

Urban Synecdoche and the Disappearing City: A History of Object-Index Design

Benjamin A. Bross

University of Illinois at Urbana-Champaign
bbross@illinois.edu

INTRODUCTION



Figure 1: *Cities Toile (Parchment)*, courtesy of Rifle Paper Co.

While browsing “online” for wallpaper for a home project, I came across a wallpaper sample that captured my attention. Titled “Cities Toile (Parchment)”¹ the product displays drawn images of buildings (fig.1). To the makers of this wallpaper, the cities –as indicated by the product name- were reduced to singular images of buildings: Hagia Sophia, was presumably Istanbul; the Eiffel Tower, Paris; Sydney Opera House, Sydney and so on. This visual associative exercise demonstrated our propensity and capacity to reduce mental maps of entire built environments into single spatial objects. The wallpaper is a clear illustration of the idea of *urban synecdoche and the disappearing city*.

Urban synecdoche is the phenomenon in which a discrete spatial object conceptually replaces the environment in which it exists. One of the effects of the phenomenon is that many designers inspired by precedent and current media, regardless of global location, approach spatial practice as stand-alone projects whose urban context is at most accidental and at worst, irrelevant; an object located in, but separate from, its contextual matrix. In its detached state the object, i.e., a building becomes a spatial *index*-type object.^{2,3} The problem with this practice is that the index’s mediatic recognition presents an inversely proportional relationship of awareness of its contextual environment, i.e., the city, town, or any settlement in which it exists. Thus, the success of the object as an index promotes a disconnection between object and its context. Sometimes, the disconnection occurs gradually: displacing the urban context into a background role and eventually disappearing altogether from consciousness; other times, the object enters the imagination as a

standalone object from its inception. Taken to its logical end, the city becomes a *curio cabinet* of objects whose main function is to *be* a collection of objects. As the mental image of the city becomes a collection of parts, particularly in the minds of the main city shapers like architects, landscape architects and planners, awareness of the urban totality decreases in favor of *object-oriented spatial production*⁴ and away from a cohesive and unique sense of urban identity. One significant result of this spatial practice is that, because spatial production embodies socially-constructed value systems, the semiotically coded spaces produced by urban synecdoche reveals a society's spatial identity which prioritizes index-objects, rather than holistic built environments.

The phenomenon of urban synecdoche is synchronous with urban social and technological development. As the pace of globalization has accelerated, from regional conquest and trade thousands of years ago to the modern technologic continuous "space of flows,"⁵ contemporary manifestations of urban synecdoche are now endemic to the entire world. Spatial producers, e.g., the state, patrons, and designers, compete on a worldwide stage to attract attention. It is unclear if urban synecdoche originated as an intentional strategy by spatial producers or because of the human need to navigate landscapes. What does seem to be clear is that urban synecdoche requires a codependent relationship: spatial producers depend on an audience that demands and consumes index-type objects; spatial producers are rewarded (fame and fortune) for generating objects that fulfill these *memorable* experiences -often at the expense of their contexts.

This essay explores this codependent relationship and its impacts. First, the essay examines urban synecdoche as a result of human spatial cognitive processes. Second, the work explores the pervasiveness of this phenomenon by noting salient examples of *urban synecdoche* grouped thematically: wayfinding, power projection through monumentality, and image dissemination. These themes are then correlated to the emergence of cultural, political, technological and market conditions in various historic eras. Third, and finally, the text discusses the impact and implications of urban synecdoche on contemporary spatial production.

SPATIAL COGNITION AND THE ORIGINS OF URBAN SYNECDOCHE

Wayfinding

Perhaps the origin of urban synecdoche is a cognitive device for spatial mental mapping developed by our ancestors. Animal species who possess cognition have evolved mechanisms to recognize and demarcate spatial relationships. Spatial demarcation is part of quotidian life: Species generate spatial boundaries to mark their territory; to recognize the spatial boundaries controlled by others or the absence of spatial control; and to navigate successfully to, from, and within territories.⁶ Successful navigation is the result of forming associated responses, or memories, to stimuli that act as spatial markers (e.g. imagery, smells, sounds, etc.). These markers, in turn, collectively form mental maps.⁷

Paleoanthropological evidence shows that between 6 and 7 million years ago, hominins⁸ began to evolve, primarily by walking (and running) upright.⁹ Our more energy efficient bipedal gait allowed for an expanded foraging and hunting territory. Increased spatial navigational capacity meant that hominins could and did become nomadic over ever-expanding distances. Around the same time, we became bipedal, hominins began to develop the first social practices that accompanied nomadic skills.¹⁰ Nomadic life was not a random set of movements, but rather necessitated establishing a cognitive correlation between spatial markers or landmarks,¹¹ climatic seasons and the environment's caloric inventory. As a result, *wayfinding* played a central role in the successful navigation and control of territories by helping hominins establish recognizable spatial sequences for the group.

On one hand, spatial recognition in nature occurred all the time: humans recognized places by using their sensory organs.¹² On the other hand, humans themselves would reconfigure

or transform spatial relationships to *mark* their presence if not territorial dominion. It seems reasonable to consider that wayfinding and territorial demarcation became part of the cognitive skill set¹³ associated with spatial identity and with placemaking. Paleoanthropologists have found examples from the Middle Paleolithic (c. 135,000 years ago) indicating not just human presence, but a conscious effort to generate a spatial differentiator visible to other humans at the Cave of Theopetra.¹⁴ This memory skill proved important in the emergence of urbanism as human recognition of space was effectively reduced to specific objects that provided mnemonic devices for the whole. It was perhaps less important to remember details of an entire seaside settlement, when what stood out at a distance was that it was located in a protected cove surrounded by a dramatic rock outcrop near a seafood-rich sand bank.

No doubt, our earliest use of language also implied an economy in the ways we transmitted knowledge about place. Toponymists, such as George R. Stewart¹⁵ and Paul Carter,¹⁶ have argued that the ability to describe succinctly a place by its natural or human-made features enabled our ancestors to remember and prioritize place-knowledge. To this day, regardless of the language, many settlements names are associated with *natural* landmarks. Eventually, as human settlements evolved and increased in spatial complexity, so did the semiotic and hence “mythic”¹⁷ meaning connoted by spatial productions. In this sense, the physical object is transformed “from a closed, silent existence to an oral state” becoming a “type of social usage which is added to pure matter.”¹⁸ Because of its mythic properties, the index-object presents not only itself to the viewer, but also represents embodied socio-cultural narratives: e.g., the Rubicon River (Italy) is a flowing body of water and a metaphoric threshold demarcating an immutable action. As we moved from nomadic to sedentary lifestyles, and our living patterns changed to mark not only territory, but also objects within those territories, human-produced space was from the beginning deeply embedded with significance. Humans often transferred the power of nature’s iconic meaning to the human produced object:¹⁹ the mountain became the temple; the life-giving river became the agricultural canal; the defensible hilltop the fortress and keep, etc. It is in this context that we may note how urban synecdoche emerged simultaneously with the urban design of our first built environments. However, it is also important to note that citing examples of urban synecdoche throughout human history should not be seen as a teleological meta-narrate of urban history itself; rather, the phenomenon must be understood as revealing the specificity of site, dissemination medium (such as books or television), and a society’s cultural values at a particular time regarding place.

Object-based Wayfinding

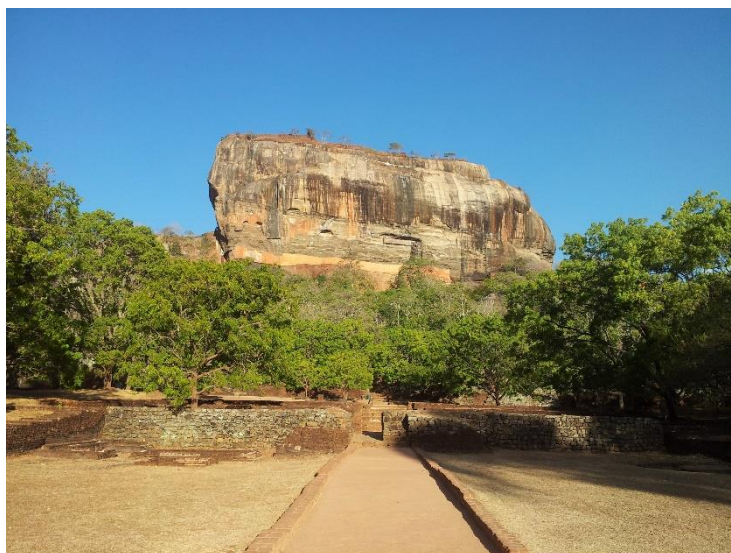


Figure 2: Lion Rock, a 200-meter-high stone fortress and palace, Sri Lanka, c. 5 C, courtesy Shashi Shekhar.

In one of the earliest known examples of humans utilizing natural features as wayfinding landmarks, rock art located in major but isolated rock outcroppings separated over a 120-kilometer distance in the Libyan Desert “provide information on how prehistoric groups used such contrasted environments during the Holocene optimum.” Emmanuelle Honoré notes that the “strong similarities in the rock art of the two massifs suggest that people have moved from one massif to another.”^{20,21} Thousands of years later, in 477, King Kassapa built his palace in Sigiriya, Sri Lanka, on a major granite outcropping that rose skyward above the dense jungle surroundings, providing a visual landmark to those who approached (fig.2, above). Seranat Paranavitana, noted “that everything at Sigiri was designed in a stupendous scale.”²² The palace, Paranavitana argues, was a visual metaphor linking a natural feature with the Buddhist belief in the “Lord of the Mountain,” serving not only as a wayfinding landmark that displaced its urban context “as the king’s abode at Sigiri dominated the city as few other palaces in the world did,” it also signaled Kassapa’s desire to communicate power and wealth “as the palace on high would indeed have appeared as something quite unapproachable –the abode of a divinity rather than that of a human being.”²³

During the Middle Ages, varied sociocultural practices promoted the rise of urban synecdoche. In Europe, the spread of Christianity and its use of iconography meant an increased focus on representational forms. Spatial products were not only state status objects but now played a vital role in the spread and strengthening of the spatial presence of the Roman Catholic Church quasi-state. In Asia and North Africa, trade between settlements and their corresponding routes led to efforts to document and describe geographies of ever expanding but war and trade linked lands. For many geographers, urban synecdoche proved an effective spatial index for imagination-based wayfinding.

Though painting, sculpture and mosaic work would continue to evolve and engage in several subject matters, urban synecdoche was evident and reinforced in the collective imagination of medieval scholars mainly in three ways. First, through the depiction of constructed biblical and mythological spatial motifs of in paintings and illuminated texts; second, through attempts to map narratively and graphically the world, using specific spatial objects as index signs for entire communities. Often, the index imagery was of holy sites particularly prevalent throughout Christendom, generating the vast genre of pilgrimage maps; third, through the work of geographers, who compiled and edited encyclopedic treatises on ethnography in distant lands. At times the last two modalities intersected, for example when monks or pilgrims acted as sources of firsthand descriptive testimony of their voyages.²⁴

In the first case, artistic expression often focused on painting biblical themes as the architecture of Heaven, the Tower of Babel and other preeminent spatial objects rooted in theological doctrine. In fig.3 (below), the 12th century fresco at Saint-Chef Abbey, France clearly demonstrates the artist’s use of urban synecdoche, consolidating the totality of the “Heavenly” city of Jerusalem into a single index building. Alternatively, myths from antiquity continued to inspire artists. Narrative texts, written by explorers, traders, pilgrims, often employed the use of evocative buildings or landscapes to identify settlements, effectively prioritizing these spatial objects out of their contexts. In *The Travels of Marco Polo*²⁵ ethnographic, agricultural and commercial descriptions of far-flung places are intercalated with examples of urban synecdoche. The Pulisangan River and its surroundings seemingly disappear at the site of a major bridge:

Over this river there is a very handsome bridge of stone, perhaps unequalled by another in the world. Its length is three hundred paces, and its width eight paces; so that ten men can, without inconvenience, ride abreast. It has twenty-four arches, supported by twenty-five piers erected in the water, all of serpentine stone, and built with great skill.²⁶

Other narrative examples include Dante Alighieri's use of the Champs Alys cemetery at Arles (France), which was already widely known throughout Europe in the 14th century. Alighieri writes



Figure 3: Fresco at Saint-Chef Abbey, 12th C., Wikimedia Commons.

Even as at Arles,²⁷ where stagnant grows the Rhone,
Even as at Pola near to the Quarnaro,
That shuts in Italy and bathes its borders
The sepulchres make all the place uneven.²⁸

Here, Arles is not presented as a landscape, but rather as cemetery imagery in *The Divine Comedy* to portray the entrance to Hell.

Medieval bishopric and cartographic documentation were often illustrated with specific buildings, urbanscapes and landscapes. Examples of medieval maps²⁹ that employed urban synecdoche include the Ebstorf Map, 13th C, and Hereford *Mappamundi* c. 1300 (fig.4, below). Towns and cities like Jerusalem, Rome, Santiago de Compostela, were depicted pictorially by one spatial object, usually a building. Thereafter, the city disappears (explicitly) and the selected church, monument, etc. acts as shorthand for the displaced city or town. Noteworthy in the Hereford Map is the ways "Africa and Asia are shown, in the early medieval tradition, as the home of monstrous races, exotic and often mythical animals and biblical sites such as Noah's Ark, the Tower of Babel and Joseph's Barns (now known as the Pyramids)."³⁰

While the previous two cartographic examples include holy sites, pilgrimage maps differed by featuring holy sites as the main visual strategy for wayfinding. One such example of the use of urban synecdoche for the faithful is William Wey's *Map of Palestine* c. 1458-63. Pnina Arad notes Wey's map is "[r]ooted as it is in the tradition of architectural response to pilgrimage,"³¹ displaying major religious edifications as index signs for settlements. The use of these maps for trade, administration, or pilgrimage inevitably shaped their audience's perception of the world around them: discrete objects in the built environment that provided the most efficient forms of wayfinding across imagined lands. The ever-expanding trade network between realms and their constituent settlements, led to a vigorous push to document geographic and ethnographic knowledge. Rulers, political administrators, soldiers, historians, traders, and the occasional traveler often collected

political, military and sociocultural observation “compendia” that were as much a travel book as much as an ethnography treatises.³²



Figure 4: Hereford Mappamundi, c. 13th C., courtesy Wikimedia Commons.

Whether these documents served to further economic advantages, political goals, or cultural understanding, their use of urban synecdoche often illustrates what was perceived as spatially salient about each place. In an example from Asia, Ḥamd Allāh Mustawfī, a highly erudite 14th century Qazvin governor during the rule of vizier Rašid-al-Din,³³ documents a portion of the region in his charge, listing agricultural production along with castles, tombs, and shrines as the prominent spatial characteristic of the respective settlement.

Khabūshān. Ṭūs: the Shrine of the Imām `Alī-ar- Riḍā and the tomb of Hārūn-ar-Rashīd. Kilāt and Jirm. Herāt: its castle: splendour under Ghūr dynasty. Fūshanj. Bākharz and Bādghīsh: the pistachio nut crop. Jām: Shrine of Zindah Pīl. Khwāf and Zāvah: tomb of Ḥaydar.³⁴

THE POWER OF MONUMENTALITY

It is conceivable that the historical appearance of the object as an index for the spatial production of a society finds its origins in the nature of urban settlements themselves. Though proto-urban environments and the earliest villages have existed since at least the Mesolithic Period,³⁵ these settlements were few and far in between across the globe. Early on, when the first empires and kingdoms were established, these usually had one large village or small city (by today's population standards) as the center of political, military and economic state³⁶ power.^{37,38} The vast majority of the population did not live in urban³⁹ environments; rather, they lived in rural environments whose settlements were composed of granular scale, less durable dwellings and lacking formalized gathering spaces.⁴⁰ In this context, major structures, such as palaces, temples, military fortifications, mausoleums, and other large-scale spatial products would have stood out as human-made objects in the built landscape. As Michael Baigent notes “[o]ne remarkable feature of these very ancient communities is that they were all, so far as archeology can tell us, apparently built around a central temple, which was, without exception, the grandest building in town.”⁴¹ These spatial expressions were the community focal point, embodying its value systems while



providing the means to generate mentally constructed wayfinding from village to village, and region to region.

The impression these large-scale spatial products generated a self-reinforcing cycle. As the reputation of a grand spatial product in one state spread, theological groups and ruling (state and quasi-state) elites from other states sought ways to effectively display their power and wealth (status)⁴² by erecting their own monumental structures. One example of this spatial approach is found in Genesis 11:3-4 (circa 950 BCE), "The people who lived there began to talk about building a great city, with a temple-tower reaching to the skies—a proud, eternal monument to themselves;"⁴³ In other cases, like the previously mentioned Sigiriya palace, elites achieved a special status by differentiating their spatial environments from the quotidian built surroundings. B.G. Trigger observes

In the early civilizations monumental architecture becomes still more ubiquitous, elaborate, and differentiated. Monumental constructions of varying sizes and degrees of elaboration correlate with increasing stratification within the upper classes. At this level of socio-political complexity, monumental architecture also becomes an integral part of what Robert Redfield (1941) called the 'great tradition', by which he meant the culture of the upper classes as distinguished from that of the lower ones.⁴⁴

Others, such as Denis Cosgrove and Stephen Daniels,⁴⁵ have noted that landscapes and monumental administrative and theocratic buildings were effective spatial products at establishing mythologies, often becoming the preferred index signs of status. Frequently, these spaces were to some degree inspired by a prevailing typology, that then provided a spatial model to be emulated, as demonstrated by the influence of Djoser's stacked mastaba pyramid (circa 27th BCE) on the Giza pyramid complex built nearly 200 years later. Such emulation proved useful in establishing a group's status and desire to transcend beyond their present time by linking to other index-object of status. This in turn prompted the state to carry out the production of spatial objects that reinforced state status through a limited amount but resource-intensive built environments. In a salient example, royal inscriptions found from Ur, list first and foremost the building achievements of Entemena, king of Lagash (circa 2400 BCE), including palaces, temples for Enlil and Nina, and a "Sacred Canal"⁴⁶ that brought water to Nina. Like the irrigation canal, other large-scale index state projects usually involved infrastructure, such as, dams, roads, and as Joe Uziel has explored,⁴⁷ defensive fortifications and ramparts (e.g., Jericho's walls). While the former *produced* power and wealth, and the latter *preserved* power and wealth, they often gained mythological status. The cycle continues when these spaces formed the seeds of the next localized myth, and then spread to other regions by conquest, travelers or far-off traders. For example, in one of the earliest known texts, the *Epic of Gilgamesh*, the narrator describes the construction of the city of Umk, specifically its walls, writing

Urshanabi, climb up on to the wall of Umk, inspect its foundation terrace, and examine well the brickwork; see if it is not of burnt bricks; and did not the seven wise men lay these foundations? One third of the whole is city, one third is garden, and one third is field, with the precinct of the goddess Ishtar. These parts and the precinct are all Umk.⁴⁸

At the same time peasants, farmers, artisans each demonstrated their status (whether they chose to or not) through material permanence, size, location of their dwellings and their built urban environment's quotidian community. In most cases, their lack of comparable available time, skill, power and wealth meant construction techniques that resulted in ephemeral structures that were (and still are) vulnerable to periodic telluric, weather and bellicose catastrophes, as well as the effects of a lack of maintenance needed to counter the inevitable passage of time. For the farmer, peasant, foot soldier, or others of similar socio-economic class, spatial objects such as the Pyramids of Giza, would have

dominated their gaze leaving an impression due to its scale and tectonic permanence. Moreover, we can imagine that even among royalty, aristocracy, the priestly cast, and state bureaucrats these major spatial expressions of status stand as an index of the state's status.

In antiquity, Athenians under Pericles (and his successors), eager to demonstrate their sociopolitical dominance and pre-eminence set about consolidating a theological campus whose visibility from a distance would lead to a legible display of power. Historians have noted that the Parthenon and its surrounding buildings were built to "impress"⁴⁹ and "dominating the city."⁵⁰ Pericles' obsession with making the Parthenon "the building that would come to symbolize the greatness of Periclean Athens"⁵¹ undoubtedly played a major role in the resentment of subjugated states forced to pay burdensome tributes for its construction, ultimately leading (along with other factors) to outright war.

Following the medieval period, artists, geographers, political administrators and incipient social scientists often continued the practice of urban synecdoche. The renewed interest in antiquity served to focus on specific examples of spatial products as tangible and replicable examples of idealized built environments. Furthermore, post-Medieval thinkers often referred to these spatial index signs as representative of the sociocultural constructs corresponding to the civilizations that built them. In *Lives of the Great Painters, Sculptors, and Architects* (1550), the Renaissance scholar Giorgio Vasari "traced the rise, perfection and decline of ancient art."⁵² Underlying his analysis is the notion that "Antique models played a secondary but decisive part in the struggle towards ultimate perfection."⁵³ Vasari not only critiques spatial expressions from antiquity to his present, he also produces a canon of exemplary art and architecture based on their supposed generative virtues.⁵⁴ Thereafter, European designers achieved "good" design following aesthetic rules based on selected examples of spatial production. This canonical approach to design in Europe (and European dominated or influenced territories) was so prevalent that in subsequent periods after the Renaissance, i.e., Baroque, Romantic and Neo-Classical periods, spatial expressions were in reference or reaction to this canonical understanding of the built form. Just over 200 years later, Johan J. Winckelmann would write the highly influential *Reflections on the Imitation of the Greek Works in Painting and Sculpture* (1755) and *History of Ancient Art* (1764). Paralleling Vasari's earlier work, Winckelmann cites specific examples of ancient Greek architecture, e.g., the Parthenon, to argue that only through its spatial emulation could society achieve sociocultural greatness.



Figure 5: View of Vienna, from *Civitates Orbis Terrarum*, 1564-1579, courtesy of Library of Congress.

Cartographers, whose increased sophistication was commensurate with growing globalization, continued to perfect the use of buildings and landscapes as representative of entire villages, towns and cities. One the primary examples of the evolution of the phenomenon of urban synecdoche in cartography is the *The Civitates Orbis Terrarum*

(1564-79) compilation. Following the success of the earlier *Cosmographia*,⁵⁵ Georg Braun, Franz Hogenberg, and others, set out to catalogue the built environment throughout Europe and around the Mediterranean through collected drawn maps. In these drawings, illustration criteria exhibit attitudes toward the mentally constructed urban space, i.e., the artists' chosen drawing technique, varying between perspectival views across the horizon (e.g., the Vienna example) or in cartographic orthogonal or quasi-axonometric representations. While most of the images they drew or collected evenly depict entire townscapes, some drawings are notable because of their focus on specific buildings as visual landmarks. Urban synecdoche or spatial object prioritization, via exaggerated scale or identifying text, results in the contrast of selected buildings and landscapes with repetitive or monotonous "background" contexts (fig.5, above). Selection criteria for these buildings or landscapes centered on what was sought to be the pictographic focus in the artist's storytelling.⁵⁶

Urban Design and Monumentality

The desire to ease the pilgrimage path in combination with the legibility of power provided the impetus for a renewed urban design focus on index-object design during the Renaissance. When Francesco della Rovere became Pope Sixtus IV (1474-84), he embarked on an ambitious redevelopment of Rome, Italy. Sixtus IV's ambitious campaign, Pierre V. Aureli notes, is the result of how the "very short time in which to implement reforms and to leave his legacy on the city form."⁵⁷ Sixtus IV viewed Rome's renovation not only as a way to restore its grandeur and improve pilgrim wayfinding, but establish his legacy. This ambition, coupled with the deployment of one point perspective provided "a framework within which to reimagine the reform of urban space according to the universal and abstract principles of spatial organisation."⁵⁸ Thus, under Sixtus IV, urban design prioritized visual and pedestrian connections anchored by Rome's Church landmarks. Jill Blondin notes that

Sixtus commissioned public works that advertised his refurbishment of Rome while communicating the message of his secular and sacred authority' to observers throughout the Eternal City. The Capitoline Museum, Aqua Vergine, Ponte Sisto, the Vatican Library, and newly paved streets not only built upon and recalled ancient power and history, but they also publicly proclaimed the success of Sixtus' papacy. By extending his vision to all f Rome [...] and not just particular areas of the city as his papal predecessors had, die pope exhibited a new supremacy. In restoring the grandeur of ancient Rome, Sixtus claimed both temporal and spiritual importance.⁵⁹

Over 100 years later, Pope Sixtus V (1585-90), would also push landmark-oriented urban design in an even more ambitious redesign of Rome. Abraham Akkerman writes that "[t]he lofty attempt of Sixtus V was to physically link the great basilicas of San Lorenzo, Santa Croce, San Giovanni and the church of St Peter. Thus the great basilicas became nodes of a new, monumental street network in which ancient obelisks were raised and consecrated as beacons of pilgrims' final destination points."⁶⁰

European Enlightenment, guided by rationality and a desire for monumentality, was characterized by grand urban designs focused on object-index buildings.⁶¹ Like Renaissance artists and architects earlier, rationalist neoclassical designers derived aesthetic lessons from antiquity, that combined with contemporary political arguments, led designers to focus on buildings and landscapes as vessels of state and patron status. While this spatial focus did not produce urban synecdoche directly, designers' desire to produce monumental projects that could anchor grand urban designs revealed an isolated object approach to design that is still prevalent contemporary practice⁶² and facilitates urban synecdoche. Designers such as Étienne-Louis Boullée, Claude Nicholas Ledoux and Jean-Jacques Lequeu's produced highly influential conceptual projects exemplifying spatial products willfully separated from the urban fabric context and especially historic form.⁶³ Boullée's Cenotaph to Newton, Opera House in the Place du Carrousel projects, and

Triumphal Gate; Ledoux's projects for the House for the Surveyor of the River Loue and the Ideal City of Chaux, and Lequeu's Temple to Equality, -to name just a few- demonstrate a preoccupation for spatial monumentality in order to captivate their audience while downplaying or ignoring all built context.

Rome's redevelopment became a showcase of European Renaissance, and later Baroque, urban design strategies emulated (or imposed) throughout the world over the next centuries: After the fire of 1666, Christopher Wren's London reconstruction plan proposed long sweeping urban corridors anchored by major buildings like St. Paul's Cathedral and the Royal Exchange; while at the same time, André Le Nôtre used a trivium of avenues to emphasize Versailles Palace; Charles L'Enfant's late 18th century plan for Washington D.C., and in particular the National Mall, utilized a similar strategy. Likewise, Baron Haussmann's 1853-1870 Paris redesign prioritized index-objects, like the Arc de Triomphe, to visually connect boulevards that traversed the city. While these urban designs organized the city, they placed singular importance on index-object buildings, reinforcing the notion of the city as a background to selected landmarks.

By the first third of the 20th century, index-object focused urban design in totalitarian states "served to legitimate regimes, to produce agreement and to demonstrate power, efficiency and speed."⁶⁴ In 1933, the Palace Building Council in Moscow's decision "to erect a gigantic figure of Lenin implied a subordination of Moscow's entire urban structure to a single entity: the Palace of the Soviets."⁶⁵ Other totalitarian state governments, including Germany, Spain and Italy, would soon push their own plans to glorify a specific built environment via landmark focused urban design. It was in this context that in 1937 Mussolini executed the centuries-old design that removed the Spina di Borgo to make St. Peter's Basilica the focal terminus of the then newly formed Via della Conciliazione.

Modernism and Contemporary Practice

At the same time that totalitarian European states were embracing index-object anchored urban design to express power, influential institutions around the world would applaud spatial individuality as the expression of the era's *zeitgeist*. The 1932 *Modern Architecture International Exhibit* at the Museum of Modern Art (MOMA) marked an important change in the way many designers conceived spatial practice. Alfred H. Barr, Jr. writing in the brochure's "Foreword" bemoaned the then current state of American design, and instead called for the rejection of historic contextualism, exhorting designers to reject the "sufficiency of historical styles for modern purposes."⁶⁶ No statement, however, makes clearer the role of designers as producers of index-object individualism than when Barr extolls Frank Lloyd Wright proclaiming "he has always been, a passionately independent genius whose career is a history of original discovery and contradiction."⁶⁷ He then added that Frank Lloyd Wright is "the embodiment of the romantic principle of individualism, his work, complex and abundant, remains a challenge to the classical austerity of the style of his best younger contemporaries."⁶⁸ In the same vein, Phillip Johnson would later note in the brochure's "Historical Notes" his admiration that "[t]he industrial architecture of Peter Behrens ...was remarkably free from the compromise with tradition..."⁶⁹ Johnson, however, finalizes by declaring Le Corbusier the most influential designer because of he was

[m]ore of an innovator than Oud, more consistent than Gropius, he displayed in his Citrohan model of 1919-22 the startling possibilities of an art of building as little related to the modern architecture before the War as to the styles of the further past.⁷⁰

Arguably, it was this exultation of individuality, reinforced by influential books such as Ayn Rand's *The Fountain Head* (1943) that laid the foundation for much of the way so many architects are viewed and view themselves today as creative iconoclastic geniuses. With MOMA's endorsement, architects were now seen as the individualistic purveyors of the spatial avant-garde. The impulse to make stand-alone objects could now be traced to the



accolades that designers received for their individuality and audacity as presented in their projects. The search for the new and different had become a mainstay for the innovative architects. Each project was an opportunity to stand apart from its context and display the talent of the designer, and not the site's urban context and history.

Nearly three decades later, designers like Robert Venturi would push back against Modernism's anti-historicism and reincorporate historical aesthetics into their designs. In *Complexity and Contradiction In Architecture* (1966), Venturi stakes out a position that not only acknowledges architectural history as the basis of new interventions, but more pointedly states about context

commonplace elements accommodate existing needs for variety and communication. The old clichés involving both banality and mess will still be the context of our new architecture, and our new architecture significantly will be the context for them.⁷¹

Venturi's embrace of history, however, did not mean a return to an architecture that prioritizes its role in ennobling the overall urban environment as much as a "gentle" architectural manifesto to accept past aesthetic forms and aesthetics. In the end, Venturi confesses that he makes "no special attempt to relate architecture to other things," and instead maintains a more humble but still individualistic approach, hoping that

[t]he architect's ever diminishing power and his growing ineffectualness in shaping the whole environment can perhaps be reversed, ironically, by narrowing his concerns and concentrating on his own job.⁷²

It would be just over a decade later that Colin Rowe and Fred Koetter's *Collage City* (1978) would address the question of index spatial objects versus urban fabric. Where the 1932 MOMA exhibit had praised Le Corbusier, Gropius, and contemporaries, *Collage City* identified the major urban approach problem, declaring that urban projects like the "*ville radieuse* or *Zeilenbau city*" were "almost literally imagined as becoming non-existent."⁷³ As modernists approached urban environments at best as inconvenient settings, and at worst as spatial problems in need of physical eradication, and fixed through discrete projects, "[t]he matrix of the city ha[d] become transformed from continuous solid to continuous void."⁷⁴ In this context, Rowe and Koetter would presage urban synecdoche, recognizing the "placing of immensely high premia upon the building as 'interesting' and detached object."⁷⁵ *Collage City*, in chapters like "Collision City and the Politics of 'Bricolage'" would then go on to address urban context and history not only as relevant but also a necessary component of spatial practice.

For all the post-Modernist criticism of index-object design approaches, many contemporary designers have embraced the effect of urban synecdoche, and accompanying mediatic recognition. It would be Remment Koolhaas, and what he calls "Bigness," that succinctly captured the role of contemporary monumental design, stating that it no longer needs the city; it competes with the city; it represents the city; it pre-empts the city; or better still, it is the city. If urbanism generates potential and architecture exploits it, Bigness enlists the generosity of urbanism against the meanness of architecture.⁷⁶

INDEX-OBJECT DISSEMINATION

Examples from Antiquity

From early on the prevalent media of the time (and region) had an effect on the dissemination of a building's image. A spatial object in itself does not become an index by just *being*. It requires a medium in which its mythological meaning propagates to audiences near and far. From antiquity and until the invention of the photography, text became the prevalent form of mass communication (pottery seals, tablets, inscriptions, parchment, hand-written books, newspapers, pamphlets), and as such, it would be writers who would

turn their narrative gaze on landscapes and individual buildings.⁷⁷ The use of a spatial produced object by authors, rather than the description of the city or an area of a city, and its corresponding culture, to capture the imagination of an audience is exemplified by Antipater of Sidon when he wrote in the 3rd century B.C.E.,

I have set eyes on the wall of lofty Babylon on which is a road for chariots, and the statue of Zeus by the Alpheus, and the hanging gardens, and the Colossus of the Sun, and the huge labour of the high pyramids, and the vast tomb of Mausolus; but when I saw the house of Artemis that mounted to the clouds, those other marvels lost their brilliancy, and I said, 'Lo, apart from Olympus, the Sun never looked on aught so grand.'⁷⁸

Other media in antiquity, like carved images, tell stories about significant urban settlements through index-objects. In the middle of the 1st century B.C.E and nearly 6,000 kilometers away, you can find a sculptural example of urban synecdoche. The South *torana* (gate) frieze at the Great Stupa of Sanchi,⁷⁹ (today Madhya Pradesh, India) depicts the siege on the City of Kusinagara during the War over the Buddha's Relics (fig.6, below). Like the text of Epic of Gilgamesh and the described walls of Umk, the relief represents the Mallas capital by prioritizing its gate, visually narrating the victory of the seven Chieftains over the city, and their withdrawal after capturing the relics.⁸⁰

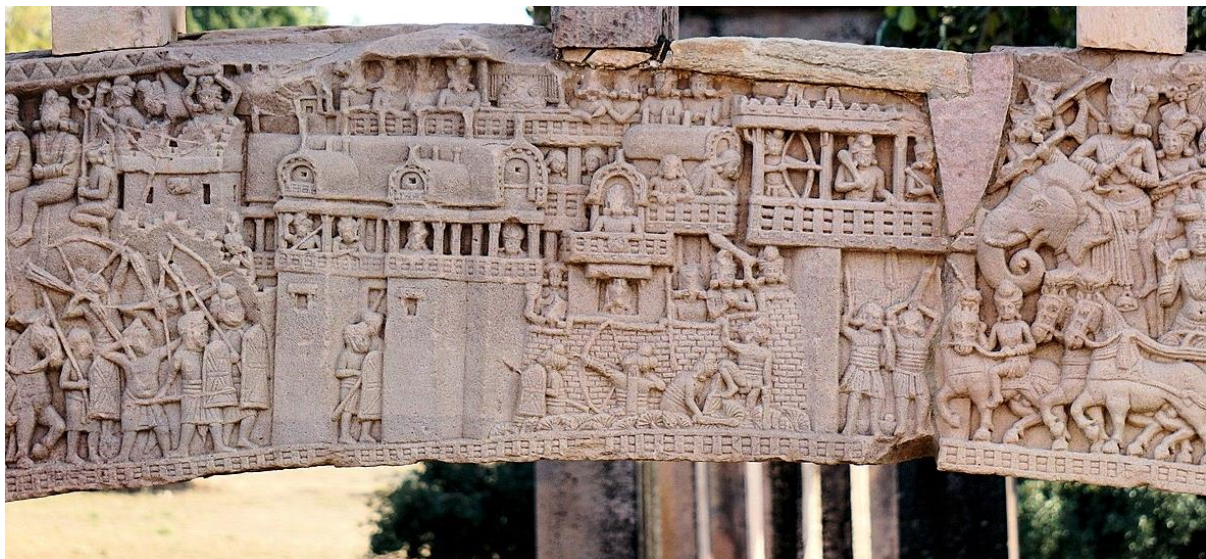


Figure 6: South torana, Sanchi, India, c. 1st Century B.C.E., Wikimedia Commons.

One of the earliest examples of a mass dissemination medium promoting urban synecdoche are minted coins in antiquity. For example, the Titus Colosseum Sestertius coin, 81-82, was issued to commemorate the Flavian Amphitheatre's inauguration. Because of their intrinsic and trade value, coins would have easily traversed across the Roman Empire, propagating the Colosseum's image as Rome.⁸¹ Yet, the practice of urban synecdoche has truly intensified in the last 175 years. This is due to several factors: First, the Industrial Revolution, obeying the logic of market and capital demands, produced new and grand-scale typologies. Second, the 19th century spread of printed news and entertainment media resulted in an intense push to document events and places that would generate an ever-expanding paying reading audience. Third, was the advent of photography which, having become commercially viable in the late 1830s, marked a major turning point in the mass production, distribution, and consumption of imagery. As photographic techniques and quality improved, photographs were increasingly incorporated into printed media such as books, magazines, pamphlets and especially newspapers, further aiding the growth of the printed industry. Examples of urban synecdoche in 19th century photography became ever more pronounced as cities urbanized because of the Industrial Revolution and explosive



population growth. From the beginning, rural and urban portraits and landscapes dominated photographic documentation. Photographers such as Édouard-Denis Baldus and William Henry Fox Talbot, dedicated great effort to document buildings that represented their urban contexts.

One of the major characteristics of the Industrial Revolution was the vigor by which innovative new typologies or the reconceptualization of traditional spatial forms shaped urban settlements. Often, it seemed that towns, cities and entire regions competed with each other in the race to concentrate capital and thus elevate their status through the latest architectural and engineering achievement; newspapers announced each new spatial object to the world with evermore colorful and superlative epithets. A front-page article of *The New York Times* consciously integrated the Brooklyn Bridge, a major infrastructure project, to the greater historic narrative of landmark spatial objects. Writers waxed poetic about the opening of the bridge stating "Babylon had her hanging gardens, Egypt her Pyramids, Athens her Acropolis, Rome her Coliseum –so Brooklyn has her bridge."⁸² *The Republican*, a Massachusetts newspaper, declared in its front page that the Brooklyn Bridge was "A Great Triumph of Engineering" followed by adjectives such as "gigantic."⁸³ In England, newspapers such as *The Nottingham Evening Post* echoed the sentiment writing that the bridge is "one of the greatest engineering achievements in the world."⁸⁴ John A. Roebling, like many designers who prioritize index-objects, delivered on his promise to build world-class landmark, writing in his original proposal that

The contemplated work, when constructed in accordance with my design, will not only be the greatest bridge in existence, but it will be the great engineering work of the Continent and of the age. Its most conspicuous feature – the great towers – will serve as landmarks to the adjoining cities, and they will be entitled to be ranked as national monuments. As a great work of art, and a successful specimen of advanced bridge engineering, the structure will forever testify to the energy, enterprise, and wealth of that community which shall secure its erection.⁸⁵

Just six years after the Brooklyn Bridge opened, the Eiffel Tower was inaugurated in Paris, France. From the beginning, Gustave Eiffel, like Roebling, developed the Tower to be an index-object that embodied the Modern spirit. As such, it had to set itself apart physically and aesthetically from the rest of Paris' historic urban context. Responding to design criticism, he too inserted his spatial object into the larger historic narrative of status landmarks when equating the tower to the Pyramids in Egypt, writing, "My tower will be the tallest edifice ever erected by man. Will it not also be grandiose in its way? And why would something admirable in Egypt become hideous and ridiculous in Paris?"⁸⁶ Not only did Parisian newspapers celebrate the opening of the then world's tallest structure, *Le Figaro* went further opening a commemorative printing kiosk in the tower itself.⁸⁷ So powerful is its urban synecdoche effect that a vast number of non-Parisians identify the Tower as Paris. Furthermore, in the imagination of most non-Parisians, the idea of Paris embodies little or no urban contextual substance.



Figure 7: Woolworth and Municipal Buildings from Brooklyn Bridge, c. 1910s, courtesy Artnectar.com

Towards the end of the 19th century, two trends aided the spread of urban synecdoche. First, photography combined with mass distributed print press in photojournalism. The use of photography as a visual aid for readers contributed to increased newspaper circulation and sales. Another innovative use of photography that placed the focus on specific buildings as index signs of their urban environment were postcards ("photostints") and "photocroms" (fig.7, above). Companies such as the Detroit Publishing Company and Teich & Co. often employed snapshots of popular urban experiences, which allowed travelers to share with friends and family quickly and economically highly evocative selected glimpses into distant or exotic destinations. Eventually, still photography gave way to the innovation of film, and film's popularity transformed how the sense of place was communicated to an ever-increasing audience.

Film and Television

The power of cinema in forming and disseminating object-space association is perhaps rooted in its capacity to emulate our imagination's ability to generate unfolding scenes in our mind such that it is a "mental cinema."⁸⁸ François Penz, (citing Arnheim, Deleuze, Guttari and Wim Wenders) further notes the importance of film on our sense of place. For Penz, film has an iterative and self-reinforcing role that environments play in our ability to "map" our imagination while experiencing cinema, and conversely, the way films then shape our expectations of place.⁸⁹ Most early films used stage sets (Meliere), or placed no particular emphasis on one building, instead "cinema's exploration of urban space is sometimes akin to a form of visual mapping"⁹⁰ documenting urban street life, such as the 1903 "It Happened on 23rd Street." Arguably, it would be the Miles Brothers' film "A Trip Down Market Street" (1906) that first placed special emphasis on one building -the San Francisco Ferry Building- as it grew ever-nearer in the background. In 1927, Fritz Lang's highly influential film, *Metropolis*, deployed urban synecdoche by showcasing the image of a metaphoric *New Tower of Babel* (probably derived from Hans Poelzig's 1911 Poznan Tower) to provide the audience with a futuristic location for the film's story. In this way,



one building, or landscape, gave the audience a clear, concise, and presumably site-specific idea of where the plot would unfold. Eventually, the use of urban synecdoche to establish context would become a standardized cinematographic technique called the “establishing shot.”

Not only does the use of an index-object for an establishing shot situate the viewer as to the “where,” it also evokes in the viewer a sense of place that may or not match the actual environmental reality. Instead of a site reality, the object is used to play on our spatial expectations of what that place should be, thereby setting the tone of the film narrative. It can do this because the index-object replaces the “local” physical space it occupies and diminishes its relationship with its context in favor of establishing our expectations based on the connotation of place; choosing an object reveals the intent of place marking, not exhibiting the reality of the local.⁹¹ Moreover, Penz (et. al.) citing Hay, notes that propensity of filmmakers to visit and revisit spatial objects, such as buildings, focusing on site –as if it were a character in the narrative- as part of the problematic that unfolds in the storytelling itself.⁹² Each inclusion into the visual narrative adds another layer to its mythology, further accentuating its role in placemaking and tone setting. This means, for example, that the Eiffel Tower displayed in *Funny Face* (1957) embodies romance and *Frenchness*, while in *Independence Day* (1996) the White House is perceived as an embodiment of all of the United States’ government attributes.

Television, however, proved to be more widespread than film. Demonstrated to the general public in the late 1920s, and introduced commercially in 1938, television use became popular in the late 1940s through 1950s.⁹³ Today, over 1.4 billion households (roughly 79% of all households) worldwide own a television⁹⁴ making it the most prevalent medium by far. Not only did made for television content often begin with wide shots to establish context, they also televised films and additionally, news programs that situated reporters outside of emblematic buildings as visual clues of the subject they were covering. As mass media dissemination of spatial index-objects, from photography to internet, has also influenced how many spatial producers see their roles as well.

Dissemination and Impact in the Information Age

Currently, we have entered what Manuel Castells calls the “Information Age,”⁹⁵ which is characterized by what he has dubbed the “space of flows.” In this phenomenon, an overwhelming and almost instantaneous stream of information flows from space to space, regardless of location. Text and imagery is readily produced in one place and consumed somewhere else through countless and vast distribution information networks, often hastening the spread of globalized ideas and trends. This digital flow of information has had several effects: First, where television and films are generally state-controlled and highly regulated media, internet information has proven to be less regulated,⁹⁶ more accessible to the general population, and friendlier to user-produced content. User-produced content and social-media websites, such as “Pinterest” and “Tik Tok,” display individual interests for other users to consume; millions of companies, groups and individuals produce content to market their goods and services. Second, such openness has also allowed for the most democratic market access to all, including the design professions. One of the effects of these copious amounts of information is the necessity to produce highly competitive attention-grabbing imagery-based content. In such an environment, any designer or firm, regardless of size, experience, and location, can post an eye-catching web-based portfolio with the hope of “breaking the internet.”⁹⁷ Third, governments and institutions also use the internet and other digital media as part of their strategy to capture foreign investment and tourist spending. Often these campaigns feature index-type objects as the centerpiece to communicate their identity. Unsurprisingly, the use of attention-grabbing digital imagery reinforces the pattern established since antiquity: patrons who seek to display status through spatial objects, now find on the internet and

other contemporary media, designers who offer an index-object design approach that at best downplay context, and at worst, render it completely irrelevant.

A salient example of contemporary urban synecdoche fueled by digital technology is Frank Gehry's Guggenheim Museum (GMB), in Bilbao, Spain. Metropolitan Bilbao, a once heavy industrial and shipping port community of over a million residents, experienced an economic downturn in the late 1980s. As a result, city authorities developed a strategy to revitalize Bilbao's urban image, and with its metamorphosis, attract tourism that would in turn promote other sources of investment capital. Like other cities and towns of the past, Bilbao's strategy focused on several urban interventions, such as new subway entrances and an airport, but the priority was the design and construction of an index spatial object that would communicate its dynamic nature to the world.⁹⁸ Its initial success in the world press, attracting tourists, and changing the existing or seeding new and exciting city images in the minds of many, gave birth to what has been dubbed the "Bilbao Effect."⁹⁹ To be sure, this essay has demonstrated that this spatial practice is not new, as Edwin Heathcoate stated succinctly "[t]he thing about the Bilbao effect is that it is a myth. You could just as well call it the Sydney Opera House effect, the Pompidou effect ... Bilbao wasn't the first city to be transformed by a self-consciously iconic building and it won't be the last."¹⁰⁰ When Bilbao's civic leaders conceived building their own "branch" of the Guggenheim, they gambled that having the recognizable Guggenheim museum name in combination with a spatial object designed by a world-renowned architect, could prove a winning strategy. The idea was simple: the success of the Guggenheim Museum as a destination would lead to economic prosperity as the city transformed itself into a tourist destination. From the beginning, contemporary media encouraged urban synecdoche, as Beatriz Plaza noted that "artistic and glamour magazines portray images of Guggenheim-Bilbao Museum, and even high-profile papers like the Financial Times and the Economist devote column inches to analyse it" while "reinforcing" the building's image as "non-reproducible space."¹⁰¹ Bilbao went from being an industrial city of Spain's north, to city whose identity was supplanted by a *unique* museum.

While the financial impact –the principal goal of the project– of the GMB has been widely debated (Plaza, Gómez, et.al.), it is undeniable that it has had a major influence on various aspects of spatial practice. On one hand, designers', especially architects', "tendency to attribute too much to a single building has become the architect's golden ticket."¹⁰² In other words, it promotes and reinforces a self-justification cycle: each project presents anew the opportunity to "break the internet," and hence, attract new commissions based on the promise of delivering the next GMB –all while context becomes an incidental placeholder. Heathcoate further notes that "[i]n trying to achieve too much, architects can forget the most important things. In the obsession with creating a form that is easily *instagrammable*, an architecture that acts as instant urban logo, the detail is lost."^{103, 104} On the other hand, the intensity of urban synecdoche is having an effect on how patrons view architects, as Witold Rybczynski writes "[w]hatever effect the Bilbao phenomenon will have on the way that tourists choose their destinations, it has already had a major influence on the way that clients, especially museums, choose their architects."¹⁰⁵

CONCLUSIONS AND IMPLICATIONS

The phenomenon of urban synecdoche is as old as human spatial production itself, yet each technological and mediatic innovation, along with recent developments within the context of globalization and its vast digital mediatic flow, have intensified its prominence. After the GMB, other spatial objects have taken their turn capturing popular imagination: Singapore's Gardens by the Bay, Dubai's Burj Khalifa, Taipei 101, Baku's Heydar Aliyev Center, and the newly proposed Amazon headquarters in Arlington, Virginia –to name just a few examples. From its humble beginnings as part of a wayfinding strategy, to the current conceptualization by patrons, and especially state actors, that a spatial product can draw attention –if not prestige– to a community, or revitalize a community from socioeconomic decay, represents a controversial approach to the idea of what it means to contribute to

the existing urban environment. What does a distant viewer, the contemporary world traveler, the urban flâneur learn or know about the cities of Bilbao or Baku? Urban synecdoche is effective precisely because the spatial object stands apart from the existing built fabric of communities, regardless of their sociocultural value systems, size and history. Yet, the GBM's arguable success in attracting city-wide tourism, and their consequent spending in the local economy, compounded by the internet age and its facile imagery, has intensified the impulse of building the next index-object while downplaying urban sociocultural contexts– a problematic approach previously identified by *Collage City*.

As many design students, and later professionals, become aware of the praise and recognition heaped on the latest index-object, particularly through magazines and internet dissemination, it is logical that they place their focus on achieving market recognition in the same way. Moreover, whereas most designers once competed for commissions at local or regional level and an exceptional few globally, today, mass media and internet means that market competition has become more democratic and globalized: the internet has allowed billions of users to post and access images in a globalized world. Ironically, as designers seek to distinguish their designs by their uniqueness, their projects have literally become examples of *utopia* (nowhere) or what more recently Christine Murray has called "notopia."¹⁰⁶ She summarizes "notopia" as a "world ... of isolated oases of glassy monuments surrounded by a limbo of shacks and beige constructions..." she continues by recognizing that "[t]his pandemic of generic buildings have no connection to each other, let alone to the climate and culture of their location." She then concludes that by the end of the current century, "the edge of Mumbai will look like the beginning of Shenzhen, and the center of Singapore will look like downtown Dallas."¹⁰⁷

Future Lines of Inquiry

As urban environments continue to evolve in response to wayfinding strategies, expressions of monumental power, and technology-driven media changes, we should next explore several questions regarding the phenomenon of urban synecdoche: Can we determine a relationship between the age of an index-object and how it is perceived? Perhaps, the longer an object has existed the stronger its synecdoche qualities. What is, if any, the correlation between the various dissemination media, i.e. clay tablet, newspaper, television, internet, and the index status of a spatial product in the mind of a global population? For example, are spatial objects that are experienced primarily on television more index-objects than those seen in the internet? Another line of inquiry should focus on context and place: to what extent does community, village, region, country, or any recognizable socio-cultural environment shape individual and group propensity to engage in urban synecdoche? Do societies engage more in urban synecdoche if they are industrially or economically less developed because of the potential uniqueness of spatial objects, or inversely, is the opposite true, because materially wealthier environments produce a constant flow of spatial objects that compete for attention? Similar attention must also be given to our academic institutions: what is the role of academic curricula – particularly History courses and design studios- in shaping the value systems of future design professionals? Finally, academic, research and policy institutions should be prepared to engage in analysis that provides an effective evaluative model, so that GBM-like financial strategies are weighed against more holistic urban strategies. Such lines of inquiry will undoubtedly prove to be the inspiration for future essays. Yet, in view of the role of index-objects in shaping the histories of the urban past, the most important question is what long-term effects will contemporary and future urban synecdoche design approaches have on contextually rooted *placemaking*?

References

¹ *Toile*, Fr.: canvas.

² Index: "Simply put, indices indicate. Indices always point, reference, or suggest something else. 'A sundial or a clock indicates the time of day...A rap on the door

- is an index...Anything which focuses the attention is an index' (Peirce 109).
"Symbol, Index, Icon", University of Chicago, accessed on July 10, 2019,
<https://csmt.uchicago.edu/glossary2004/symbolindexicon.htm>
- ³ Arguably, spatial products may be seem closer to *symbols* than *indexes*. Symbols, however, are defined as "arbitrary and unmotivated, reliant on conventional usage to determine meaning." (Ibid). Buildings and landscapes, at a minimum relate to their context by physically existing in it. Moreover, the spatial product embodies social *zeitgeist*.
- ⁴ Henri Lefebvre, *The Production Of Space* (Oxford, OX, UK : Blackwell, 1991):26
- ⁵ Manuel Castells, *The Rise of the Network Society* (West Sussex, UK: John Wiley & Sons Ltd. 2nd Edition, 2010):406
- ⁶ Hanspeter A Mallot and Stephan Lancier. "Place Recognition from Distant Landmarks: Human Performance and Maximum Likelihood Model." *Biological Cybernetics*, vol. 112, no. 4 (Aug. 2018): 291–303
- ⁷ Edward C. Tolman, "Cognitive Maps in Rats and Men." *Psychological Review*, vol. 55 (July 1948): 189–208
- ⁸ Hominin: the group consisting of modern humans, extinct human species and all our immediate ancestors (including members of the genera *Homo*, *Australopithecus*, *Paranthropus* and *Ardipithecus*). See, Beth Blaxland, "Hominid and hominin – what's the difference?" Australian Museum, last accessed on September 5, 2019.
<https://australianmuseum.net.au/learn/science/human-evolution/hominid-and-hominin-whats-the-difference/>
- ⁹ Herman Pontzer, "Evolved to Exercise." *Scientific American*, 00368733 (Jan2019): Vol. 320, Issue 1.
- ¹⁰ Jennie Robinson, "The First Hunter-Gatherers." *Oxford Handbooks*, Archaeology, Prehistoric Archaeology (April 2014).
- ¹¹ Robert Cohen and Therese Schuepfer. "The Representation of Landmarks and Routes," *Child Development*, vol. 51, no. 4, (Dec. 1980):1065–1071
- ¹² Daniel E. Lieberman. *The Evolution of the Human Head*. (Cambridge, MA: Harvard University Press. 2011):375
- ¹³ Tools fabricated an estimated to be 3.2 million years ago demonstrate hominin cognitive skills. Lombard, Marlize1, mlombard@uj.ac. z., et al. "Cognition: From Capuchin Rock Pounding to Lomekwian Flake Production." *Cambridge Archaeological Journal*, vol. 29, no. 2 (May 2019):201–231
- ¹⁴ Georgia Tsartsidou, et al. "Palaeoenvironmental Reconstruction and Flora Exploitation at the Palaeolithic Cave of Theopetra, Central Greece: The Evidence from Phytolith Analysis." *Archaeological & Anthropological Sciences*, vol. 7, no. 2 (June 2015):169–185
- ¹⁵ George R Stewart, *Names on the Land : a Historical Account of Placenames in the United States*. 4th ed. (San Francisco: Lexikos, 1983).
- ¹⁶ Paul Carter, *The Road to Botany Bay: An Exploration of Landscape and History*. 1st U. of Minnesota Ed. (Minneapolis: University of Minnesota Press, 2011).
- ¹⁷ Roland Barthes. *Mythologies*. Translated by Annette Lavers. (New York, NY: Hill and Wang, 1972):109
- ¹⁸ Ibid., 110
- ¹⁹ Christian Norberg-Schulz. *Genius Loci: Towards A Phenomenology Of Architecture*. (New York: Rizzoli, 1984, c1979).
- ²⁰ Circa 6,000 years ago.
- ²¹ Emmanuelle Honoré, "Prehistoric landmarks in contrasted territories: Rock art of the Libyan Desert massifs, Egypt," *Quaternary International*, Volume 503, Part B, 2019, Pages 264-272,
ISSN 1040-6182, <https://doi.org/10.1016/j.quaint.2017.06.068>.
- ²² Senarat Paranavitana, 'Sigiri, the Abode of a God-king', *Journal of the Ceylon Branch of the Royal Asiatic Society Centenary Volume, 1845-1945* (1950):130
- ²³ Ibid., 135

-
- ²⁴ Bernard Hamilton, "The Impact of the crusades on western geographical knowledge," in *Eastward Bound, Travel and travelers 1050-1550*, edited by Rosamund Allen, 15-34. (Manchester: Manchester University Press, 2014):15
- ²⁵ Rustichello da Pisa. *The Travels of Marco Polo*. c.1300 Translated by Thomas Wright. 2019. <http://public-library.uk/ebooks/60/81.pdf>
- ²⁶ Ibid., 184.
- ²⁷ Italics mine.
- ²⁸ Dante Alighiere, *Divine Comedy-Inferno*. Translated by Henry Wadsworth Longfellow. Creative Commons Attribution-Noncommercial Licence. 2019. <https://www.paskvil.com>file>files-books > dante-01-inferno>. 62.
- ²⁹ As with any era, medieval maps did document on other aspects to generate notions of place, such as Pietro Vesconte's 1321 topography-focused *Map of the Holy Land*.
- ³⁰ Bernard Hamilton, "The Impact of the crusades on western geographical knowledge," 29. In: *Eastward Bound: Travel and Travellers (1050-1550)*, Edited by Rosamund Allen, 2004.
- ³¹ Pnina Arad, "Pilgrimage, Cartography, and Devotion: William Wey's Map of the Holy Land." *Medievalist.net*, accessed on September 10, 2019. <https://www.medievalists.net/2017/11/pilgrimage-cartography-devotion-william-weys-map-holy-land/>
- ³² Palmira Brummett, editor, "Introduction: Genre, Witness, and Time in the 'Book' of Travels," *The 'Book' of Travels: Genre, Ethnology, and Pilgrimage, 1250-1700*. (Leiden, Netherlands: Brill. 2009):1-35
- ³³ "Hamd-Allah Mostawfi," *Encyclopaedia Iranica*, accessed on October 1, 2019. <http://www.iranicaonline.org/articles/hamd-allah-mostawfi>
- ³⁴ Hamd-Allāh Mustawfā of Qazwān, *The Geographical Part of the Nuzhat-Al-Qulūb*. Composed by in 740 (1340). Translated by G. Le Strange., and printed for the Trustees of the "E. J. W. Gibb Memorial". Vol. xxiii. Pp. xix + 322. (Leyden: E. J. Brill; London: Luzac and Co., 1919.) Price 8s. Chapter XIV, Introduction.
- ³⁵ Robert John Braidwood, "Where Agriculture and Village Life Began: The Excavation of Jarmo, Iraq." *Illustrated London News* 219 (December 17, 1951): 992-95.
- ³⁶ Encyclopaedia Britannica: "political organization of society, or the body politic, or, more narrowly, the institutions of government. The state is a form of human association distinguished from other social groups by its purpose, the establishment of order and security."
- ³⁷ Robert McCormick Adams. "Settlements in Ancient Akkad." *Archaeology* 10 (December 1957): 270-73
- ³⁸ Robert McCormick Adams. "Some Hypotheses on the Development of Early Civilizations." *American Antiquity* 21 (January 1956):227-32
- ³⁹ Urban: Defined here as the built environment of a permanent settlement that includes agrarian (including rural) and non-agrarian spatial uses.
- ⁴⁰ This pattern was so pervasive that the UN estimated that only in 2007 was most of the world's population considered to be more urban than rural dwelling. See, Hannah Ritchie and Max Roser, "Urbanization," *OurWorldInData.org*. <https://ourworldindata.org/urbanization>.
- ⁴¹ Michael Baigent, *Astrology In Ancient Mesopotamia, The Science of Omens and the Knowledge of the Heavens*. (Rochester, Vermont: Bear and Company, 2015):30
- ⁴² Hereafter, "status" will be used as the concept that combines an object's capacity to emanate qualities of power and wealth.
- ⁴³ "Genesis 11:3-5" *TLB Edition*. Accessed on August 16, 2020. <https://www.biblegateway.com/passage/?search=Genesis%2011:3-5&version=TLB>
- ⁴⁴ Bruce G Trigger, "Monumental Architecture: A Thermodynamic Explanation of Symbolic Behaviour." *World Archaeology*, no. 2 (October 1, 1990):119-32
- ⁴⁵ Stephen Daniels, and Denis Cosgrove, *Introduction: Iconography and Landscape, in The Iconography of Landscape*, Cambridge Studies in Historical Geography 9, ed. (Cambridge: Cambridge University Press, 1988).



-
- ⁴⁶ C. J Gadd, and Leon Legrain. *Ur Excavations Texts ...* (London: Printed by order of the Trustees of the two museums, 1928).
- ⁴⁷ Joe Uziel, "Middle Bronze Age Ramparts: Functional and Symbolic Structures." *Palestine Exploration Quarterly* 142, no. 1 (March 2010): 24–30.
doi:10.1179/003103210X12599211960366
- ⁴⁸ Assyrian International News Agency. "The Epic of Gilgamesh." Translated by N.K. Sanders. Section 22, 2019.
https://archive.org/stream/TheEpicofGilgamesh_201606/eog_djvu.txt
- ⁴⁹ Sarah Pruitt, History. "How the Ancient Greeks Designed the Parthenon to Impress—And Last." Accessed on July 10, 2019. <https://www.history.com/news/parthenon-acropolis-ancient-greece-engineering>
- ⁵⁰ J.B. Ward-Perkins. *Cities of Ancient Greece and Italy: Planning in Classical Antiquity*. (NY: George Braziller, NY. 1974):12
- ⁵¹ Jeffrey M. Hurwit. *The Acropolis In the Age of Pericles*. (Cambridge, UK: Cambridge University Press, 2004), 87, 89-91
- ⁵² Wallace Fergusson, *The Renaissance in Historical Thought, Four Centuries of Interpretation*. (Cambridge, MA: The Riverside Press. 1948):61-62
- ⁵³ Ibid., 63-64
- ⁵⁴ Along with other Renaissance scholars, spatial object canonization and their generative principles determined acceptable design until the onset of Modernism.
- ⁵⁵ Georg Braun and Franz Hogenberg. *Cities of the World*. Edited by Stephen Füssel. (Taschen. 2017):9
- ⁵⁶ Francois Penz, "The Cinema in the Map- The Case of Braun and Hogenberg's *Civitates Orbis Terrarum*" in *Cinematic Urban Geographies*, edited by Francois Penz and Richard Koek Editors, (New York, NY: Palgrave Macmillan, 2017):39-40
- ⁵⁷ Pier Vittorio Aureli, "City As Political Form: Four Archetypes of Urban Transformation." *Architectural Design* 81 (1), 2011:32–37
- ⁵⁸ Ibid.
- ⁵⁹ Jill E. Blondin, "Power made visible: Pope Sixtus IV as *Urbis Restaurator* in Quattrocento Rome," *The Catholic Historical Review*, Vol. XCI, No.1 (January 2005):1-25
- ⁶⁰ Abraham Akkerman, "Harmonies of Urban Design and Discords of City-form: Urban Aesthetics in the Rise of Western Civilization," *Journal of Urban Design*, Vol. 5, No. 3, 267-290, 2000
- ⁶¹ Jean-Marie Pérouse de Montclos. *Étienne-Louis Boullée (1728-1799): Theoretician Of Revolutionary Architecture*. New York: Braziller. 1974):27
- ⁶² Emil Kaufmann, 1891-1953. *Three Revolutionary Architects: Boullée, Ledoux, And Lequeu*. (Philadelphia: American Philosophical Society, 1952):435
- ⁶³ Ibid., 434
- ⁶⁴ Harald Bodenschatz, "Urban Design for Mussolini, Stalin, Salazar, Hitler and Franco (1922-1945)." (Planning Perspectives: PP 29, 3: 381–92, 2014):382
- ⁶⁵ Ibid., 383
- ⁶⁶ Alfred H. Barr, Jr., Phillip Johnson et.al, *Modern Architecture International exhibition*. New York, Feb. 10 to March 23, 1932. (New York, NY: The Museum of Modern Art, New York, 1932):13
- ⁶⁷ Ibid., 14
- ⁶⁸ Ibid., 15
- ⁶⁹ Ibid., 19
- ⁷⁰ Ibid., 20
- ⁷¹ Robert Venturi, *Complexity and Contradiction In Architecture*. (New York, NY: The Museum of Modern Art, New York, 1966, 2002):42
- ⁷² Ibid., 14
- ⁷³ Colin Rowe and Fred Koetter, *Collage City*. (Cambridge, MA: MIT Press, 1979, 1983):50
- ⁷⁴ Ibid., 56
- ⁷⁵ Ibid., 58

-
- ⁷⁶ Peter Davey, "Public Realm," *Architectural Review*, 1999 July, v.206, n.1229, 32-33.
- ⁷⁷ Irving E. Fang. *A History Mass Of Communication: Six Information Revolutions*. (Boston: Focal Press, 1997).
- ⁷⁸ W.R. Paton (Eds.). *The Greek Anthology, III*. (Cambridge, Mass.: Harvard University Press. 1916-1918):31
- ⁷⁹ Originally built by emperor Ashoka in the 3rd century B.C.E, the complex suffered an earthquake in the 2nd century B.C.E., leading to rebuilding and additions, such as the *toranas*.
- ⁸⁰ Debala Mitra. *Sanchi*. New Delhi: Director General Of Archaeology In India. (1965):39
- ⁸¹ Susan Masten, "10 Most Important Ancient Coins Ever Minted," *The Collector*. December 12, 2020. <https://www.thecollector.com/important-ancient-coins/>
- ⁸² "Brooklyn's Great Display," *New York Times* (May 25, 1883):1
- ⁸³ "The Brooklyn Bridge Open," *The Republic* (Springfield, MA. May 25, 1883):1
- ⁸⁴ "Opening of the Brooklyn Bridge." *The Nottingham Evening Post* (Nottingham, England), Friday, May 25, 1883:2; Issue 1580.
- ⁸⁵ Kathleen L. Brooke and Frank P. Davidson. "The Brooklyn Bridge." In *Building the World: An Encyclopedia of the Great Engineering Projects in History*, Volume 1. Westport, CT: Greenwood, 2006. <https://legacy-abc-clio-com.proxy2.library.illinois.edu/reader.aspx?isbn=9780313083037&id=GR3373-252>.
- ⁸⁶ Paul Souriau. *The Aesthetics of Movement*. Translated by Manon Souriau, after *Le Temps*, 1887 (Amherst, MA: University of Massachusetts Press. 1983):100
- ⁸⁷ Landmarks of the World. "Pinery 'Le Figaro'." Accessed on September 20, 2019, <https://www.wonders-of-the-world.net/Eiffel-Tower/Prinery-le-Figaro-on-the-Eiffel-tower.php>
- ⁸⁸ Italo Calvino. *Six Memos for the Next Millenium*. (Penguin Books, London 2009):83
- ⁸⁹ Francois Penz, "The Cinema in the Map- The Case of Braun and Hogenberg's *Civitates Orbis Terrarum*," 24-25
- ⁹⁰ Teresa Castro, "Cinematic Cartographies or Urban Space and the Descriptive Spectacle of Aerial Views (1898-1948)" in *Cinematic Urban Geographies*, edited by Francois Penz and Richard Koek Editors, (New York, NY: Palgrave Macmillan, 2017):52
- ⁹¹ Ian Christie, "Merely Local': Film and Depiction of Place, Especially in Local Documentary" in *Cinematic Urban Geographies*, edited by Francois Penz and Richard Koek Editors, (New York, NY: Palgrave Macmillan, 2017):82
- ⁹² Francois Penz, Aileen Reid and Maureen Thomas, "Cinematic Urban Archeology: The Battersea Case," in *Cinematic Urban Geographies*, edited by Francois Penz and Richard Koek Editors, (New York, NY: Palgrave Macmillan, 2017):194
- ⁹³ "History of the Television," *Bebusinessed*, accessed on October 5, 2019. <https://bebusinessed.com/history/history-of-the-television/>
- ⁹⁴ Tom Butts, "The State Of Television, Worldwide," *TV Technology*. December 06, 2013. <https://www.tvtechnology.com/miscellaneous/the-state-of-television-worldwide#:~:text=Globally%2C%20more%20than%201.4%20billion,one%20set%20in%20developing%20countries>
- ⁹⁵ Manuel Castells, *The Rise of the Network Society*. (Oxford, UK : Blackwell Publishers, 2000).
- ⁹⁶ Clearly, Internet access is also regulated by many states, yet is less regulated than other media.
- ⁹⁷ "Break the Internet," *Merriam-Webster*. Accessed on October 31, 2019. <https://www.merriam-webster.com/words-at-play/break-the-internet>
- ⁹⁸ Ulrike Wiebrecht, and Peter Wislocki. "Bilbao: Der Guggenheim-Effekt." *Baumeister*, vol. 96, no.10 (Oct.1999)26-37
- ⁹⁹ Alternatively, "Guggenheim Effect."
- ¹⁰⁰ Edwin Heathcote, "Is the Bilbao Effect over? -- It Is 20 Years since the Guggenheim Bilbao Opened. Frank Gehry's Building Has Been Much Praised, but How Has the Museum Really Changed the Area and Are There Too Many Cities Trying to Do the Same Thing?" *Apollo*, vol. 185, no. 651. (Mar. 2017):38-39



- ¹⁰¹ Beatriz Plaza, "The Guggenheim-Bilbao Museum Effect: A Reply." *International Journal of Urban and Regional Research*, vol. 23, no. 3 (Sept. 1999):589–592
- ¹⁰² Heathcote, 38
- ¹⁰³ Italics mine.
- ¹⁰⁴ Heathcote, 38
- ¹⁰⁵ Witold Rybczynski, "The Bilbao Effect." *Atlantic*, vol. 290, no. 2 (Sept. 2002):138-139
- ¹⁰⁶ Christine Murray, "AR Issues: On "Notopia," the Scourge Destroying Our Cities Worldwide." *Arch Daily*, Accessed on May 4, 2020.
<https://www.archdaily.com/789475/ar-issues-on-notopia-the-scurge-destroying-our-cities-worldwide>
- ¹⁰⁷ Ibid.

Figure References

1. Courtesy of Rifle Paper Co.,
https://cdn.shopify.com/s/files/1/0094/5012/products/HW_RPC018_CitiesToile_Parachment_Roll_web.jpg?v=1527583546
2. Shashi Shekhar. Photograph, CC BY-SA 3.0
<<https://creativecommons.org/licenses/by-sa/3.0>>, via Wikimedia Commons
3. G.Freihalter. Photograph, CC BY-SA 3.0 <<https://creativecommons.org/licenses/by-sa/3.0>>, via Wikimedia Commons
4. Unknown Author,
https://en.wikipedia.org/wiki/Hereford_Mappa_Mundi#/media/File:Hereford-Karte.jpg
5. Georg Braun, Franz Hogenberg, et.al., Library of Congress.
<https://www.loc.gov/resource/g3200m.gct00128a/?sp=94>
6. Artist Unknown, Photograph. *War over the Buddha's Relics*, South Gate, Stupa no. 1, Sanchi.jpg, courtesy of Wikimedia Commons.
7. Unknown Artist, 1910s, "Woolworth and Municipal Buildings from Brooklyn Bridge, New York," 1910s. Postcard. http://artnectar.com/wp-content/uploads/2011/02/vintage_woolworth_building_brooklyn_bridge_postcard.png