connection).

It is within the aesthetic field that the project intends to provide new knowledge and competence, and it is based on the experience dimension, the “psycho-geographic” aspect: How is the high and dense city perceived? Despite the main purpose of the project it cannot avoid to include certain sociological (or “anthropological”) elements. The chosen perspective entails that only secondarily and in a sporadic way functional and historical issues will be taken in consideration, and what structural engineering concerns, it will only be addressed as far as it supports the main track of the project. The use of steel skeleton or (reinforced) concrete, for example, became at a time (especially the twenties) almost a dividing line between American and European endeavours within the field.⁷ The skin of the skyscraper—for instance multiple layers of climate screens or glass coating—is, of course, a special field for innovation that has aesthetic implications.⁸

Most literature on the subject is historically oriented, but my starting point in the academic and public debate on high-rises does not cause the history of skyscrapers and skyscraper cities to be an integral part of the research field. This does not, however, exclude certain questions concerning historiography, since they can elucidate discursive issues: What narrative patterns are summoned to articulate the history of the skyscraper, and what place and role is the building form assigned in the more overarching architectural and cultural development? Since history itself has a history and each period chooses its own prehistory, it can be immensely informative to observe how the “origin” of the skyscraper can be established in different ways, how national (or regional) features are emphasised, or which lines of continuity and discontinuity are conferred to the topic and attributed to a contemporary or projected situation. Some sort of distinctiveness is a prerequisite for telling the history of a given subject, but what is the identity of the skyscraper? Are Mexican or Egyptian pyramids or medieval towers part of the story?⁹

In the existing literature, skyscrapers are predominantly discussed as individual architectural works. Even though you can argue that the individual skyscraper aspires to an almost urban scale, it is not single skyscrapers that are the focus for my survey—even though they will occur—but the city they are part of and to the creation of which they contribute. The selected skyscraper concentrations must, therefore, comprise various geographic areas and represent starting points in different types of street networks, unequal terrain conditions etc.

It is part of the project's objective to examine the way in which skyscrapers are placed in cities of substantially different provenance and diverse visual and functional design. How the varied parts of the research field are to be balanced against each other are subject of an assessment that cannot be determined in advance—the level of descriptive and analytical detail will necessarily vary. But it is obvious that the whole field somehow must be represented in order to meet the comparative aspect.

3. APPROACH AND METHOD

The constituents that are addressed can be summarized in the following three sets of questions to the subject, each with its heading:

- A. *The experience dimension.* How and to what extent do skyscraper cities relate to their physical-geographic foundation? Which special conditions are applicable to the skyscraper's integration in the urban fabric? How do skyscrapers relate to different types of cities? How is the joining together ("suture") implemented between high-rises, skyscraper concentrations, and more traditional urban fabrics? How do ostentatious high-rises interact with less spectacular ones? In what manner are scale issues involved in architectural perception? In this context the questions arise: What kind of space is created between the high-rises? Is there space for places? American cities, for instance, do not have a strong tradition for squares (but rather "street corners") and skyscraper piazzas tend to be either sunken or elevated.
- B. *The discursive verbalisation.* Which conceptual notions (of different observances) surround the skyscraper and the vertical city? What kind of discursive patterns is operative in different areas, and what are their relationships to overarching discourses? Which notion of the city and which urban concepts are at stake? How is a given city relating to other cities?
- C. *The generalised cognition impact.* What kind of lesson can be learned from skyscraper cities as a typology in relation to other urban formations? It is my thesis that research concerning the perceptual, phenomenological, and discursive dimensions of the skyscraper city is capable of shedding new light on city formations in general.

In short: How is the skyscraper city experienced? How is it talked about? What can we learn from it?

Methodologically I shamelessly apply a pluralistic strategy using concepts of different provenance—without feeling an obligation to engage in exegesis of particular theory formations. Here, as anywhere, it is of special importance to avoid label-like concepts that disrupt understanding at just the point where it should begin—instead of making use of them as a motor for further understanding. None the less the adopted perspectives are basically two: a phenomenological and a discursive approach.

The *phenomenological*—and perception psychological—viewpoint is an important prerequisite for the analysis. Even though many skyscrapers' bases at street level seek to connect them with edifices of a more customary scale, it is a significant feature of the skyscraper that the beholder find it more than difficult to relate his or her body to the colossal building—despite the fact that it is extensively subject to anthropomorphic projections (e.g. the tripartite division of the body and the column).

Traditional cities are exploiting dominant horizontal axes. What happens when a part of the urban axes is tilted upwards? Forward movement is as a rule connected with ascent. If space in front of us is experienced as a modality of will and therefore designates our future—a space we want to cross as a projection of our efforts to reach a goal—then there is certainly something peculiar about the perspective of the skyscraper: It is a space that we cannot enter.

Tools from perception theory are, of course, useful when analysing skyscraper cities. The striking height and position of two skyscrapers on each side of Victoria Harbour in Hong Kong are turning them into a gate or entry to the city. Towers like the Empire State Building and World Trade Center are bringing Financial District and Midtown together, Sears Tower (Willis Tower) and Hancock Tower—both black buildings with antennae—are virtually indicating the extension of the Chicago skyscraper district. It is clear that general terms such as Kevin Lynch's (paths, edges, districts, nodes, landmarks)¹⁰ are influenced by gestalt theory (such as continuity, sameness, nearness, closure). Still, for example, the character of the borders' vertical termination need to be specified: the southern and western limits of New York's Central Park are (or have become) defined with respectively very high and slender skyscrapers (in fact located a little to the south of 59th Street) and solid twin towers (on 8th Avenue). Skyscraper cities normally abound in landmarks that however often are

obfuscating each other, but “Stalin’s Seven Sisters” in Moscow are almost drawing a circle around the inner city, standing out as a outposts and specimens of the turrets in the Kremlin wall. One of the sisters (The Foreign Ministry) is at a distance facing the new international business centre and is provided with a sight line creating a visual path to the skyscraper cluster at the banks of the Moskva River.

A *discursive* and semiotic approach is the other anchoring for the project—and the starting point of the project is the Danish and international debate about the justification of the building type. But discourse analysis will also be carried out in other contexts, e.g. the notions of specific cities. Such more or less mythical conceptions are not just something secondary; they are more than mere appendages to the city.

Generally, the discourse analysis aims at exposing the tracks that our statements are inclined to follow when we are talking within a particular area. The objective of the study in this framework is to map the patterns that currently and historically have been unfolded in verbalisations concerning the skyscraper and the vertical city. Such conceptual structures delineate patterns for our attention.

Consequently, it is an assignment for the project to identify—also rival—key terms that provide the discursive field with vectors, organise the other concepts, and in this way make an analytic proposal concerning semantic connections and couplings. Discourses are not, however, monolithic blocks, but regardless of their character a number of (frequently opposed) key concepts will normally act as magnets for other terms bundling them together in associative patterns. On a plain level, it is evident that the designation “towers” rather than “skyscrapers” in the Danish debate has served to integrate the skyscraper in a tradition and make potentially controversial projects seem more innocent.

Metaphorically, space and time are systematically interacting when we are plotting territories of reality on each other in order to be able to think the world and orientate ourselves in it. In this context, I will draw on inspiration from recent metaphor theory, which has received important impulses from a phenomenological emphasis on the body as a moving base for interacting with the surroundings.¹¹ This is an important perspective if you want to avoid maintaining the skyscraper and the city as static objects on a pictorial level. Cities can generally be submitted to a description (a is beside or in front of b) or narrative (a is after or before b); to say that a is “next to” b is already a translation from space to time.

But the skyscraper city is, in my view almost intrinsically adapted for a kind of narrative.

Both perspectives can be elucidated by photographic, cinematic, and literary representations of skyscraper cities. In all three contexts, they oscillate between the two urban archetypes of the West, having opposed semantic attribution: Babel and Jerusalem. At any rate, you may ask how the cities are branding themselves? How is their (touristic) self-representation on postcards or websites? It is almost always possible to find a photographic viewpoint where a skyscraper city assumes a neat pyramid outline, and Dubai seems adapted or even conceived for internet representation. And as to cinematic representations: Why do skyscraper cities in a particular degree seem to elicit omnipotent flight fantasies? You get the impression that the towering void between the skyscrapers is a permanent challenge that invites the superheroes to perform an air ballet of pursuit and escape; they are literally at par with the city that offers hiding places and cover for ambush attacks.¹²

4. PHENOMENOLOGICAL PERSPECTIVES

The phenomenological approach is suitable for examining how the appearance of the skyscraper city is changing depending on different viewer positions. As a background for lower buildings, the skyscrapers' jump in scale will make them project themselves towards the spectator. That is the case with Frankfurt am Main seen from Museumsufer: the nostalgically restored Römerberg is crushed under the semicircle of skyscrapers that are mostly situated in the former ramparts or along the main roads leading to the city. Instinctively the spectator will be inclined to misjudge the distance to them. In the same manner, it can be difficult in a distant perspective to figure out that American cities, as a rule, have pinpointed its skyscrapers in a rectangular grid.

The skyline is in a way the horizontal extent of the skyscraper city's verticality, the city's horizon, its contour against the sky, where the lower parts of the buildings flow together. Only as a skyline can the skyscraper city appear as a static image; otherwise it is set in motion, typically experienced as a continuously dynamic shifting of perspectives. As hyperbolic exclamation marks, they are obstructing each other; they are all intent on standing out and by virtue of iconic appearance obtain a publicity value. Normally, they have a high degree of prominence as they are still discernible when you have left behind the street of their location, but this visibility is unstable. Dependent on viewpoint, they are able to

participate in new constellations loudly commenting on each other. The skyscraper is not perceived as the same building seen at a distance as part of the city's skyline, seen from a position at its entrance or observed at different heights from a neighbouring skyscraper. In addition, skyscrapers are constructed both to be buildings to look *at* and to look *from*. It is an odd fact that in a certain sense, you are erecting a viewpoint to look at other viewpoints. The skyscraper city can perhaps be seen as a scene where everybody wants to be both an actor—or even protagonist—and spectator. The frequent difficulty of getting an impression of a skyscraper at a close distance has resulted in protruding lobbies with skylights framing the building from below or pictorial self-representations.

The experience of skyscraper cities is variable and changes at night. Light is rarely limited to the street level leaving the upper part of buildings in darkness. Especially the pinnacles of the more iconic skyscrapers are often bathed in light or emit floodlight on the sky. And the city's walls of glass surfaces, transparent or opaque or mirroring at daytime depending on light conditions, are typically transformed at night into a substance-less flicker of light that draws, without depth, phantasmagorical patterns in the nocturnal sky. A special field of study is thus the skyscraper city's illumination and light scenography.

Street axes and street networks are contributing decisively to the experience of cities. Where Haussmann's Paris emphasises the depth dimension of the horizontal axes by obliging houses to observe street lines and often articulates street walls by aligning windows and cast-iron balconies, the skyscraper city acts as a vertical counterpoint to the street layout. Tilted up and in competition, axes are laid out as vertical lines of motion, defying gravity and indicating a line of sight that suspends the horizon. Our equilibrium sense is attacked, and we tend to lose the sense of scale when experiencing our body engulfed by excessive dimensions of buildings that potentially transcend themselves: you always have the feeling that they could be higher.

In my opinion, the skyscraper generally attests to *an aesthetic of distance and projecting*. What is near and bounded to the earth tends to being experienced as heavy, material, limited—perhaps also warm, dark and mixed. What is distant and soaring, on the contrary, is perceived as light (in a double sense), immaterial, unlimited, clear and clean.¹³ Associating upwards and forwards I think that the skyscraper to a large extent is perceived as a project in a literal sense: a plan—in Danish “et ud-kast”—something

that we throw ahead of ourselves, projecting it further forward in space and in the line of our onward motion. Thus it can be conceived as a statement or expression of will directed away from traditional restrictions and towards the future.

In a way, skyscrapers are organised around channels of (upward) motion—eventually with a hierarchy of the pace made possible—but recent skyscrapers are often detached from roads on one hand but on the other hand linked to their speed in a more direct way which we find in older cities where speed levels were graduated and mediated in relation to the buildings. Different skyscraper cities' rhythm is worth examining in detail, but I believe that a sort of acceleration is inherent in the typology and that it has a social impact.

On an urban scale, the function of a regular street network such as the grid may be seen as preventing the skyscraper city from visually clogging because straight intersecting streets direct the gaze toward their vanishing points. In contrast, strong claustrophobia is sensed when skyscrapers are located in urban structures with irregular streetscapes (e.g. New York's financial district): As soon as a more cohesive street wall turns, it becomes intrusive as a mass. Not least because of a heavily sloping terrain, the same is true in Hong Kong where traffic density in the Central District and Wanchai—but not only there—has been counteracted by a system of walkways between the skyscrapers. As independent traffic arteries, they are only partially aligned with the road network and are constantly sucked into the buildings that they connect. Consequently, the skyscraper's more representative reception systems are typically displayed along these superimposed connection routes. Often, the base or "starting point" of the buildings is in a way shifted upwards, leaving the level below to traffic entrances, garages and service functions. The result is an uncertainty as to determine the ground level—a feature that you find in many skyscraper cities. The necessity of huge excavations can be supposed to invite the establishment of underground shopping malls and sunken piazzas. The city's verticality is striving upwards but also directed downwards.

Whereas American central business districts (CBDs) are usually coinciding with the city centre, skyscraper clusters in European cities are typically located outside the historical core. An example is La Défense west of the La Périphérique, the ring road of Paris. The CBD is organized along a prolongation of the royal axis starting from the Louvre and punctuated by three (triumphal) arches doubling their height and mutual distance and

culminating in the open cube of La Grand Arche de l'Humanité as a non-military “window to the West”. Tall buildings and linearity are combined in Wilshire Boulevard in a kind of linear city within the city of Los Angeles (running east-west for 25 km). The boulevard is lined up with a rim of high-rises behind which the building heights decrease dramatically. Dubai, however, is more obviously reminiscent of former urban utopias of the linear city with the traffic lines determining the shape of the city. The city turns its back to the desert areas and orientates itself parallel to the coastline (that is at some distance to the west). The same path is followed by the elevated metro line along the freeway Sheik Zayed Road offering a moving theatre loge for a veritable parade of skyscrapers passing by with the stations as densification points. In Dubai, the viewer is drawn through a dynamic, cinematic process that stages the city as a ceaseless movement in an ever-present game between a horizontal expansion and vertical catapulting of the gaze.

5. DISCURSIVE PATTERNS

Situated somewhere between phenomenology and discourse analysis—and linking the two approaches—is “the image of the city” in the sense that we are applying metaphors to the city—metaphors through which we perceive and conceptualize the city. As with living creatures, we attribute birthdays, identity and human features to the city. In a traditional vein, the allegories of Paris and New York are affirming a continuity between The Old World and The New World in the gate relief at the Rockefeller Center’s French Building. The city as an image—or even visual art work—is framed by the St Louis Gateway Arch seen from the Mississippi River. The text of Hugh Ferriss’ “The Metropolis of Tomorrow”¹⁴ is imbued with explicit theatrical metaphors; it presupposes a static spectator as shown in his charcoal drawings that in some respects are somewhat similar to C.D. Friedrich’s romantic landscape paintings. Landscapes with mountain peaks and valleys or rather gorges are also recurrent similes for the skyscraper city. In line with this, it can also be conceived as an urban forest or an impenetrable and dangerous jungle. The forest analogy, however, is impaired by the crucial difference that not the oldest but the most recent skyscraper tends to be the highest. If you generally regard the city as a chessboard or a playfield, you see it as the outcome of strategic moves brought about by competitive interests. No metaphor is neutral: if you compare the city with a book or a kind of text, it should not be impenetrable

but readable—the story has to be significant, imbuing time with meaning. Discourses are determining not only what and how you understand, but also what you see and how you act.

The American skyscraper discourse seems to be the natural point of departure for the conceptual patterns that also subsequently have emerged in the field. No doubt it can be broadly linked to what David Nye has called “The American Sublime,”¹⁵ which also includes the skyscraper. In the absence of common tradition and creed, it is especially the American landscape that at an early stage served as a national focal point for a sense of community. Also characteristic for the country is that technological innovations have not, in the same way as in Europe, constituted negative counterparts to nature. Here, I think there is an interesting interconnection of skyscraper projects, the construction of railways, and the implementation of large bridge projects. Steel in the US seems to have been invested with a specific significance that has delayed the use of concrete in skyscrapers—whereas a European high-rise as Torre Velasca not only consciously deviates from its American predecessors by its cantilevered Lombardian design but also by its choice of concrete as material.¹⁶

A key element of American identity formation is the frontier, the boundary between rural land, that was continually pushed forward, and the wilderness. After the expansion to the West was completed (c. 1890), the skyscrapers could create a new frontier in the sky. Perhaps it is a parallel impulse to movement and urge for dynamism that can be mobilised from the country’s endless, open roads and streets that defy topographical obstacles, and seem created for the “homo viator,” the travelling human being with all its cravings and unrelenting strivings.

The American rejection of European tradition has nevertheless always been rather ambivalent. From the beginning and up through Art Deco and even modernism to our day, the skyscraper has from time to time been characterised by “elective affinities” with the Gothic style in its upward strivings. It is my assumption that John Ruskin’s romantic conception of Gothic as an expression of organic growth principles (cf. also L. Sullivan’s Kindergarten inspiration) and Eugène Viollet-le-Duc’s more functionalist interpretation of the same style go together and unite in the American context. This ambivalence corresponds to Siegfried Giedion’s inspiration from Oswald Spengler’s notion of the “Faustian Space” of the West, whose infinite upward and outward pursuit is exemplified precisely by the Gothic, or

Bauhaus's unstable shift from crystal mysticism that has an affinity to Gothic light metaphysics on the one hand¹⁷ and glass as a hygienic and morally pure exposition on the other. Walls are symbolically abolished after the First World War, and the interior is opened and made transparent for the clear light of reason.

Generally, I believe that American skyscrapers have been keen to include European culture shaping a kind of positive Babel uniting the populations of the world. Europe—and the world at large—is present in the foundation of Chicago Tribune Tower (1924) where stones from historic buildings worldwide are assembled in the base, and the design of the tower is rebuilding or restoring in America gothic monuments damaged in Belgium and Northern France during the Great War.¹⁸ The gothic Cathedral of Learning in Pittsburgh includes seminar rooms adopting design traditions from the whole world, and the symbolic program of The Rockefeller Center has a similar (but not quite completed) international program with New York taking over from Paris. The tendency to intricate programs does not seem to have diminished lately: The East Asian iconic skyscrapers excel in a symbolism of geometric shapes and number of floors; 88 floors or 8 setbacks (8 being associated with luck), transitions from a square floor plan to a circle indicating a junction between earth and heaven etc.

Almost without exception, American cities form lattice patterns, and the grid, in many contexts, functions as a sign for rationality that is carried on vertically in the “curtain walls”; in its sublime infinity it can turn into a kind of empty transcendence. As a regulating pattern for cities, the grid allows for rapid and continuous expansion and in the American context it is traditionally perceived as an expression of a democratic principle, although it—unlike the Roman castrum—is without clear centre and external limitation (fortification): it can always expand and allow for more buildings. The streets are often soberly numbered instead of being named after rulers. Attributing the grid as such to particular democratic characteristics is, however, in my opinion, not just a simplification, it is also an example of a widespread short-cut between form and content.

Conceptions of democracy and openness are also discursively included in the European development of high-rise blocks as opposed to the American towers. Not least in post-war Germany, separate high-rise buildings were considered leverage to break down the corridor street's compact house walls; now a well-ventilated city could be created with a dynamic and fluid aesthetic that allowed the high solitary building objects to be visible from

multiple angles as three-dimensional volumes in space—an urban opening that facilitated traffic flow. The walls of the street had fallen, and it was all associated with the liberating forces of democracy. However, Le Corbusier’s view of the skyscraper city also offered more authoritarian notions of crystalline abstraction such as male mastery and spiritual overcoming of matter (as with Mondrian associated with the female and horizontal).¹⁹ Similar notions have been growing on the other side of the Atlantic, but as expected, it is predominantly the various American discourses that have set the agenda, and it must be assumed that they will be challenged by the Eastern development, just as one can also hypothesise that it generally promotes a mediation between the global and the national (or local) in a kind of “glocalisation.”

You can often read the power constellations of the traditional European city from the height of the buildings. In the skyscraper city, the buildings most often exhibit a competition that, in a sense, compromise collective values; they struggle to define the city centre and can be seen as a seismograph for power struggles—almost like family towers in northern and central Italian cities (but of course to another degree associated with economic strategies to upgrade and develop building sites).

6. PREMISES, ASSUMPTIONS AND THESES

It is a premise for the project that the skyscraper city must be seen as an integrated formation and that the phenomenon can only be illuminated to a limited extent by isolated analyses of single monuments.

I would argue that literary science’s notion of *intertextuality* in appropriately applied form is apt to address (historical generated) interferences between forms and conceptual patterns and thus connect discursive and visual aspects of the skyscraper city (without these being inextricably linked). The mutual visibility of the buildings enables constellations and interferences, where echoes and contrasts invite to an on-going dialogue. But such exchanges of meaning also inform entire cities. While Constantinople of the past has defined itself in relation to Rome, Chicago and New York have largely emphasised their differences: the true American city that processes and markets agricultural products in contrast to the refined and almost European cultural and financial metropol. The same goes for areas within cities: In Singapore, the white classicism of the former British administration is theatrically juxtaposed with the financial district’s skyscrapers on the other side of the river. Shanghai’s British The Bond promenade looks

across the Huangpu River to the new skyscrapers shooting up on the Pudong Peninsula, while the city as a whole traditionally was set against Beijing. The proposed concept may also capture aspects of the global race, both formally and semantically, when a similar semantic traffic is conducted across continents: Petronas Towers in Kuala Lumpur is an Islamic paraphrase of the still existing WTC, although designed by an American architect. Later it has been glossed by the Nouvel Tower that is facing it, also a twin tower but with a square plan in contrast to the rounded and more organic shape of Petronas. In return, the latter building's cold and metallic surface has been substituted by green vegetation almost covering the Nouvel Tower and transforming the skyscraper to a vertical garden.

As suggested, the skyscraper can seem distant, even when seen from a close viewpoint. It shoots up and out of the city, isolating itself so far. Yet, I believe it otherwise possesses a peculiar extroversion that somehow corresponds to the potentially unfinished upward pursuit of the skyscraper. The fact that the core of newer skyscrapers, with its elevators and service installations, sometimes is fortified with overpressure to support fire security, almost emphasises that the skyscraper traditionally throws all attention to the surroundings instead of concentrating on the interior space. I would argue that the same goes for the skyscraper city as a whole: The tower character provides it with something extrovert: it seems in many ways to look for its counterparts—also across continents.

In my opinion, a number of traditional concepts transferred from previous architecture may stand in the way of an adequate understanding of the skyscraper phenomenon. These terms include the concept of façade, which was already called into question by modernism. Many modern skyscrapers articulate lines and gradients by applying vertical axes that draw the gaze upwards. Provided with a kind of built-in kinetic catapult—similar to the internal transport system of lifts—the buildings prepare a slippery slope to pull the sight upwards towards the sky, not infrequently guided without retarding moments. Almost always, the “beginning” seems emphasised, often also the end that eventually can repeat elements from the base, but the pinnacle can also dissolve and mix with the air, while the middle of the course rarely seems accentuated. And instead of settling around a vertical centre where a lateral symmetry in itself denies the time dimension, such buildings are more likely to stage a bottom-up progression than form a façade in the traditional sense. It is my

assumption that the façade typically becomes a narrative that can formally instrument and dramatise the ascent in various ways.

Typically, a visual track is created that is accentuated by a possible counteraction from lateral horizontals. Thus, as a kind of dramatisation of the skeleton's vertical steel rails are often laid out for the flight of a soaring glance, for example in the form of unbroken pilasters, which are awarded figure quality by lying on top of (broken) horizontal spandrel panels. The middle of the building, which in a narrative analogy would correspond to a transformation, has become a place where nothing happens. Floors for technical equipment can divide the route, but otherwise the middle is typically an area where repetition and lack of difference cause the gaze to slide off and skate from one element to another, a kind of minimalist infinity principle—we are not able to retain the floors in order to count them—and sometimes the movement's utmost goal is not contained in the building but seems to transcend it. In the same way, a continuous glass skin can constitute a catapult for the glance making it difficult to judge the heights of the floors and by the same reason the scale of the building. Setbacks can produce accelerated perspectives; the same effect can be obtained by increasing glass surfaces in relation to a solid wall or decreasing the size of wall elements as the building goes up, exploit colour perspective (with increasing light and cold colour shades upwards) or perforate the top of the tower so that it blends with the air.

Most skyscrapers seem intended to be viewed “über Eck,” obliquely. When uniform, accentuated elements are repeated in shifting heights along the sides, it can produce a revolving architectural movement as it is often the case in Frankfurt am Main skyscrapers. Another kind of dynamics is literally linked to the lifts: Where their claustrophobic space usually do not carry out their potential role as the icon of the ascent, the increasing insertion of high-speed glass elevators on the exterior of buildings or at the inside in transparent wells can incarnate and make movement and dynamics visible as a concrete “drive” in the building mass.

Television programs about individual skyscrapers seem almost invariably to shape a narrative focused upon how the building teams are overcoming severe challenges and how they against all odds succeed in meeting tight deadlines and in the end beat some records or invent a cutting-end technique. Similarly, on a level that is more inherent to the building typology, it is one of my central theses that most iconic skyscrapers—and skyscraper

clusters—are exploiting some kind of *architectural narrative*. The base, middle and terminations of towers can be dramatised and staged in myriad ways that has to be described and systematised. And skyscraper clusters relate to each other or the rest of the city in different ways.

The variation in skyscraper design has only increased with new East Asian skyscrapers. Some Chinese skyscrapers, I think, have begun to work with a “bird’s eye view,” where the view from an aircraft arriving at a city is incorporated in the city’s architecture—perhaps also taking into account the fact that Chinese monumental architecture has traditionally made the roof construction its most articulated element.

With the skyscraper city as grounded in “intensive symbolism,” I will propose a concept that I believe can summarise a number of the characteristics of the skyscraper city, the term being capable of comprising semantic and phenomenological aspects. It poses the opposite of “extensive symbolism” as related to ground possession, and thus a social form in which the increase of wealth was connected with the ownership of large land holdings.²⁰ The constructing of a skyscraper or a skyscraper city has regularly become symbolically associated with building a nation or a community, and so it becomes an important general question how such associations are transformed in the global exchange between cultures.

- 1 The project has received an “investigator’s grant” from the Novo Nordisk Foundation in Denmark. The perspectives of the project are initially delineated in comprehensive articles: Anders Troelsen, “Byen på højkant. Perspektiver på skyskraberen,” in *Perspektiver på rum*, eds., Gregers Algreen-Ussing, Lise Bek and Jens Schjerup Hansen (Hørsholm: SBI-Byplanlægning 76 · Statens Byggeforskningsinstitut, 1999) and Anders Troelsen, “Kanon og konsensus. Skyskraberen i historisk perspektiv,” in *Kunsthistoriografi*, eds., Hans Jørgen Frederiksen, Maria Fabricius Hansen and Anders Troelsen (Aarhus: Institute of Aesthetic Studies, University of Aarhus, 2009). In these articles are given the references that have been relevant for me at the given time. Here, I shall only single out my first important source of inspiration: Thomas A. P. van Leeuwen, *The Skyward Trend of Thought. The Metaphysics of the American Skyscraper* (Cambridge, Mass.: M.I.T. Press, 1988). It is a very captivating, but mostly rather essayistic discourse analysis diving into the prehistory of the skyscraper. Later, I have especially benefited from Marco D’Eramo, *Il maiale e il grattacielo. Chicago: una storia del nostro futuro* (Milano: Feltrinelli, 1996) and Stephen Graham, *Vertical. The City from Satellites to Bunkers* (London and New York: Verso, 2016) even if neither of the books have an architectural focus in a narrow sense. It is worth mentioning that the focus on perceptual and semantic dimensions of the skyscraper city at a first glance seems to underplay the fundamental fact, powerfully stressed by Carol Willis, that skyscrapers normally are built to generate wealth, not only to symbolize it. Cf. Carol Willis, *Form follows finance. Skyscrapers and skylines in New York and Chicago*, (New York: Princeton Architectural Press, 1995), 10: “the skyscraper should best be understood both as the locus of business and as businesses themselves”.
- 2 Cf. Xuefei Ren, *Building Globalization. Transnational Architecture Production in Urban China* (Chicago: University of Chicago Press, 2011), 22. Enhanced computing power has also made it possible for especially North American, European, and Japanese architectural studios to be exporters of design.
- 3 Cf. Johannes V. Jensen, “Bykultur,” in *Retninger i Tiden. Artikler 1925–30* (Copenhagen: Gyldendal, 1930).
- 4 Cf. Jannie Rosenberg Bendsen, Birgitte Kleis and Mogens Andreassen Morgen, *Bellahej. Fortællinger om en bebyggelse* (Copenhagen: Strandberg Publishing, 2015).
- 5 A view shared for example by Jan Gehl, *Cities for People* (Washington, DC: Island Press, 2011), 98f.
- 6 Cf. Eric Firley and Julie Gimbal, *The Urban Towers Handbook* (London: John Wiley & Sons Ltd., 2011), 11.
- 7 Adrian Forty, *Concrete and Culture. A Material History* (London: Reaktion Books, 2012), 107.
- 8 Cf. Scott Johnson, *Performative Skyscrapers. Tall Building Design Now* (Los Angeles: Balcony Press, 2014).
- 9 This is an issue for otherwise rather marginal authors, see M. Révész Alexander, *Der Turm als Symbol und Erlebnis* (Haag: Martinus Nijhoff, 1953) and Francisco Mujica, *History of the Skyscraper* (Paris: Archaeology & Architectural Press, 1929) that I have not included in my historiographic survey (see note 1).
- 10 Kevin Lynch, *The Image of the City* (Cambridge, Mass.: M.I.T. Press, 1960).
- 11 George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago and London: The University of Chicago Press, 1980).
- 12 It is not this kind of films that are the focus of an otherwise interesting book, see Merrill Schleier, *Skyscraper Cinema. Architecture and Gender in American Film*, (Minneapolis and London: University of Minnesota Press, 2009).
- 13 I am inspired by Gaston Bachelard, *L’Air et les Songes. Essai sur l’imagination du mouvement* (Paris: Le Livre de Poche and Librairie José Corti, 1943). I agree with Bachelard’s affirmation that “tout chemin conseille une ascension” (18) and feel challenged in relation to my subject by his statement that “Le ciel n’a pas de rivage parce que l’ascension n’a pas d’obstacle” (61). At the same time, however, I do not share his Jungian approach to “les jeux dialectique du vertige et du prestige. ... du courage de vivre contre la pesanteur, de vivre ‘verticalement’” (24).
- 14 Hugh Ferriss, *The Metropolis of Tomorrow* (Princeton N.J.: Princeton Architectural Press, 1986 [1929]).
- 15 David Nye, *American Technological Sublime* (Cambridge, Mass.: M.I.T. Press, 1994).
- 16 Forty, *Concrete and Culture, A Material History*, 112.
- 17 Cf. Paul Scheerbart, *Glasarchitektur* (Berlin: Verlag der Sturm, 1914) and Bruno Taut, *Die Stadtkrone* (Jena: Eugen Diedrichs, 1919).
- 18 Katherine Solomonson, *The Chicago Tribune Tower Competition: Skyscraper Design and Cultural Change in the 1920s* (Chicago and London: The University of Chicago Press, 2001).
- 19 Le Corbusier, *Urbanism* (Paris: Les Éditions Arthaud, 1980 [1925]). In a discursive analysis, I have tried to systematise the underlying notions of Le Corbusier which have much in common with Piet Mondrian and—to a lesser degree—Wassily Kandinsky. Cf. Anders Troelsen, *Mod Modernismen. Analyser af moderne kunst* (Aarhus: Aarhus Universitetsforlag 1994. 26–31).
- 20 Stuart Ewen, *All Consuming Images. The Politics of Style in Contemporary Culture*, (New York: Basic Books Inc., 1988), 168–69.