## THE TOWER OF BABEL AND THE IMAGE OF THE CITY

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Tower of Babel.

In the painting by Pieter Bruegel the Elder in the Kunsthistorisches Museum in Vienna, 'The Tower of Babel', we see an image of both a monument and a city (Figure 1). While the tower itself, a large structure of vaults and arcades rising to the clouds, is only partially built, it puzzles the viewer: does the painting allude to an act of completion or to a process of decay?

The picture attempts a visualization of a myth which, along with others such as a flood, is one of the most striking biblical stories. And yet, it is one which is ambiguous as to its interpretation. It has stirred the imagination of writers from Dante to Kafka and Borges and has challenged painters from medieval times to the present. George Grosz, for example, wrestled with this image to portray the metropolis of the 1920s as Babylon.

The story of building the tower has particularly challenged the imagination of artists because it is one which describes *homo faber*: man as maker. Its implications, however, are double-edged: on the one hand a story of man's genius, his inventiveness and imagined infallibility, and on the other, of his limits and the potential destructiveness of human pride.

It is a story which presents the parable of building par excellence: man's urge to build and the realizations of this urge in structures ever larger, higher and more magnificent, a vision of monuments which reflect his glory, genius and pride. Not simply confined to a particular event in history, the story of building the tower has been with us in various forms, and continues today. It is a myth which helps us to understand the building of such monumental structures as the Empire State Building, the Gothic cathedrals or the freeways of Los Angeles. It is with us in the spreading suburbs of our large cities, it appears in the monuments of dictators and in those of the giants of commerce. It is an image which resonates in our memory of great empires long vanished, in the last year's Challenger and in the core of Chernobyl ...

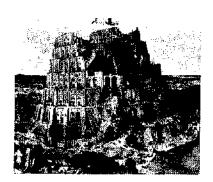


Figure 1. Pieter Bruegel: The Tower of Babel, Vienna, 1563.





Because the Tower of Babel presents such a striking parable of building, we decided to try it as a project for a large class of beginning students in the College of Environmental Design at Berkeley. Given the biblical text as a point of departure and examples from the history of images of the tower(from Mesopotamia to Fritz Lang's Metropolis) the students were asked to build a version of their own out of clay, positioning it specifically, both historically and geographically.

While the primary objective of this project was to allow the students the freedom to explore the myth of the tower as an initial design exercise, it also formed the basis for their writing stories, inventing settings and investigating the web of interconnections between man's history and his attempts to shape his environment. Though specific in focus the project also provided the students with the opportunity of investigating a larger issue: man's role as builder and the consequences of the act of design.

In the first stage, the students were asked to write a story of their own and to make drawings of their towers in the imagined context, presenting both plan and elevation. In the second stage, they worked directly with 25 pounds of ceramic clay, no longer with the aid of intermediate drawings. Here, some explored and refined their initial ideas while others started all over again, some of them several times, letting the tower evolve through the immediacy of working with clay (Figure 2).

In many ways the process the students followed during this three week project itself reflected the evolution of the image of the tower in the visual arts. This was especially true with reference to the place of the city in such images. While Bruegel's depiction has come down to us as the most incisive image of this monument, copied time and again by successor generations of Dutch painters, images showing the overall tower and its surrounding city were rare before the 16th century. This selective emphasis is all the more striking, when we note that the biblical account consistently links the tower and the city.

Pre-16th century versions in most cases show fragments of the tower: the 'historical' sense in depicting the monument is lacking in the medieval image. Instead, the world of the present served as a model for illustrating the past. And, rather than focusing on the image of the tower itself, these mosaics, miniatures and reliefs present an elaborate and vivid account of the process involved in making such a building: the casting of bricks, the stirring of plaster, and always, ladders, hooks and scaffoldings (Figure 3).



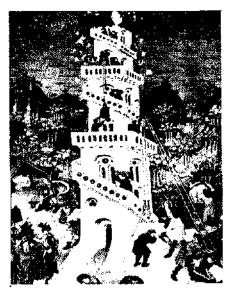


Figure 2. Students at work.

Figure 3. Late Byzantine mosaic, ca.1220,
San Marco, Venice.

Figure 4. Book of Hours, Duke of Bedford,

Figure 4. Book of Hours, Duke of Bedford

ca. 1430.

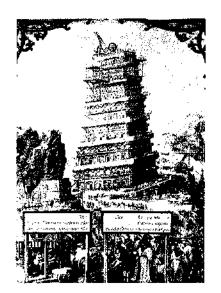


Figure 5. Flemish miniature, Brevarium Grimani, ca. 1500.

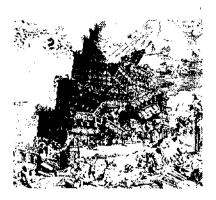


Figure 6. Cornelius Antonisz, 1547.

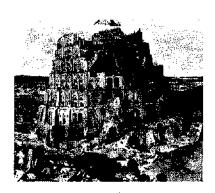


Figure 7. Picter Bruegel, 1563.

These detail views and the rare overall images of the monument are based on towers of the medieval city: round ones, square ones, or those of the campanile type. Step-like or spiral shapes which are typical in the 16th century paintings, do not occur. It is tempting to speculate that the images which the crusaders and travelling merchants brought back with them, eg., that of the tower of Samarra and the ziggurats of Mesopotamia, gradually found their way in the representations of the myth of the tower.

However, the introduction of overall views of the tower is perhaps the result of a decisive shift from a more conceptual approach in image-making to a tradition which emphasizes perceptually accurate representation of an actual or imagined reality, as in the Renaissance. A transition image is the French illustration from the 'Book of Hours' for the Duke of Bedford (Figure 4). The intricately decorated and imposing tower reaches the sky. Although the monument is clearly under construction, its destruction is already visible at the top. Stones topple, the workers fight with one another and some fall off the scaffolding. The image here still has a conceptual element. The tapestry-like arrangement of the landscape and of the sky, and the image of the camel all allude to an 'imagined' Orient. This is one of the first illustrations showing a tower consisting of a spirating ramp on a square base.

An image of the same type, but far more dramatic, can be found in the Brevarium Grimani, ca. 1508 (Figure 5). Its illustrator has a greater mastery of perspective and the tower is set in a 'real' rather than schematic landscape; this painting clearly aims at accuracy in historical terms by placing it into 'believable' surroundings. Ascending ramps for wagons emphasize the gigantic dimensions of the tower, as does the diminutive scale of the surrounding city and harbor.

Whereas the Grimani image shows no sign of the tower's destruction or of God's wrath (this absence perhaps indicating the level of the Renaissance ego), an etching by Cornelius Antonisz depicts the tower virtually bursting apart (Figure 6). The trumpets of the angels initiate the collapse of a round steplike structure resembling the Colosseum in Rome. Here, we find one of the early examples of a round tower, a type which subsequently becomes predominant.

The 16th century is dominated by three types of imagined towers which were copied in numerous variations. The classical example is the one used by Bruegel and his sons: A round, dilating step-like structure emerges directly from the ground (Figure 7). There is no separating base. By contrast, The van Cleeve family and their followers depicted the tower as a spiralled shape atop a square base, while the third type, one employed by painters of the Valkenborch family consists of right-angular structures on top of a square base (Figures 8, 9).

As these types evolve, the tower becomes more and more part of the city. In Bruegel's painting, the urban surrounding is the traditional city of the time: city and tower are distinctly separated by building type and scale. In the van Cleevetype, the city takes on the same structure as the tower. It becomes an envisioned metropolis. The tower's square base mediates between monument and city, integrating it with the urban grid. Streets and ramps move alongside at ground level. In the last of the three types, the tower itself appears as a gigantic building, one which merges directly with the surrounding city, set-off by tiny buildings and intricate street life which flank it. Here, in the fantasy of the painter, the skyscraper is born.

These three types also differ in the precise focus of their depiction. With Bruegel, it is the process of building the tower, the cutting of stones and their transport to the top by means of numerous technical devices, all elaborately shown. Cranes lift the stones, small buildings are tucked under the arcades to house tower

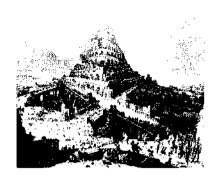


Figure 8. Hendrick van Cleeve, ca. 1600.

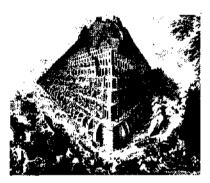


Figure 9. Maarten van Valkenborch, ca. 1600.

workers. In later types, by contrast, the activity of building is brought into the foreground, separated from the tower which now becomes a monument. In certain cases, this monument is shown in a ruined state, a remnant of a previous age, now housing new buildings within an ancient shell. In the development of these three types we see a shift from accounts which focus on the mythical story to ones which depict architectural fantasies, presaging Piranesi, Sant'Elia, Chernikoff, Archigram et al. Thus the tower of Babel image contributes to and fashions the architect's dreams.

It is dreams like these which we see in the student projects, revealing to us their understanding of what it means for them to design, to build and to shape the world. It tells us about their aspirations as designers, their visions and their fears.

In Rohini's project we see echoed the form of a cooling tower in a nuclear plant whose surface invokes at the same time the decorative patterns of Sri Lanka, her home. One side is cracked open, revealing a city in many levels, reiterating those of civilization. While the tower itself is still being built, the threat of nuclear destruction hovers at the edge of the city.

In Tina's project we see a somewhat dark version of the Berkeley campus. In the background stands the campanile and a gate. Figures arise in protean fashion, struggling with each other to mount a twisting staircase whose destination remains unclear. The project emphasizes the foibles of ungoverned competition. The craftsmanship involved, however, is redemptive.

In the White City which rises like El Greco's Toledo from the dome of a rock, we see a tower against the night sky. Janus-like, one side presents a detailed facade to the city below. Here, the history of architecture is recapitulated, from primitive arches and the Parthenon up to the Empire State. However, its back reveals a crumbling set of catacombs and leaves us with a question (Figure 12).

In the Underground City, the surface of the earth has been laid waste: a city is rebuilt in a subterranean cavern. To the side, we see a tiny figure who burrows through the rock, succumbing before he reaches his goal. This city is reborn, like the Phoenix, but now underground (Figure 13).

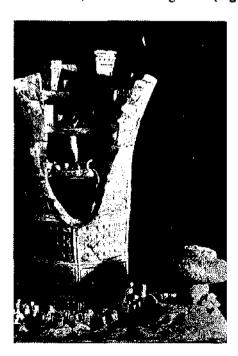




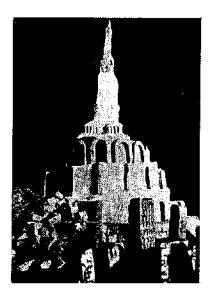
Figure 10. Rohini's project. Figure 11. Tina's project.

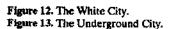
It is the theme of the city itself which, in the majority of these student projects figures as the parallel image to the tower, its extent in space somewhat mirroring the tower's vertical rise. The image of the monument and the city are inextricably intertwined, and it is the contrast between their axes, horizontal and vertical, which makes the tower a monument.

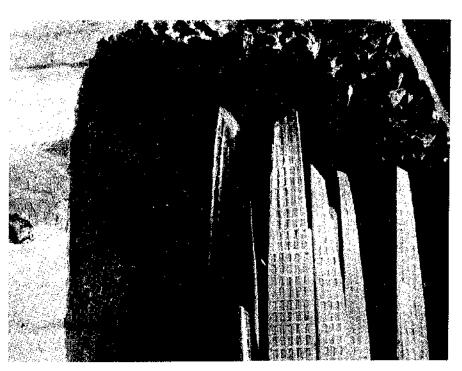
It is important to recognize that in the biblical account, tower and city are consistently mentioned together. "Let us build us a city and a tower, whose top may reach unto heaven" (Genesis 11:4). The tower is shown as an outgrowth or projection of the forces which create the city itself. It is a culmination of the same gesture. However, where the city extends horizontally, the tower is vertical, reaching to the heavens. We have here the origin of monuments. Mark Girourard, writing in The Listener (6 Oct. 1983), has suggested that it was the startling increase in the size of cities in the early 19th century that led to a reinvocation of the image of Babylon in our own times. That is, as London, and later Paris, reached such a size that they could no longer be seen in their entirety from one single vantage point, the image of the tower came to represent this condition in symbolic form: the tower of Babel as objective correlative for immeasurability. In this way the tower represents man's attempt to usurp the role of God, and, as we see in the story of the Golden Calf, where a man-made idol is substituted for the divine, here a built form (the very act of building, as it were) is substituted for God's powers of omniscience.

Curiously, this substitution is borne out quite literally in the Biblical text; consider the role of sense perception: man speaks and hears, both of which are less encompassing than the faculty of sight which, significantly, is ascribed to God alone. "And the Lord came down to see the city and the tower which the children of man builded" (Genesis 11:5).

We might say, then, that the biblical account is a parable of the unknowable, one which suggests that the limits of man's understanding (and hence his actions) are necessarily divine in origin, thus the challenge of the tower is not a physical one. Rather, it has to do with man's sense of himself, and of his role on earth. Homo faber, yes, but to what end?







The biblical story emphasizes this: the tower per se is not evil, only man's intentions in building it, and what he means to achieve. We have here a critique of design in the most profound sense, one driven home by the story's conclusion. For it is not the tower of Babel which is destroyed (in fact, there is no mention of physical destruction anywhere in the entire account) but rather man's language, his ability to devise, to design, to bring such a project to realization. "Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth" (Genesis 11:9). The punishment for building the tower takes place not on the physical plane but rather in the confounding of tongues and with this comes the great dispersion: the people are scattered across the face of the earth.

The myth, then, is less one about one particular building as it is about building as such: the intentions which lead us to, and the consequences of the act of design. Here, then lies the pedagogical value of posing such a question to beginning students. For, rather than presenting a fixed problem in which preconceived notions are already built in, this approach demands a questioning of the very foundation of architecture. And, because of the immediacy of working directly through clay rather than through intermediate drawings, the acts of designing and building become one and the same.

## BABİL KULESİ VE KENT İMGESİ

## ÖZET

Alındı : 7.10.1990 Anahtar Sözcükler: Temel Tasarım, Kule Yapıları, Babil Kulesi.

İncil'deki Babil Kulesi'nin yapımı öyküsü tarih boyunca sanatçıların hayal gücünü kamçılamış, değişik biçimlerde günümüze kadar gelmiştir. Öyküde homo faber (yapıcı insan), yani insandaki bina yapma dürtüsü ve bu dürtünün daha da büyük, daha da yüksek ve görkemli yapılarla gerçekleştirilmesi anlatılır.

Bu çarpıcı özelliği nedeniyle kuleyi, 'Berkeley College of Environmental Design'daki (California Üniversitesi) oldukça kalabalık bir birinci sınıf stüdyosunda denemeye karar verdik. Projede İncil'deki metin ve tarih içinde kulenin betimlemelerinden (Mezopotamya'dan, Fritz Lang'ın *Metropolis*'ine kadar) yola çıkıldı. Öğrencilerden, kulenin tarihsel ve coğrafi konumunu belirleyerek kendi yorumlarını kilden üretmeleri istendi. Bir ilk tasarım ödevi olarak kule efsanesinin özgürce araştırılmasını amaçlayan projenin birinci aşamasında, öğrencilerden bir öykü yazmaları ve kuleyi hayal edilen ortam içinde plan ve cephe olarak çizmeleri istendi. İkinci aşamada doğrudan seramik kille (11 kg.) çalışıldı. Kimi öğrenci ilk düşüncesini geliştirirken, kimi de bunu bir yana atıp doğrudan kille çalışarak kulesini biçimleme yoluna gitti.

Öğrencilerin bu üç haftalık projede izledikleri yol bir çok yönden kule betimlemesinin görsel sanatlarda geçirdiği evrimi yansıtmaktaydı. Bu özellikle tasarımlardaki kentin konumu açısından geçerliydi. Öğrenci projelerinin çoğunda kent teması ile kule teması paralel gitmekte ve mekan içindeki uzanım bir anlamda kulenin düşey yükselişini yansıtmaktadır. Anıt ve kent imgesi içiçe geçmiş olup yatay ve düşey eksenler arasındaki karşıtlık kuleyi bir anıt haline getirmektedir. Sonuçta efsane bu tek binadan çok, bina yapımıyla, bizi tasarım eylemine götüren amaçlar ve bu eylemin sonuçlarıyla ilgilidir. Mimarlık eğitiminin daha başında olan öğrencilere böyle bir soru yöneltmenin pedagojik değeri işte burada yatıyor. Önceden edinilmiş kavramları içeren belirli bir konu sunmak yerine izlediğimiz bu yöntem, mimarlığın kendi temelllerinin sorgulanmasını getirmiştir. Çizimler yerine doğrudan kille çalışarak ise, tasarlama ve bina yapma eylemleri birleşmiş olur.