THE LARGE TOWER OF BABEL BY PETER BRUEGEL
- ITS PRECEDENTS AND ANTECEDENTS IN THE
ARTISTIC IMAGINATION AND IN ARCHAEOLOGY

by

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B.A., University of Saskatchewan, 1971

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
in the Department
of
FINE ARTS (HISTORY)

We accept this thesis as conforming to the
required standard

THE UNIVERSITY OF BRITISH COLUMBIA
September, 1976

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ABSTRACT

This thesis was originally commenced with the intention of examining the various artistic representations of the Tower of Babel, then comparing them with possible sources of inspiration such as the Biblical account, Herodotus, and the original (as now revealed by archaeology). So far about two hundred and thirty illustrations have been found, mainly in the form of manuscript illuminations, frescoes, mosaics and paintings. As this piece of research would run into several large volumes, it has been decided to concentrate upon a most outstanding example, that of the painting executed in 1563 by Peter Bruegel which is usually referred to as his "Large Tower of Babel".

The precedents and antecedents of this painting have been studied and special attention given to influences such as the medieval traditions of allegory in literature and symbolism in painting. Because of the use of symbolism by Bruegel in much of his painting, an attempt has been made to ascertain whether or not the religious or political motives often connected with this are present—and the conclusion reached is that to some extent they must be.

There is at present very little in the way of detailed description of the painting by art historians, and so attention has been given to this, accompanied by a search for sources of Bruegel's inspiration. One result of this has been the
discovery that Giulio Clovio provided some ideas for the painting and himself collected another larger example not now in existence. The description by Vasari would suggest that the subject was something of a wonder in Rome in the 1550's, thus providing another cogent reason for Peter Bruegel's interest in it during and after the time of his visit to Italy.

It is concluded that the particular form which Bruegel's tower takes is mainly the cumulative result of his own powerful imagination, the imaginations of his contemporaries and predecessors, combined with literary detail available from Herodotus and to some extent the Biblical account.

While travellers' tales of Middle Eastern towers such as Samarra abounded, it seems unlikely that much of the original tower at Babylon remained to be observed, even if it were recognized in Bruegel's time. With the influence of the archaeological facts available to us today at nil then, comparatively speaking, the thesis section of detailed research into the actual form of the original tower becomes only of interest for the sake of comparison with the artistic form - and as a corroboration of Herodotus' important account. It therefore very properly becomes an appendix.
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ACKNOWLEDGMENT

I would like to express my gratitude to Dr. George Knox who gave freely and generously of his time, and whose many helpful suggestions have been of immeasurable value in the completion of this work.

I would also like to acknowledge my indebtedness to Dr. Mary Morehart for her careful scrutiny of the work and for the positive assistance given toward its completion, and also to the Inter-Library Loan Service without whose help I would have been unable to complete the research.
PART I

GENERAL DESCRIPTION

One of the best-known pictures of the Tower of Babel is the painting completed in 1563 by Peter Bruegel the Elder (?1525 - 1569). Under the name of "Peter Brueghel" he became a master printer in Antwerp in 1551, but by 1559 he had dropped the "h" from his name. His sons, Jan and Pieter the Younger restored the silent "h" and substituted the French "eu" for the Flemish "ue". It seems most fitting here to use the spelling he finally chose himself.

This painting is the more commonly reproduced of two similar paintings by him, and usually catalogued as "The Large Tower of Babel", signed and dated: "BRVEGEL FE. MCCCCC LXIII". As early as 1565 the large tower is recorded as belonging to the Antwerp merchant Nicolas Jonghelinck, who possessed a total of sixteen works by Bruegel. No information exists as to the commissioning of the painting, but it seems highly probable that Jonghelinck was the first owner. Van Mander later mentions it as being in the collection of the Emperor Rudolph II, and by 1659 it was in Archduke Leopold William's collection. It is now in the Kunsthistorisches Museum, Vienna.

Bruegel would have been aged 38 when he painted the large tower, assuming his birthdate to be 1525. This is arrived at
by taking the year 1551, which is proven to be the year of Bruegel’s acceptance into the Antwerp painters' guild, and subtracting 26, which was the normal age for admission as a master painter. A crucial visit to Rome was made in 1552-54, when he was perhaps 27 to 29, and when he died in 1569 he would have been at most 44.

The second known painting of this subject by Bruegel may have been completed as early as 1554, perhaps when still in Rome, and is a first pointer to the origin of Bruegel's interest in it. Known as "The Small Tower of Babel" (60 x 74.5 cm as against 114 x 155 cm.) this panel-painting was also listed as being in the Rudolph II collection. It is now in the Boymans-Van Beuningen Museum, Rotterdam.

A third version of the tower by Bruegel, now lost, was a miniature on ivory done while he was in Rome. It was probably given to the miniaturist Giulio Clovio, who was a close acquaintance, as it is mentioned as being in his possession in his will of 1577.

The Large Tower scene shows a colossal round, stepped tower, which looks as if it could accommodate as many people as a small town in the labyrinthine tunnels of its depths. It reaches to the clouds and engulfs a rocky outcrop, used for support, on the edge of a fortified city. It leans a little menacingly to the left and towers over even the painter's viewpoint on
his high foreground vantage point - as if getting out of man's control, being too ambitious for his powers (Illus. 1). Stretching into the distance is a verdant Low Countries landscape on one side and an estuary (or the North Sea) on the other. The busy seaport exhibits a mixture of stone fortresses, Gothic spires or towers, and red-bricked, step-gabled houses typical of a Flemish city such as Bruges or Antwerp even today. The harbour, with its details of ships, carefully-drawn rigging and dockside stores must have been the subject of many preparatory studies in Bruegel's sketchbook⁷ - in fact the work can be read as much as a technical drawing as a painting (Illus. 2).

The human content and activity depicted in the painting is shown in such variety and frequency that Bruegel's output on that level alone may be said to be truly prodigious. The tower itself can be seen as a great hive of activity, with men hauling or hoisting loads, working treadmill cranes, climbing ladders and scaffolding, wielding picks, hammers and mallets. The tower obviously exists to be lived on, if not in. Thatched labourers' houses of wood and plaster have been built against the stone walls at various levels. Here women are seen at domestic tasks such as tending a window-box, cooking with a stew-pot over a fire right on the stone terrace, and laying out washing to dry on stone buttresses and on a picket fence somehow erected in the rock. In the harbour men climb
rigging or steer a log raft; on wharves and streets they unload cargoes, drive teams of horses through an arch or over a bridge, stack lumber and barrels and work in a blacksmith's forge (Illus. 3). 

Bruegel gives some prominence to the main group of figures by placing them on the foreground hill, on which the observer would also be standing. This part of the scene is set in the mason's yard, probably adjacent to the quarry, where they are at work cutting stone blocks for the tower. Several are using levers in a back-breaking effort to move a large block, while two nearest the observer form their own circle as they stoop, with rounded shoulders, to pound chisels with large wooden mallets.

Other stonemasons have dropped their tools and are rushing forward to kneel before a king who has entered the yard with a rather small group of followers. The king carries a gold sceptre, held as a symbol of royal authority, wears a low crown, sports a large iron two-handed sword - but is not elaborately dressed. The long grey cloak, doublet and hose, although perhaps of fine linen or silk, are not ornate and are not intended to convey the impression of great opulence, for they would not be unknown to Flemish weavers and prosperous merchants accustomed to orders from local titled folk and prelates. In fact, Foote goes as far as to say "Earlier painters had depicted Nimrod as an imposing monarch full of
pride and deserving of his punishment. Bruegel shows him as a vain, petty dignitary whose arrival merely slows the work. A heavily cloaked, corpulent figure in a dark round hat immediately next to the king, gesticulates in the explanation of some detail (he may be the architect).

Several courtiers are brightly attired but not with the expense and grandeur then associated with a Near Eastern court in Old Testament times. This leads inevitably to the question of whose court is here represented - that of the potentate Nimrod connected with Babylon and the Tower of Babel - or that of a more local dignitary more contemporary with Bruegel (Illus. 4). Certainly the first impression which would come to the minds of Bruegel's peers would be that of Nimrod, since he was repeatedly illustrated in the Babel story, possibly in line with the Church teaching of the day. Precise dates would not be known and Genesis 10 : 8, 9 says:

"Nimrod, a mighty hunter before the Lord. His kingdom in the beginning consisted of Babel, Erech and Accad, all of them in the land of Shinar ..." [Mesopotamia].

Full use would probably have been made of the didactic value of the Babel story and it would not then have been seen simply as an account of how the survivors of the Flood, descendants of Noah, began to talk different languages.

While the details of the artist's intent should be left
until later, it would be appropriate at this initial stage to deal generally with the scene as it relates to Bruegel's artistic beginnings. A comparison with a tapestry design by his teacher, and subsequent father-in-law, Peter Coecke van Aelst, reveals some basics in Bruegel's style. This tapestry is one of a series depicting scenes from the life of the Apostle Paul, and is authenticated by a drawing, bearing Coecke's signature, which is the model for the tapestry illustration. This series is ranked in importance, both for design and execution, with two others for which the weaving was also done in Brussels with the low-warp method. These others are the "Acts of the Apostles", for which Raphael designed the cartoons, and the "Conquest of Tunis", designed by Jan Vermeyen. Julius Held, in describing the tapestry, which was then at the Detroit Institute of Arts, says that, on examination:

"... one encounters a conception of landscape and a figural design of striking natural simplicity and freshness - ... boats ... scattered over the sea, whose wide surface is rippled by smoothly breaking waves; figures of peasant type, heavy and solid molded into a mass, lacking the graceful movements obviously aimed at in other parts of the tapestries, - human habitations between hills and rocky cliffs in the distance. In all of this is revealed a feeling for nature itself scarcely ever before expressed in Flemish art".

This description fits portions of Bruegel's Babel scene very closely and could equally well be applied to that painting. If one accepts Held's tapestry dating of 1540, and the earliest
birthdate given to Bruegel of 1525, the young apprentice to Coecke would then have been fifteen. This makes Bruegel's contribution to the tapestry design something of a possibility, but this chance becomes much more remote if we accept the birthdate of 1528-30 given by Stechow, for example\(^1\) (Illus. 5).

That Bruegel's genius in painting was not developed at an early age seems much more likely, however, since we know that as late as 1550 he was working in a subordinate position to Peter Balten (or Baltens). This was on an altarpiece commission for the church of St. Rombout, won by the shop of Claude Dorizi at Mechelen (Malines). Balten worked on the centre part while Bruegel was assigned the wings\(^14\). This being so, it seems quite probable that Bruegel did not contribute to the background scene of the tapestry design in 1540, but, as Julius Held says, "it shows clearly enough that in Coeck's atelier, valuable impulses could be passed on to him"\(^15\). That we have here one source of inspiration for parts of the landscape and people of Bruegel's Babel is certain. We should now turn our attention to the deeper questions of the artist's intent and inner meaning, as this will give us a clearer understanding of the cause and effect at work in the painting. It will then be more readily understood when viewed as a whole.
SYMBOLISM AND THE TRADITION OF ALLEGORY:

It is clear that there is an element of symbolism in the picture because of the portrayal of people, buildings, and landscape as those of Bruegel's day - Babylon is in fact translated into the 16th century Low Countries. This was not strange to Bruegel's audience, since they were used to an artistic convention in which "everything in a painting was to be judged and enjoyed both as a symbol and as an accurate portrayal of real life\(^{16}\).

Given that such a level of symbolism exists, one must then ask if it is also used on a deeper level: for example, as the figures are Bruegel's contemporaries, it would be an easy transition to implicating reigning monarchs or princes of Bruegel's time into the story.

That symbolism on the deeper level is likely in Bruegel's work is demonstrated by the reasoned argument of Kenneth C. Lindsay, and Bernard Huppé, appearing in the Journal of Aesthetics in 1956\(^{17}\), which is worth reproducing. Briefly, there is a long tradition of medieval allegory and underlying aesthetic theory with foundations in St. Augustine's De doctrina Christiana (which is in effect a fundamental programme of Christian culture):

"St. Augustine ... considers all poetry (and painting as a form of expression would be included), to have two parts, sense and sentence; that is, story and underlying meaning. These two parts stand in the relation of shell and core. The process of comprehension involves penetrating the shell to reach the core of meaning. Appreciation, aesthetic
satisfaction, is equated both with the process of comprehension, and with the difficulty of discovering the underlying meaning. Indeed, aesthetic satisfaction appears to be proportional to the difficulties of the sense and the Christian clarity of the sentence (underlying meaning): 'No one has any doubt', says Augustine, 'that some things are understood more readily through figures of speech, and that when something is searched for with difficulty, it is, as a result, more delightfully discovered'. Augustine's theory, since it relates intellectual difficulty and aesthetic satisfaction, helps to explain the prevalence of the specifically medieval mode of allegory, whether literary or pictorial. For if a work has its fundamental aesthetic function in demanding interpretation, what is more natural than allegory, for in allegory, the characters and story exist for their meaning, not for their fictional reality. The understanding of an allegory is predicated upon interpretation.

It is logical that in a world such as Bruegel's, which retained many medieval customs and much of the medieval outlook on everyday life, and in which change was engendered relatively slowly, one would expect to find symbolical narration both in literature and painting. For what would be more natural for a serious painter than the working out for himself of a pattern which, though not strictly allegorical, would preserve that acceptable mode of interpretation? We find that Northern painters such as Melchior Broederlam, Jan van Eyck, and the Master of Flémalle sustain a strong tradition of disguised symbolism right through to near-contemporaries of Bruegel such as Albrecht Altdorfer, Aertson, Lucas Cranach the Elder, and Maerten van Heemskerck. One good example is Ketel's allegorical painting of the proverb "Desire has no rest", where a man is:
... stepping over a bottomless pit; he is blindfolded by Sensuality; Peton, a medicinal herb, is growing behind him, and a newly born child is lying at its root - this herb symbolises spiritual life. In front of the man, Napelles, the most poisonous herb is growing. A skull is at its roots - symbolizing spiritual death. This allegory shows that man is so eager to get only temporal goods that he neglects those which serve for his salvation ...".

That Bruegel himself was part of the long tradition of users of allegory is certainly not denied by this quotation from Abraham Ortelius, the geographer and scholar, in his *Album Amicorum*:

"Multa pinxit, hic Brugelius, quae pingi non possunt, quest Phiniers de Appelle. In Omnibus eius operibus intelligitur plus semper quam pingitur." 

While this passage is obviously eulogistic, it shows an appreciation of Bruegel - as a person who "painted here many things that cannot be painted" - on the part of a true contemporary (born 1527 in Antwerp and died in 1598) who came near to being a universally educated man in the sense that Leonardo da Vinci or Erasmus were. As well as being a geographer, Ortelius was a cartographer, archaeologist, art collector, and a student of religious concepts, and of their more abstruse interpretations.

Like many of the cultured Catholics of his time, Ortelius had a detailed knowledge of the writing of St. Augustine. Augustine had been recognized as a leading authority on aesthetics and his works had the added merit, for many, of having the Church's stamp of approval.
In addition to all this, Ortelius began his career in Antwerp as a colourer of maps, and by 1570 had published the world's first systematic collection of maps (with the title Theatrum, or a "display", since the word "Atlas" was not then used). It was also an outstanding example of the art of cartography in copper plate engraving. Through his long connection with the print shops of Antwerp, Ortelius would have another interest in common with Bruegel. However, it is the link with the academic world, and the interest in symbolism which is more important to us. He corresponded with such divines as the Spanish Biblical scholar Benedictus Arias Montanus. With his enquiring mind, and informed opinion, it would be natural for him to have discussed with Bruegel such questions as the use of symbolism in art.

That Bruegel's art seemed esoteric even in his own time is clear, and the statement that he "painted ... many things that cannot be painted" may refer to his skill, or to his use of symbolism - the painting of abstract ideas by inference. The opening passage of this "epitaph", with a translation by A. E. Popham, is also worth considering:

"Dijs Manibus scrum
Petrum Brugelium Pictorem fuisse sui seculi absolutissimum,
nemo nisi invidus, emulus, ant eius artis ignarus, umquam negabit. Sed quod nobis medio etatis flore abruptus sit,
an hoc Morti, quod fortasse eum ob insignem artis peritiam,
quam in eo viro observaverit, etate proiectorem duexerat;
æd nature potius, quod eius artificiosa ingeniosaque imitatio-
tione, sui contemptum verebatur, imputaverro, non facile
dixerim."
"[Sacred to the Gods of the Underword. No one except through envy, jealousy or ignorance of that art will ever deny that Peter Bruegel was the most perfect painter of his century. But whether his being snatched away from us in the flower of his age was due to Death's mistake in thinking him older than he was on account of his extraordinary skill in art or rather to Nature's fear that his genius for imitation would bring her into contempt, I cannot easily say.

Abraham Ortelius
dedicated this
with grief
to the memory
of his friend]"\textsuperscript{27}

This passage reveals the literary, as well as artistic milieu, to which Bruegel belonged. By his association with Ortelius, it appears that he was a person of some intellectual stature, and acquainted with both the traditional and avant-garde thought of his day. To confirm that Bruegel was part of a long tradition of allegory, we should look for specific examples of symbolism, and of the way in which he used it. It can then be seen if these methods can be detected in his Towers of Babel.
BRUEGEL'S USE OF SYMBOLISM:

Just as medieval allegory demands of its audience a willingness to study the externals so as to come to the underlying meaning, so perhaps Bruegel will ask his viewers to study the composition of his paintings, in order to realise their meaning. One envisages searching through masses of detail in order to arrive at the iconographical centre; however, one rule by which our search may be guided is given by Gustav Glück:

"A ... characteristic of his art is that he hardly ever places the chief event of the story in the visible centre of the picture; he tries rather to conceal than to emphasize it."28

Taking a work of art with an obviously Christian theme, which lends itself to symbolism, the "Conversion of St. Paul", the rule of Glück obviously holds good, since the eye is detained in the foreground, while searching for the subject of the title. The figures on horseback, and those crowding through the Alpine Pass on foot are not all focusing their attention on some great, traumatic event, but are continuing on their way, as if unaware of an unusual occurrence having taken place. Only as the eye wanders to the middle ground of the picture can we pick out a prostrate figure, and a very few others looking up toward the source of light. (Illus. 6)

So in looking for the obscure centre of the painting, we
become aware of other elements which Bruegel wished to emphasize - the obvious blindness of the majority to such a spiritual event, the state of common ignorance which Paul shared with humanity when he was Saul, just a bit further back on the road. Bruegel has used both obscurity and contrast to bring out his theme. (Illus. 7).

In a Biblical theme such as the "Conversion of St. Paul" it is relatively easy for a painter to incorporate a political message under the camouflage of a religious one. However, Bruegel is also equivocal when dealing with non-Biblical subjects. In les Gueux - literally "the Beggars", but generally known as "the Cripples" - there is an overt appeal to human sympathy with a religious undertone. This is to the effect that deformed bodies were paying the wages of sin through loss of the symmetry ordained by God. To Bruegel's contemporaries, "Sin" would here perhaps be war, man's apathy toward poverty or the activities risking syphilis, but this is the maximum moral inference that can be extracted from this painting.

On the other hand, the soldier's red "shako" hat, the bishop's mitre, and the chasuble of the beggar with his back turned, would all be symbols of Spanish authority, and so the establishment would be implicated in this scene. The painting had been signed and dated by Bruegel in 1568, and two years before this date "Vive le Gueux!" had become the rallying cry in the Netherlands of an anti-Spanish resistance movement which
had as its emblems begging - bowls, chains, and foxtails²⁹ (Illus.8).

The history of this, briefly, is that when the Emperor Charles V ended his fifty-year reign, in 1555, he left his imperial title in Germany to his brother Ferdinand, and the Netherlands to his son Philip. Unfortunately, Philip II had been brought up in Spain, whereas his father had been raised in Brussels, and had understood the Netherlands well, making Antwerp the mercantile and economic capital of the Hapsburg Empire.³⁰ Philip could speak neither French nor Dutch, and could empathise with neither nobility nor merchants. Feeling a foreigner he left for Spain in 1559, never to return.

His Regent, Margaret of Parma, was more sympathetic but was hindered by her council and the fact that all decisions had to be approved from Madrid. Philip increased the number of bishops, and with the new bishops came an intensification of the papal Inquisition. On April 5, 1566, a deputation of minor nobles, mostly moderate Catholics or Protestants, went to the Regent's palace in Brussels to request the ending of the Spanish Inquisition, which was foreign to the Netherlands. Henri Pirenne describes how these signatories to the "compromise" drawn up at the palace of the Count of Culembourg received their new title:
"Le soir, un banquet réunissait les signataires du Compromis à l'hôtel de Culembourg. La Plupart d'entre eux s'étaient fait tailler la barbe «à la Turque», portaient des vêtements de couleur grise et étaient pour vus de besaces et d'écuelles comme celles des mendiants et des gueux qui erraient par le pays. Que signifiaient ces singuliers emblèmes destinés, comme jadis les hivréés des signeurs anticardinalistes, à servir de signe de ratillement aux ligueurs? Ce fut, semble-t-il, une parole injurieuse prononcée, le matin même, peut-être par le comte de Berlaymont, qui en inspira l'adoption. Toujours est-il que soir-là fut pousse pour la première fois ce cri «Vive le Gueux!» qui, durant tant d'années, allait retentir dans les provinces."

With the fame of "le Gueux" spreading countrywide, it seems unlikely that Bruegel would title a picture similarly without considering the implications it would have. Looking away from the centre of the painting, we see a shadowy female figure stealing away to the right. She bears in her hand a silver (?) collecting plate with a coin in it. Could this be Margaret of Parma, leaving the Netherlands without accomplishing what had been hoped of her, - without having helped the Dutch people to achieve their birthright of freedom? (She departed in 1567.) If we are to follow Glück's suggestion that Bruegel hardly ever places the main theme in the visible centre, such an explanation of the figure's importance is more likely to be true. Certainly Pirenne sees a message in the painting, although his focus is more to the centre; he also sees further ramifications:
"Il est donc pas impossible que le terme de «Gueux» décéré par Berlaymont aux signataires du Compromis des Nobles qui portaient des queues de renard à leur chapeau le 5 avril ait été suggéré au président du Conseil des finances par la comparaison des nobles avec les mendiants affublés des mêmes attributs. Le choix de ces queues de renard apparaissait comme un défi à la personne de Simon Renard, ami de Granvelle ['Cardinal de Granvelle'] et diplomate dévoué la cause de Philippe II. Les nobles les firent pendre aux chapeaux de leurs domestiques puis s'en parèrent eux-mêmes. Le 19 juin 1564, à l'occasion du baptême d'un des fils de Pierre-Ernest de Mansfeld à Luxembourg, l'on vit paraître un individu déguisé en cardinal suivi d'un diable à cheval qui le frappait à l'aide d'un fouet formé de queues de Renard. Dans sa correspodence, Granvelle explique que le choix de cet emblème a été inspiré aux nobles par l'attitude de son ami Simon Renard.

While one may pursue the analogy this far, it should be remembered that Bruegel is equivocal. The foxes' tails do not have to be in defiance of Simon Renard, or to be suggestive of the "compromise", as foxes' tails were worn by beggars long before these issues came to light. For example, when Bruegel painted the "Battle Between Carnival and Lent" in 1559, he shows a crippled beggar wearing six foxes' tails. It does seem significant that he chooses to paint a similar group again, and to give them a title with a special meaning. Acknowledging that additional meaning may have been intended in "Les Gueux", we still cannot be sure of it. The very pitiful and unlovely aspect of "Les Gueux" would tend to discourage one from thinking he was sympathetic toward "le Gueux". However, we could assume that this discouragement would have been intentional both for reasons of Bruegel's own
safety (he would naturally have been afraid of the Inquisition), and out of respect for his moderate Catholic friends.

Probably Bruegel found that he could not always be true to his artistic instincts and to his political instincts in one and the same painting. Where a facet of a painting emerges which appears to conflict with his political inclinations — such as the pitiful aspect of "Les Gueux" — it is likely that he allowed the artist in him to predominate. He was in fact an artist first and other interests came second.

The opinion of some art historians is that a thread of political significance does run through some of Bruegel's paintings. With regard to the "Conversion of St. Paul", for instance, both Glück and Marlier consider it alludes to the passage through the Alps of the Duke of Alba's army in 1567. The dark figure on a white horse with his back to the viewer, to the right centre of foreground, may be intended to be the Duke of Alba (Illus.7).

Foote considers that the "Two Monkeys" (1562) may have had political, as well as other, aspects (Illus.9):

"Monkeys were commonly used to represent man's bondage to his bestial side and the picture can be seen as a blend of local scenery and didactic commentary on human weakness. In the 1560's, moreover, Bruegel's resentful countrymen felt that they were held in chains by the Spanish authorities in the Low Countries, which has led to the suspicion that the painting perhaps had a political meaning too"34
We should examine further paintings to ascertain the extent of Bruegel's symbolic intentions.

To take an example from mythology, the "Landscape with the Fall of Icarus" (c. 1558) is a mythological event, but again the setting is realistic. The eye searches for the subject, but first encounters the details Bruegel intended us to note: the ploughman hard at work, the shepherd with his flock, the fisherman by the shore, and the ship sailing on its way. Only after ranging the canvas do we see the legs of the mythical aeronaut disappearing under the waves between ship and shore in a cloud of spray (Illus. 10). The main theme as stated in the title is certainly obscured. What does the painter mean by this? One aspect of his intention is very clearly verbalised in the poem "Musée des Beaux Arts" by W. H. Auden:

"About suffering they were never wrong,
The Old Masters: how well they understood
Its human position; how it takes place
while someone else is eating or opening a window
or just walking dully along; ...
'In Bruegel's Icarus, for instance:
how everything turns away
Quite leisurely from the disaster;
the ploughman may
Have heard the splash, the forsaken cry,
But for him it was not an important failure;
the sun shone
As it had to on the white legs disappearing
into the green Water; and the expensive
delicate ship that must have seen
Something amazing, a boy falling out of the sky.
Had somewhere to get to and sailed calmly on."35
While the "Tower of Babel" may not be a painting about suffering, the understanding of the human condition which Bruegel reveals in the "Fall of Icarus" may well be applicable to both paintings.

Apart from suffering, what else could be symbolised (Illus.11) here? Since the legend of Icarus could represent the fall of pride, then in Bruegel's day, this would imply the fall into the eternal punishment of hell. Bruegel has concealed from the casual glance the head of a dead man, not visible in small reproductions, which appears in the undergrowth on the left of the largest tree on the left of the picture. Bianconi states that the dead man may be an allusion to the Flemish proverb: "No plow ever stops when a man dies". While this is an aspect of the theme of suffering, the additional meaning placed on it by Lindsay and Huppe is more satisfactory:

"A connection between the dying Icarus and the dead man exists powerfully on the symbolic level. Death as a warning to pride is an ever-present theme in European Christian literature, for pride will bring eternal death. The fall of Icarus and the detail of the dead man may symbolize the same thing, the eternal death of the soul through pride. The symbolic connection of ideas may serve to explain the otherwise unmotivated concealed detail of the dead man in Brueghel's Fall."

Thus, the deliberately obscured detail of the dead man may have the function of reinforcing the symbolism of the falling of Icarus. So both the main theme and a subsidiary theme are obscured.
What of the contrast between the violent death of Icarus and the peaceful activity of the rest of the scene? The ship heading for port can symbolize the reward of salvation for those pursuing their Christian duty. Similarly, the three living persons realistically performing their tasks in life are indicative of where our attentions are to be directed, with less importance given to the "high-fliers". We should pursue the path of duty followed symbolically by the ploughman, the shepherd, and the fisherman - this is the message to the observer. There seems to be little doubt that there is strong symbolism in this painting.

BRUEGEL'S SYMBOLIC METHOD APPLIED TO HIS LARGE TOWER OF BABEL

How does the method of obscuring the main theme apply to the "Large Tower of Babel"? In this case, the main theme, as stated by the title, is not obscured - there stands the tower "larger than life". However, since a characteristic of Bruegel's art is that he rarely places the chief event of the story in the visible centre of the picture, but tends to conceal it, perhaps the tower itself is not the most important part of the painting. The main organizational difference between this painting and the "Landscape with the Fall of Icarus", or the "Conversion of St. Paul" is that these have a foreground which provides a diversion from the subject in the title whereas the diversionary tower is placed in the
middle ground. We may therefore look away from the area dominated by the tower for the true iconographical meaning.

It seems probable that this will prove to be in the foreground group composed of king, courtiers, and stonemasons. After all, Bruegel is more concerned with people and events than buildings, so in this case, again, it seems that the subject that dominates the composition most (the tower) is not also its iconographical centre. As mentioned on page 5 of this chapter, King Nimrod is not ostentatiously dressed - and the group of courtiers is quite meagre. Yet it is this group that is probably the iconographical centre.

Accepting this aspect of interpretation, we see immediately that there is a contrast between the almost - humble king, and the large amount of respect being paid him by the kneeling stonemasons. Why this contrast? Probably because Nimrod and his tower were well-known as symbols of pride\textsuperscript{38}, Bruegel wanted to stress that Nimrod was only a human being and that therefore all the adulation was completely unjustified. Bruegel has hardly fitted Nimrod to the Biblical description of "a man of might on the earth" [I Chronicles 1:10] but perhaps this was unnecessary, since the mammoth structure behind him tells us of his power and ability - as well as his pride and ambition.
This leaves the way open for another interpretation of Nimrod himself. Since he is in contemporary dress, could not the "petty dignity" aspect of him signify the meddlesome rulers from Spain - perhaps one of them in particular? That the opportunity would have been taken to imply this seems especially likely since Babel in any case was taken to imply "Babble of tongues". The Spanish were at that time attempting to impose upon the Low Countries a new and unwelcome language - Spanish.

Added to this, Bruegel's intent at times (Illus.12) seems to have had political overtones. For example, in his painting "The Massacre of the Innocents", there appear to be similarities between the troops shown in this painting and those of the Duke of Alba, who carried out violent reprisals against Calvinists in the Brussels - Antwerp region in 1567. Unable to pass through hostile France, he had raised an army in Milan, marching northwards over the Alps [see the "Conversion of St. Paul" pages 13, 14]. He continued through Savoy and Lorraine, and so into the Low Countries, collecting German and Walloon mercenaries on the way, and entering Brussels in August of that year. The German Reiters wore blue-steel armour (the "black harness") and black cuirasses, while the Spanish and Walloons wore red cuirasses.
In "The Massacre of the Innocents" (Illus.13) some of the cavalry standing in reserve have black cuirasses, while some soldiers on foot have red ones. The rather disguised, transparent flag has on it a cross of the ceriphed type as used by the Spanish on banners and galleon sails.

There is one very noticeable exception which stands out among the mass of lances held vertically by the reserve of cavalry - a single lance held at an angle pointing directly to the flag. Almost under the flag is a lone, elderly bearded figure in black, sitting on a white horse. He seems to be an important element in the painting. Glück identifies this figure as the Duke of Alba. This view is supported by the comments of Stanley Ferber in his article on "P. Bruegel and the Duke of Alba":

"Close examination of the face of the 'black rider' shows an old man with a long, pointed gray beard and a full, drooping mustache. Beard styles of the mid- and late sixteenth century favored the shorter, more squared, 'spade' or 'shovel' beard shape. Almost nowhere in Bruegel's paintings can a long, pointed beard be found. Hence, the anomalous beard of the figure in black appears to be more than a simple genre touch. In examining sixteenth-century portraits to arrive at a generalization concerning beard styles, those of Ferdinand Alvares, Duke of Alba, are unique in the consistency with which they depict the Duke. Various engravings of the late sixteenth century, at least two contemporary with Alba's reign in the Lowlands, show him with the long, pointed gray beard and drooping mustache already seen in the figure in black in the Bruegel painting."
"... In examining portraits of the sixteenth century in paintings as well as graphic media, for contemporary portraits of Alba, the author was struck by the consistency of beard types depicted. Thus the beard on the figure in black stood out all the more as a distinctive feature"40

It would be difficult to find reason enough to deny the implications of this picture. The cumulative evidence is very strong when further examination reveals yet another important detail. This is that the royal herald, or deputy, on horseback on the right surrounded by imploring peasants has a vest (Illus.14 ) embroidered in a gold design that transpires to be the two-headed eagle. This is the emblem of the House of Hapsburg, of which the more tolerant regent preceding Alba (Margaret of Parma) was a member. A contrast between the régimes of the Spanish and Austrian regents is here implied, since the Hapsburg herald is unarmed and has a hand opened in a gesture of helplessness. This was the feeling of the exasperated Margaret when Philip II decided to substitute Alba's Inquisition for her more enlightened rule41.

To find similarly potent political symbolism in "The Tower of Babel" is impossible since the picture is much more subtle in that respect. However, proof of Bruegel's use of it in "The Massacre of the Innocents", and the "Conversion of St. Paul" makes it more likely to occur, at least in generalized form, in the Babel painting.
Assuming for the moment that in that painting, the contrast between the unimpressive king with his small court, and the adulation of the stonemasons is intentional, then perhaps we are to look again at the scene. In that case, the masons may not be so much genuflecting to the king as imploring him to reconsider an act. Two have outstretched hands as if in the act of supplication. Similarly, we could then see the person next to the king, not as an architect, but as a burgher of the bustling Flemish city, whose environs are being engulfed by the mammoth structure. Like the masons, he might be imploring the king to desist from building the folly that is overshadowing their city.

More evidence that Bruegel did intentionally reduce (Illus.22) his royal party to humbler proportions than might have been expected in his time is provided by comparison with the Gremani Breviary miniature of the scene. This Bruegel is likely to have seen while in Venice (c. 1552-53). In spite of its tiny proportions, the artist manages to show a larger royal party.

Then, in the depression behind the masons and in front of the tower are four distant men lying on the ground who might be workers recovering from toil, or dead men. Taking them to be dead would signify that the tower was a symbol of pride, since the punishment for pride was death - death of
the spirit. Less obvious and more subtle perhaps than the dead man in "The Fall of Icarus" (because it would be good policy for a person to thoroughly veil such suggestions if he wanted to live a long life), but nevertheless a plausible symbol if we wish to read it that way.

In addition, the tower overshadowing the city would not only be the symbol of pride - the unrelenting pride of Philip II and of his regent Alba - but also of the imposition of tyrannical rule upon the peaceable and industrious cities of the Low Countries. This gives us an insight into the iconography of the Tower of Babel itself at this point in history. There is, however, one other aspect of the tower's symbolism at that time which might be taken into consideration.

It should be stressed that the message conveyed by this painting is so subtle, or "low-key" that it can also be imagined to read as being somewhat critical of Protestants as well. For example, a contemporary of Bruegel, van Vaernewijck, drew a parallel between the internal quarrels of the Protestants and the Tower of Babel. He compared the feuding of Calvinists, Lutherans, and Anabaptists with the builders of the Babylonian Tower, whose pride God punished by confusing their language. The absence of much detailed interpretation on the part of art historians on the subject of this painting makes a final decision as to his exact symbolic intentions doubly difficult.
From Bruegel's life, independent of his art, we are unable to reach a firm conclusion as to his convictions. As a friend of Ortelius and as part of Antwerp's intellectual world, he should have been a Calvinist, but the teachings of Erasmus were also highly regarded in that city - and Erasmus refused to take sides. Bruegel moved to Brussels in 1563, just before a series of anti-Catholic outbursts in Antwerp. Did he do this to escape the violence, to avoid the ensuing punishment for Protestant leanings, or simply to avoid having to take sides at all? An indication of the usefulness of this piece of escape information is given by the fact that when Christopher Plantin decided to flee the Antwerp persecution in the same year he chose to go to Paris, since Brussels was not much safer than Antwerp. We cannot assume that Bruegel was fleeing persecution necessarily and therefore the circumstantial evidence does not assist us in arriving at a definite motive here. Added to the already too numerous possibilities is one provided by the earliest biography of Peter Bruegel, published in 1604 - Carel van Mander's Schilder-Boeck:

"As long as he [Bruegel] lived in Antwerp, he kept house with a servant girl. He would have married her but for the fact that, having a marked distaste for the truth, she was in the habit of lying, a thing he greatly disliked. He made an agreement with her to the effect that he would procure a stick and cut a notch in it for every lie she told, for which purpose he chose a fairly long one. Should the
stick become covered in notches in the course of time, the marriage would be off and there would be no further question of it. And indeed this came to pass after a short time. In the end when the widow of Pieter Koeck [to whom Bruegel had been apprenticed] was living in Brussels, he courted her daughter whom, as we have said, he had often carried about in his arms and married her. The mother, however, demanded that Breughel should leave Antwerp and take up residence in Brussels, so as to give up and put away all thoughts of his former girl. And this indeed he did"43.

The truth is probably that Bruegel did not have one straightforward motive for his decision. It is more likely that, as in life generally, a combination of circumstances and motives made a move desirable.

This brings up the whole question of whether or not it is profitable to devote considerable time in researching the details of an artist's private life. Can we understand Bruegel's artistic achievement as well without this revelation of his secret thoughts? Probably not, since if a clear motive for his move to Brussels could have been established, this would have added to our knowledge of the artist's intent in many of his paintings, especially where elements of iconography are unclear.

Even without an irrefutable religious or political motive for his move it is still a fact that Bruegel was a person of strong moral convictions - as can be seen from the cumulative evidence of many of the paintings - and that to be consistent
in art as in life, he would have expected people to read a moral message (including that against the "pride" of powerful invaders) in his works of art.

BRUEGEL'S IDEA OF THE MEANING OF THE TOWER

The idea of the meaning of the tower in the mind of Bruegel would have evolved from much thought about a variety of impressions gained in various ways. Added to the Bible story perhaps heard at an early age - with its warning against pride, its "babble" of tongues, awesome destruction, and moral - would be other literary impressions from a few books mentioning or dealing with the subject. These would be the more readily available printed books such as the translations into Latin of the Histories of Herodotus of Halicarnassus. By 1566 there were at least ten Latin editions of the book, printed in Venice, Rome, Geneva, Paris, and Cologne with the earliest being 1474. Editions in French numbered two by 1556, and one German edition was produced in Augsburg in 1535^44.

It seems highly likely that such a popular book would have come under discussion, if not under Bruegel's scrutiny, during his long stay in Italy (c. 1552 - 54). The full description by Herodotus of the eight-storey tower with its encircling staircase and base 200 yards long, is on page 71 of Part II, of this thesis.
Visual impressions might have come from engravings appearing in one of these books. Long before the advent of printing however, there were numerous illustrations in Bibles and chronicles. The Welislaw Bible has a 14th century illustration (Illus.15) of the tower by the Böhmischer Master; the Toggenburg Bible, prepared around 1411 by Rudolf von Ems, (Illus.16) has a miniature by the Schweizer Master, and there is another miniature in the Kasseler World Chronicle prepared by Rudolf van Ems (Illus.17), c. 1385. These are just a few examples of the type of tower which Bruegel might have seen in his formative years.

While the chance of his having seen one of these specifically seems very small, it must be remembered that not a great deal is known about the artist's early life and travels and it seems very likely that, as the thinking person that he obviously was, he would have examined works of this nature. They bear little relationship architecturally to Bruegel's tower, but may have helped in the formation of his original idea of its religious and moral connotations. While the thinking behind the symbolism used in these early paintings is buried much more deeply in the past than that of Bruegel's, we can see ideas emerging: that of judgement, for example, in the crowbars held by hands from heaven which pry at the builders and the building (Illus.15) of the Böhmischer Master; that of punishment for pride as armed angels (Illus.18)
hurl builders from the ornate Tower in the Book of *Hours* of the Duke of Bedford.

Again, the idea of the Tower of Babel as a symbol of judgement upon pride emerges. The reason for its becoming popular in Flanders was surely its immediate relevance: the imposition of the Spanish language upon an already multi-lingual country; the establishment by Philip of Spain, like the descendants of Noah in Babylon, of a brick city as an administrative centre intended to govern a wide area; the folly of such grandiose schemes - especially when the overseers speak a foreign language which cannot be understood. This might appear to be a pessimistic view of history, but the tower certainly seems to mirror metaphorically the views of Bruegel and of many of his contemporaries.\(^45\)

Finally, there is the concept of the tower as something grotesque, ridiculous, or even the product of a world gone mad or "upside down". This is similar to that aspect of the Bruegel painting "Dutch Proverbe" as seen by its engraver P. Fruytiers:

"Par ce dessin it est montre
Les abus du monde renverse"\(^46\)

That frame of mind may have arisen from the sinister turn of historical events (the occupation of the Low Countries, the approach of the Duke of Alba) but is more likely to have been part of the general fascination with the fantastic in those times.
THE ARCHITECTURAL ORIGINS OF BRUEGEL'S TOWER

To ascertain what visual images of towers generally may have been combined to produce the version of 1563, we must look at examples which Bruegel himself is most likely to have seen prior to that date.

One aspect of Bruegel's experience which has so far received little attention is his friendship with the now less-famous miniaturist Giulio Clovio (1498 - 1578). Clovio had migrated from Croatia to Rome and made such progress that Vasari later said that "there was no more excellent illuminator or painter of small things" and that he was the "Michelangelo of small works". "Small" is evidently not intended here as a derogatory term. In fact, Giulio Clovio had a fame which to us, today, is quite surprising.

He appears in a group of four men standing together in the lower right-hand corner of El Greco's Roman version of "Christ Cleansing the Temple", now in Minneapolis. The others in the group are Titian, Michelangelo, and probably Raphael. Why Clovio should appear in this privileged position with at least two of the immortals is unclear, unless we consider the possibility that either he was truly renowned as an artist in those days, or he was a special friend of El Greco. El Greco was certainly indebted to his fellow Greek expatriate, since Clovio, who lived in
the Palazzo Farnese from 1561 until his death in 1578, wrote a letter to Cardinal Alessandro Farnese, on November 16th, 1570, introducing El Greco as follows:

"A young Candiote pupil of Titian's has arrived in Rome", from Venice "a really excellent painter in my opinion. Among other things, he has done a portrait of himself which has astonished all the painters of Rome. I should like to recommend him to the patronage of your Eminence, his only practical necessity being a room in the Palazzo Farnese for a short time, until he can find more suitable lodging ...".

While this establishes the indebtedness of El Greco to Clovio, it does more to improve our estimation of Clovio's importance as an artist and critic and as a trusted protégé of Cardinal Farnese. That Giulio Clovio was renowned as an artist in his time is also born out by the testimony of Vasari, already mentioned, and by such comments as those of Paolo Pino, Raffaello Borghini, Mancini, and Baglione. Webster Smith goes a step further in saying:

"An Italian could have said, although apparently no one ever did, that Clovio, the 'best' of all miniaturists, won simply by default in a field in which no other artist of renown would work more than a little if at all, for miniatures may be seen and admired only by a few".

It would appear that his is the example of the practitioner of a dying art, whose name becomes almost eclipsed with that of his specialization.
With Clovio's fame among his contemporaries as a miniaturist proven, it remains to trace his influences upon Peter Bruegel. Bruegel got to know him sufficiently well to be asked to collaborate with him in several paintings. In one of these, mentioned in Clovio's will, Clovio supplied the human figures while Bruegel filled in the background—a landscape. Clovio's estate papers also refer to two other paintings "di mano di Mr. Pietro Brugole": a watercolour of a tree and a small tower of Babel on ivory.

Giulio Clovio's possession of a Tower of Babel on ivory by Bruegel might seem to be only an indication of interest, on the part of the miniaturist, in "small" works—and more of an indication of a way in which Bruegel may have influenced Clovio. However, that the influence was in fact in the reverse direction is shown by the fact that Clovio produced a miniature of the Tower of Babel by 1546, long before Bruegel, born at earliest in 1525, could have produced his ivory, and brought it to show Clovio in Italy. Clovio's tower appears in The Book of Hours of the Blessed Virgin (Illus.20) produced for Cardinal Alessandro Farnese, in whose palace Clovio later lived. This is the book to which Clovio is pointing (Illus.21) in the portrait of him later completed by El Greco (c. 1570), and must have been an undertaking of which he was proud.
Vasari's description of this book implies that the work, including his Tower of Babel, must have been a source of great wonder at the time. Vasari's enthusiasm suggests that it must have been a production of considerable importance at that time, and may well have been a topic of considerable interest on Bruegel's arrival.

While he did not show great originality in the subject of the tower, for it is very similar to the Grimani Breviary one (Illus.22) (painted between 1508 and 1519), he may have discussed it with his friend Bruegel, and inspired him to paint a much more elaborate one. Similarities there certainly are in the works of the two artists - the use of seven or eight stages, and a staircase, or ramp, going all the way round the outside, similar cranes and so on, but Bruegel's execution is such a vast improvement that we can only conclude that Clovio acted as an inspiration rather than a source of detail, and there were other architectural influences at work.

Certainly another source of inspiration, at least, may have been the tower finished in mosaic (1220 - 1230) in the narthex of St. Mark's, Venice. This is one of the finest early examples of the tower, and provides a variety of examples of both human and divine activity in that scene (Illus.23).
When he was in Venice, Bruegel may well have seen the tower illustrated in the Grimani Breviary, which may have been contributed by a fellow Fleming: Gheeraert Horenbout (1467 - 1541?), or by Simon Benning. He would have noted such details as the building methods illustrated, and the busy port at the right of the picture. The dockside crane operated by twin treadmills is almost identical to the one shown by Bruegel (Illus.24) lifting building blocks to the third stage of the tower. The positioning of the ships and port in relation to the tower, and the general geographic setting is also repeated by Bruegel. Similarities are continued in the tiny human scale, dwarfed by the grotesque tower, with implications of the inadequacy of human endeavour in such a giant enterprise. Workmen pay homage to Nimrod in a duplication of details which make it appear highly likely, in fact, that Bruegel had seen the Grimani Breviary.

However, it is significant that none of the above-mentioned towers is round. For the origin of the round form, according to de Tolnay, we must look to the illuminated Bible of Holbein the Younger, and H. S. Beham. It would in fact be surprising if Bruegel had looked at examples in Italy and not in Northern Europe. These are both round towers without a spiral staircase (Illus.25,26) and show some resemblance to fortified towers of the Middle Ages.
Nor should we underestimate the technical effect upon Bruegel of the thousands of well-drawn prints turned out by the printshops of Bruegel's time. Many of these single editions are now lost, but something of their effect can be seen in the graphic nature of Bruegel's picture. He was in fact closely associated with the most famous of the Nether­landish shops while in Antwerp - that of the House of the Four Winds printshop run by Hieronymus Cock. This was a combined art dealing centre, coffeehouse, and meeting-place for intellectuals, whose life Bruegel must have become a part of when he began work for Cock shortly after its founding in 1548.

A print which illustrates Bruegel's part in the printing process is "Big fish eat little ones" (Illus. 27). His was the responsibility of executing the first half of the copying process: reducing the original oil painting to its graphic essentials by drawing a simple, sharp-lined sketch. This sketch was then copied by an artisan, who engraved the copper plate from which the print was made. That Bruegel did the drawing of "Big fish eat little ones" we know because it is to be seen in the Albertina, Vienna, and is signed "1556 brueghel". The print from the plate is in reverse of the drawing, and is based on an original Bosch, because it is credited to him on the print: "Hieronymus BOS inuentor". The actual engraving was done by Pieter van der Heyden.
(whose monogram can be seen), and the print was published by Cock in Antwerp (COCK EXCV. 1557).

Bruegel seems to have worked at the printshop until late 1551, when he went to Italy, and again after his return in 1554. His actual journey was probably instigated by Cock, in order to collect material for a new series of engravings.

It was while in Rome that he encountered the most significant of all the architectural influences that make up his Tower of Babel. In fact, the question of why Bruegel chose the tower as a subject at all may be in part answered by the architectural influences which it exhibits. By turning a sketch of the Colosseum into the Tower of Babel he had at once an impressive vehicle for a subject lending itself to the allegory expected of an artist in his times.

A look at the exposed part of the Tower, still under construction, shows an organized labyrinth of arched corridors running in towards the centre. These correspond to the corridors by which spectators gained access to the interior stairways leading to the tiers of marble Colosseum seats (Illus. 28). The transverse arches of the interior shown in the painting, all barrel-vaulted, correspond to the ambulatory corridors which run around the outside of the Colosseum. Bruegel must have sketched the Colosseum while in Rome, perhaps for the printshop, and used the sketch as a basis for
his painting. However, the tower had never before been portrayed in such detail, or on such a massive scale, and much of it appears to be original to the artist.

He does not extend the analogy of the Colosseum to the use of the three orders framing the three main tiers of arches as in that building. Instead, his "columns" are engaged buttresses with a structural purpose. He includes an intriguing variety of arch forms, which visually sort themselves into pairs between the buttresses. Some of the tallest arches are blind, or have an arched doorway in the lower level of masonry; some arches are open, but less tall, and so have a second blind arch form above with perhaps an archery window; there are small rounded balconies resting between the tops of some of the arches; other arches have pairs of windows above them which look like clerestory windows, and right at the topmost level of each arched interval, below the circular spiral ramp running round the next level of tower, Lombard bands are consistently shown. The general effect is Romanesque, and one is reminded of Jan van Eyck's use of that style when depicting ancient scenes.

Although the internal structure has similarities with that of the Colosseum, the external arrangement shows that of another architectural influence: the account of Herodotus. He mentions eight towers, or stages, the eighth being a shrine. Bruegel's eighth and topmost level, although unfinished
and partly obscured by a cloud, is also smaller, like a shrine. The analogy continues in Bruegel's choice of means of ascent. This is also by "a circular way carried round the outside of the building to the highest part"\(^2\). So his basic design goes back to a source almost contemporary with the original tower in its final and finest form.

As regards the architectural inspirations in the vicinity of the Colosseum, in or about Bruegel's time, we have an abundance of sketches and drawings available, many of them by visiting artists from the Low Countries. An example containing several towers is a drawing done c. 1604-6, by Peter Stevens (Illus.29), although it may have been sketched in an earlier visit in 1591\(^3\). The view from the north side of the Palatine, across the Campo Vaccino, reveals the scene pretty much as it would have looked in Bruegel's time. On the left is the house next to the Temple of Antoninus and Faustina; behind this the Torre die Conti, and the towers of St. Quirico and Giulitta. On the hill on the left is the monastery of San Domenico with the towers of the church of that name. In the centre, the church of St. Cosma and Damiano is being sketched by foreground spectators, and on the right is the Basilica of Maxentius with the houses built on to it. Anyone gazing upon this impressive scene could hardly fail to become interested in the variety of building forms.
One more reminiscent of the Roman arches of Bruegel's structure is that by P. Bril of the imperial palaces on the Palatine Hill (Illus. 30). Two figures sketching are shown dwarfed by the massive arches, whose brickwork is shown in some detail. This brickwork is similar to that portrayed by Bruegel in the upper levels of his tower (Illus. 31) before the stone facing was put on. As Bruegel gazed at these arches in Rome, as he must have done, would not the glory and pride that was once Rome have reminded him of the pride of Babel - also in the ruins of judgement?

A building which would have been less a source of detail but equally interesting to Bruegel, perhaps, would have been the Castel San 'Angelo, shown here in a military drawing after being fortified in 1557 (Illus. 31). This and the following illustration show the Castel San 'Angelo very much as Bruegel would have seen it. The engraving gives a better impression of the bulk of the tower, and its suitability for staging spectacles (Illus. 33). Again, something of the pride of Rome and of Babel might be indicated to the contemplative individual.
INSPIRATION FOR ARCHITECTURAL DETAILS OTHER THAN THE TOWER

Several scenes which would have provided valuable background material, as well as contributing to Bruegel's competent technique in that area, were completed in 1562\textsuperscript{64} (Illus.3\textsuperscript{4}), just prior to his Large Tower of Babel. These show something of his devotion to detail as well as the flickering light effect achieved in his more finished drawings. In the Boston one, reproduced here (two similar ones are in Besançon) Bruegel appears to have used a fine point for detail while in another - a marine landscape with a view of Antwerp in the background (Illus.3\textsuperscript{5}), Bruegel used several shades of yellowish and brown ink with a thicker line. The use of diagonal cross-hatching does not appear much in the painting, of course, except where it re-emerges in shaded portions of boat hulls - but there is a striking similarity between the design and execution of the twin-masted sailing ship being tossed by the waves in the marine landscape and those in the painting. That drawings were used as a basis for details of the painting is quite clear, and is confirmed by such elements as the Babel ship (Illus.2) - with high after-castle stern-on to the viewer. The viewpoint for this would be from a boat in the harbour - as were all of Bruegel's Amsterdam drawings - and not from the higher viewpoint of rising foreground in the painting.
Many elements in the drawings—such as the battlemented round towers (Illus. 36), conical roofs, and the twin-masted ships, and twin arched bridge—also appear in the painting. The round towers appear with similar highlights, although achieved with paint instead of ink on white paper. The drawings certainly reveal Bruegel's developing interest in architecture at that time. The many castles sketched by Bruegel in the early 1560's—many of them perched high on rocky crags—show a certain interest, too, in the larger scale, more impressive works of mankind.

One peculiar and rather un-Flemish item in Bruegel's painting (Illus. 4) is the aqueduct enclosing the distant perimeter of the city to the left of the tower. One wonders if this is actually a part of the fortifications and walls, but as the arches appear to be open to the country beyond, this seems unlikely. The combination of aqueduct and fortified walls (Illus. 37) may have been suggested by the parts of the Claudian Aqueduct that are bricked-up, so would have been recalled from Bruegel's visit to Rome. See also top of Illustration.

The aqueduct is in fact about the only Roman element in the painting, apart from the tower, and may have been introduced to heighten the atmosphere of unreality, or to lessen the contrast between the foreign tower and the utterly Flemish town.
The building equipment being used in the painting may have Roman precedents, but was in common use contemporaneously, as witnessed by the many illustrations in which it appears starting from the time of the Grimani Breviary (Illus. 22). Vitruvius mentions a similar hoisting machine to that on the second highest level of illustration, but his is powered by windlasses turned with handles, not operated by treadmills as in Bruegel's.

As regards any direct influence from further afield than Italy, no historians mention this as far as can be ascertained, although since the Babel story has its genesis in the Middle East, one would expect to find some enquiry in that direction. The nearest contact with that area would appear to be through travellers whom Bruegel would undoubtedly have met who had been to the Islamic countries, and more particularly, through his teacher, and father-in-law, Peter Coecke van Aelst. In 1533, before Bruegel could have been his pupil, Coecke went to Constantinople and produced a series of woodcuts showing Turkish scenes (Illus. 38) - including one of Suleiman I, parading with his extensive retinue, which includes archers, bodyguards on foot (swinging clubs?), and two chamberlains on horseback. Caryatids in Turkish garb separate panels in the prints. The domes and minarets of Istanbul, including those of the Hagia Sophia, are recognizable. Such a visit must have been frequently the subject of conversation.
in the atelier of Coecke, and would have fired the imagination of a young artist apprentice. It is not reflected specifically in any of Bruegel's work, however, and neither is the possible visit to Tunis, which Marlier finds difficult to prove.\footnote{66}

**A COMPARISON OF THE LARGE TOWER WITH THE SMALL TOWER OF BABEL AND WITH ANTECEDENTS**

Bruegel's Small Tower (Illus. 39) is usually given the date 1563, which is the same year as his larger one. This seems credible since, although it has an even greater, miniature-like completeness, it does not contain the same development of religious theme or political symbolism: the group of foreground figures is missing. Bruegel could therefore have painted it in the year when he was deeply interested in the subject, and possibly before he painted the Large Tower. The date of 1554 sometimes given, is also credible, as this was the close of Bruegel's tour, and a time when the idea was fresh in his mind.

The Small Tower illustrates a greater variety of archway forms, and is in fact a very exceptional study of the very large number of possible variations, all within a fairly standardized Romanesque type of outer framework. It also has the Lombard bands, and unfinished side characteristic of the Large Tower. Both versions appear to be unique in this unfinished aspect.
The Small Tower dominates the scene more completely and may consequently be said to be an even finer example of one of the great follies of man. This increased effectiveness, for the tower is much closer to the picture plane, and so even more monumental and severe, may be a reason for dating the Small Tower later. Stechow, in describing the impact of this tower says:

"The colours are darker. The Nimrod episode has been abandoned as detracting from the main point of the story rather than adding to it: the sin of pride speaks more eloquently through the insane project itself than the cruel commands of the king to his subjects. The idea of transforming a rock into the tower has been dropped ... the enterprise thus takes on an additional element of hybris. True, the structure is in a more advanced stage, but success is no nearer; while the antlike crowds on the lower ramps are no longer involved in construction, such work is still frantically pursued in the upper reaches and made to look even more futile by the display of architectural complexity in the inner recesses, the ominous red colour, and the more threatening clouds. The handling of the landscape at left and the harbour at right is less miniature-like and more magisterial than in the version of 1563.

It is appropriate to consider Bruegel's Small Tower at the same time as the tower's antecedents, since most of them take this one as their point of departure. This may be because it was the more accessible of the two, although both, according to van Mander, were in Vienna, and probably both were owned by Rudolph II; nevertheless on the back of the Small Tower canvas are the arms of Elizabeth of Parma, wife of Philip V.
The first of a host of apparent imitations is that by Lucas van Valckenborgh, dated 1568 (Illus. 40). The chief characteristic of these is that they push the tower back into the picture space, and so fall short of the grandeur of the original. Figure 36 reveals a tower almost identical in form to that of Bruegel's Small Tower, with the conciliatory variations one might expect being introduced only in the landscape. Another, attributed to the same artist (Illus. 41), shows elaborate buttresses to the first level which also function as flights of steps. Another dated 1594 (3 years before the artist's death) Illus. 42, shows a tower basically the same architecturally. A few more stories have added to the height, but the tower has nevertheless settled further into the landscape.

Lucas Van Valckenborgh (1530 - 1597) seems to have become something of a specialist in the Tower of Babel, with a total of possibly ten works by him. One of these is only known from a description in the King Charles I capital collection catalogue of 1757 by George Vertue (ed: Horace Walpole):

"the Tower of Babylon, with many very little and curious figures, done by Faulkenburch, bought ... of Sir David Murrey" 70.
Not until the end of the 16th century do we find an illustration of some originality, but still with echoes of Bruegel. That attributed to Verhaecht is characterized by the new town (Illus.43) architecture in the foreground, and the landscape is only fantastic in the background fjords. The tower reveals a tendency to accentuate the spiral ramp—perhaps encouraged by fresh travellers' tales of the tower (Illus.62) of Samarra. It generally reflects the new form initiated by Bruegel—and what is striking in the history of the tower in art is that Bruegel's was an imaginative departure from all that had gone before, and for long after 1563 his innovations were followed without further work of distinction.

Since Bruegel's work provides us with the finest examples, there seems little point in exhaustive comparisons with less significant creations. This more than any other, shows an intellectual balance. It is Babylonian in meaning, Roman in architecture, and almost perfectly Flemish in background and population.

THE TOWER OF BABEL AND THE FANTASTIC

What was continuing more or less parallel to Bruegel, van Valckenborgh and others, was a body of lesser-known work of a much more fantastic nature. This is exemplified by the Destruction of the Tower of Babel, drawn by Marten van Heemskerck in 1567. This shows a colossal stepped square
tower in the midst of violent disintegration. The circular turret from the top is falling in several huge pieces, (Illus. 44) apparently so suddenly that tiny figures can be seen caught in the act of ascending the staircase. The tale of destruction with its emphasis on judgement, is continued in his Destruction of Sodom. Although there is a triumphal arch, temples, and an amphitheatre, evidencing a visit to Rome, the themes of Bruegel seem much more sane and reasoned than does the world of van Heemskerck. (Illus. 45)

It is true, too, that Bruegel was well seasoned with the experiences of travel. Many an artist could make fair representations of Roman architecture from the numerous drawings and prints in circulation. There were illustrated maps (Illus. 46) such as the reconstruction of the whole city by Pirro Ligorio. The detail, which is one section of this huge map (Illus. 47), shows buildings such as the Colosseum, Circus Maximus, and temples along the Via Sacra more as they would have appeared in the original than in the sixteenth century. A Roman MS. may have been available.

Much more fantastic than Heemskerck's tower (Illus. 48) is one of a series in the book Turris Babel, published in 1679, by Athanasius Kircher, the Jesuit divine and polymath, who attempted to show scientifically how a very high tower could be built. His work appears to be the most original since Bruegel (a century before), and in the copper engraving
done for him by Lieven Cruyl, and Coenraet Decker (?) are included numbers indicating where the steep spiral ramp reaches a level stage. This carefully follows Herodotus, who describes eight levels and a temple on top. Kircher has a classical temple portico, too.

Kircher calculated that a tower would have to be 178,672 miles high to reach the moon, and that its height at that point would be the radius of the Earth, multiplied by fifty-two. Its mass would be greater than that of the Earth, and so he doubted whether the enterprise would be successful because:

1) there would not be enough material in the world to build it;

2) once the tower got beyond the centre of gravity, it would collapse;

3) if it were built at the rate of a mile a week, it would take 3,426 years to get it as high as the moon; and

4) when it reached that height, it would take a draught horse that climbed thirty miles a day more than sixteen years to take a load from the base to the summit.

In this incredible engraving (Illus. 4-9), it is shown how a tower of fifty-two times the Earth's radius (see small circle above globe at base) could be designed to reach the moon. The radii are counted off in tens at the side and a small crescent moon is balanced on the top. However, Kircher must have realized the pure fantasy of the subject since he raised objections.
In his realization of the impossibility of the project, Kircher echoes another divine, John Donne, who wrote for his Nativity Sermon of 1624:

"Only He can raise a Tower, whose top shall reach to Heaven: The Basis of the highest building is but the Earth" 73,

and, in his Second Anniversary:

"They who did labour Babels tower to 'erect, Might have considered, that for that effect, All this whole solid Earth could not allow Nor furnish forth materialls enow; And that this Center, to raise such a place, Was far too little, to have been the Base".

So, Donne has two probably original objections to the project:

1) there is not enough matter in the whole world for such a building; and

2) The Earth is too small for the required foundation.

The tradition of studying the immense height of the Tower goes back to Antiquity. Don Cameron Allen writes:

"... four miles says Isodore; much higher says the extra-traditional Eutychius ... But as early as Philo and Cyriillus of Alexandria, men doubted whether it could have been possible to complete the tower even if 'the gods' had not decided to descend" 74
THE TOWER AS AN EXPRESSION OF CHANGING IDEAS IN LIFE, LITERATURE AND ART

Placed between Bruegel, and Kircher, in time and extremity (Illus.50), is a drawing of Karel van Mander engraved by Zacharias Dolendo, under the supervision of Jacques de Gheyn75. This shows a substantial round tower rising in stages, the first two of which are accessed from pyramids of steps. The solid, semicircular arches have circular windows above them, and are separated by buttresses on the third stage. The building disappears into threatening (judgemental?) storm clouds, and the confusion of tongues amid the vast population is convincingly executed. A foreground figure reminiscent of one of Peter Coeck’s Turks points to a stone tablet in Greek, while another tablet in the foreground (not seen in the copy) is in Hebrew. A tall obelisk contains hieroglyphics, while all around people of many different races, and nationalities gesticulate, and point in efforts to be understood.

By the nineteenth century there was a return to depictions of the scene in simpler, more realistic terms, more in keeping with the Biblical original perhaps. Gustav Doré (Illus.51) imagines primitive wagons shifting stone blocks, with crowds of heaving slaves, a very sombre spiral tower-like an enlarged Samarra – and a group of foreground supervisors apparently in despair of accomplishing their task, or seeking deliverance.
from impending doom and confusion. One flings his arms skywards in a very Gallic gesture of emotion.

One of the most recent examples, is also one of the most primitive. This is a woodcut (Illus.52) by Leo Michelson, and shows only a tower on a rock base with teams of men pulling loaded oxen, a horse, or camel at each level of the winding spiral ramp - again like Samarra. A rare occurrence is the depiction of God pointing from the clouds in condemnation of the builders - and the building.

Marius Bauer shows a different cosmic event (Illus.53) - the descent of some lightly-etched heavenly beings, presumably to spread the confusion of babbling tongues in a dispensation which was reversed by the tongues of Pentecost. In contrast to the stark simplicity of the Michelson woodcut, this shows a Germanic rhythm, and an interest in the structured lines of criss-crossed scaffolding, and crane jibs pointing skywards. It is interesting that the arcade running around the tower just above the scaffolding level has pointed arches of an Islamic nature, and the foreground pavilion and mosque are either Iranian, or Islamic Indian in design. These are sufficient to indicate the Eastern situation of Babylon.

This is in fact a Babel of considerable originality, and with its descending figures, perhaps of doves, may be the only one to reflect a twentieth-century re-assessment of the philosophy of the subject.
Jean Daniélou, S. J. in The Lord of History, Reflections on the Inner Meaning of History, says:

"Origen states that Christ inaugurates a new phase of existence, in which former lines of demarcation have vanished. Instead of the old order, based on the separation of races, languages, and cultures, there is one new world in Christ. This unity was symbolized by the Pentecostal gift of tongues - the converse of the Tower of Babel - re-establishing the means of communication between the various families of mankind. The nations have re-discovered a common speech ..."76

The emphasis upon the confusion of speech, beginning in art, perhaps with van Mander (Illus.50), and occurring only occasionally to-date has generally been overshadowed by the message of pride, and sometimes of condemnation through destruction. In literature, Milton makes the pride that creates the tower to be humble, and there is laughter in Heaven at the expense of the builders:

"Forthwith a hideous gabble rises loud
Among the Builders; each to other calls
Not understood, till hoarse, and all in rage,
As mockt they storm; great laughter was in Heav'n
And looking down, to see the hubbub strange
And hear the din; thus was the building left
Ridiculous, and the work Confusion nam'd."77

As Paradise Lost was written about 1660, van Mander, for his rare portrayal of the "babble of tongues", could not have read it, but it does demonstrate an awareness of this aspect of Babel. Perhaps most artists emphasized the tower "reaching up to Heaven" because of the challenge it offered, and because
of the fascination with the subjects of condemnation of pride, and of impending doom, and imagined collapse. This emphasis was paralleled in literature also:

"Babel, synonymous with pride in the seventeenth century, evokes numerous and often diverse associations but traditional interpretation commonly emphasizes man's pretentious ambition and his misguided values." 78

So it is today also, that the art of thinking artists not only follow life and literature, but is in the forefront of philosophy. Far from being a fantasy, Marius Bauer's etching is part of twentieth century consciousness of the subject. For example, in his choice of Eastern architecture, he places the tower in a meaningful setting. Jacques Ellul, professor of the history and sociology of institutions at the University of Bordeaux, says this of the East:

"The East has an exact meaning in the Scriptures. It is both the road man takes in his futile search for eternity, and the one he takes when he obeys God's call. These two great ways are parallel and show the relationship between the different attitudes of the human race. On the one hand, those who wanted to build Babel came from the East, just as did the marauders who throughout history oppressed God's people. But on the other hand, Abraham also came from the East ... Moses and the Levites stood on the East side of the altar. The Wise Men came from the East." 79

Babel is definitely in the first category, since it is the way people took in a search for eternity (a tower that reached up to Heaven). But Bauer's illustration is the first,
and possibly the only one so far that shows also the descent of the heavenly beings that immediately invite comparison with, and contrast to, Pentecost. It therefore points to the new realization that Babel is in a sense the antithesis of the road one takes in answer to God's call.

It now remains to examine the sources of information on the Tower of Babel up to the twentieth-century archaeological reconstructions, having ascertained, as far as possible, what facts were available to Bruegel.

A final word on the place of Babel in contemporary thought comes from Rudolf Ekstein of the Menninger Foundation:

"God the Father took away from his children one language in order to punish them for attempting to be as powerful as he, and so took from them unity, harmony, and lasting peace. The myth suggests that different languages create misunderstandings, destroys co-operation, makes for differences that may even lead to war and destruction.

The Tower of Babel, symbol of security, of power, of fulfillment of man's dreams and longings can be completed only if men talk one language."
FOOTNOTES TO CHAPTER I:


5. See pp. 33-38 of this thesis.

6. Charles de Tolnay, p. 80. The will was published by Bertolotti, in Giulio Clovio Principe dei Minaturisti, (Modena, 1882). It mentions the ivory as: "Una torre de Babilonia faata di avolio di Mro. Pietro Brugole".

7. See page 43 of this thesis, dealing with sources for objects other than the tower.


9. See thesis pages 13-21 dealing with the symbolism used by Bruegel in this (and other) paintings.


18. Lindsay and Huppé, p. 379.

19. For these and other examples of symbolism in art form the 14th through 16th centuries, see: Charles D. Cuttler, *Northern Painting from Pucelle to Bruegel*, Holt, Rinehart and Winston, (N.Y., 1968).


21. Ortelius began the Album Amicorum about 1573, from which date the earliest entries were made. Although this date was about four years after Bruegel's death, he inserted an epitaph for him - as he did with a few other close acquaintances. The album is now in Pembroke College, Cambridge.

22. de Tolnay, P. 61.


27. Popham, loc. cit.


32. Note the singular version of the definite when the phrase is applied specifically to the Signatories of the Compromise.


34. Foote, pp. 68-69.


36. Bianconi, p. 89.

37. Lindsay and Huppe, p. 383.

38. "The Tower of Babel is a traditional symbol of Man's impious pride", and "... the construction of the tower marks the absolute extremity of perversion and wickedness, worse than murder, war or cannibalism. As an expression of hubris the building of the Tower of Babel is also paralleled in classical myth, especially in the revolt of the Titans or Gents (the two became confused) against the Gods". "The similarity [or parallel] was recognized by early Christian commentators, such as St. Justin Martyr".


39. Glück, p. 30. To make this identification with the Duke of Alba one would expect that Glück would have to agree with the dating of the picture in 1567. Surprisingly, he tentatively holds to 1566, and therefore might agree to 1567. It is true that the Duke of Alba was seen as a threat in 1566 as well. Delevoy dates it in 1567, but de Tolnay 1563 - 4. Certainly, much of the point of this political aspect of the picture would be lost if it proved to have the much earlier date. It must have been kept in hiding for a number of years and one wonders if the versions which show the "Innocents" as farm animals were overpainted to mollify the accusation implied.

41. Ferber, p. 214.


45. Bruegel's involvement in the current ideas of his day came partly through participation in the work and intellectual life of Hieronymous Cock's print-shop. See thesis Chapter II.


47. Foote, p. 74.


54. Foote, p. 74.

55. Loc. cit. This is the same ivory as mentioned by de Tolnay; (see Footnote 6).


57. Gudiol, p. 36. This portrait obviously formed the model for the small portrait of Clovio appearing in El Greco's "Christ Cleansing the Temple" (Illus. 19). The book Clovio is holding is open at a tiny, near-copy of Michelangelo's figure of God creating the Sun and the Moon.


59. de Tolnay, p. 80.

60. Bianconi, p. 118.

61. Foote, p. 72.


That many of the hoists were being pioneered in the North as early as the 14th century, and not in Italy is shown by von Heinrich Jerchelin, "Die Bilder der südwest deutschen weltchroniken des 14. Jahrhunderts", Zeitschrift für Kunstgeschichte, (1933), II, pp. 50-54.

67. Stechow, p. 86.

68. Stechow, p. 86.

69. Bianconi, p. 98.


71. Erna Mandowsky, and Charles Mitchell, Pirro Ligorio's Roman Antiquities, the Warburg Institute, (London, 1963), plate pages 75 & 76.


75. Theodor Ehrenstein, The Old Testament in Graphic Art, Part II, Kunstverlag Albert Kende, (Vienna, 1936), [courtesy of Metropolitan Toronto Library Board].


PART II.

"Once upon a time all the world spoke a single language and used the same words. As men journeyed in the east, they came upon a plain in the land of Shinar and settled there. They said to one another, 'Come, let us make bricks and bake them hard;' they used bricks for stone and bitumen for mortar. 'Come', they said, 'let us build ourselves a city and a tower with its top in the heavens, and make a name for ourselves; or we shall be dispersed all over the earth'. The the Lord came down to see the city and tower which mortal men had built, and he said: 'Here they are, one people with a single language, and now they have started to do this; henceforth nothing they have a mind to do will be beyond their reach. Come, let us go down there and confuse their speech, so that they will not understand what they say to one another.' So the Lord dispersed them from there all over the earth, and they left off building the city. That is why it is called Babel, because the Lord there made a babble of the language of all the world; from that place the Lord scattered men all over the face of the earth.'"

INTRODUCTION

An object of profound religious significance, the Tower of Babel and Ziggurats in general, undoubtedly suited the heavenward aspirations of the people of the Mesopotamian Plain. The Sumerians had migrated from the Iranian plateau but here they had no Mount Sinai by which they, like Moses, could ascend to meet their god. The Ziggurat with its staircases could provide the means. The parallels between Ziggurat and mountain are strong. The Babylonian word "sikkurat" was used of any object which had height. The peak of a mountain could thus be called its sikkurat, and the anglicised form "Ziggurat" has come to have a special application and is now used for the high, stepped buildings, or temple-towers, which Babylonians and Assyrians - like their Sumerian predecessors - constructed at all principal holy places in their country. That the Babylonians included their new temple-towers in the connotation of the old word sikkurat suggests that for them the towers were associated with mountains - possibly holy mountains.

As in the Hebrew connotation of the holy mountain, there was undoubtedly included in the Babylonian version the idea that the summit was to be a landing-place and temporary dwelling-place for the god who wished to descend to earth. This may have been the idea behind designing the structure in giant steps; certainly the temple at the top was intended for use by the god
since a woman was provided as a companion. We should note here that the Babylonian concept of a god was more down-to-earth and less sophisticated than the Hebrew one, so their structures would be less dissociated from the physical world, at least in functional detail. The extent to which this was true in practice would depend upon the degree in which form was related to function in that particular culture and era. Certainly, the stepped form of tower was indicative of its function as staircase of the gods and was, perhaps, suggestive too of the purpose of man's ascent, although this last was clear anyway from the presence of man-sized flights of steps. The placing of a temple at the top bears out the accuracy of André Parrot's conclusion that:

"...the Tower of the Scriptures was not an expression of man's pride. Instead of a clenched fist raised in defiance towards Heaven, I saw it rather as a hand stretching out in supplication, a cry to Heaven for help." 6

It is relevant to mention briefly another function - that of the tomb. 7 A windowless, doorless room discovered in some of the temple towers was found to contain neither human skeleton nor artifacts and seems likely to have been intended as a tomb for the god - another indication of the temporal nature of the Babylonian god and the relation of form to function.
THREE BASIC SOURCES:

1) The Biblical Tower of Babel

The Ziggurat, in the form of the Tower of Babel, enters Biblical history at the point when that history is centred in Mesopotamia. It is as well to have looked at that dramatic story and its setting before examining later ideas and works of art on the subject.

The account occurs in the Old Testament in Genesis 11, following the genealogical tables of the peoples who sprang from the seed of Noah (Gen. 10) and preceding that of the descendents of Shem (Gen. 11: 10-25), which in turn leads up to the appearance of the patriarchs, namely Abraham's family of Terah which was to leave "Ur of the Chaldees" in Genesis 11: 31. The Tower of Babel story is rather an isolated event not mentioned again anywhere else in the Bible, and was written as a result of the Jewish captivity in Babylon. Jerusalem fell to Nebuchadrezzar II (also known as"Nebuchadnezzar") in July, 587 B.C. and the story very probably took shape a short while after that date.3

Mesopotamia forms the Biblical milieu from the beginning through to the period of the Flood and the subsequent Tower of Babel narrative.

It is unfortunate from the viewpoint of this inquiry that such a basic document as the Bible contains more material of
an evocative or inspirational nature than of purely historical importance. For example, in the last sentence the narrator connects "Babel" with the Hebrew root balal, which means "to confound or mix". However, according to Parrot, Babel is definitely formed directly from the Akkadian babilu ("Gate of God").

It would have helped to have had this aspect of the Tower's function taken into account in the story, since "Gate of God" takes us beyond the idea of reaching heaven for personal motives alone. The Hebrew writer may well have mistaken the very earthly attitude of the Babylonians toward their rather temporal god for a demonstration of irreverence and pride.

"With its top in the heavens" must in fact be an eastern metaphor to express an astounding height. Until this century many interpreters have taken the metaphor literally, and so construed an irreverent encroachment upon heaven. The severe and just punishment for this, often in the form of a cataclysmic destruction of the tower, has often received undue emphasis at the expense both of more positive aspects of the tower and of the city as a whole. This applies to works of art as well as literature on the subject. It is this very bias, however, that has been such a source of inspiration to writers and artists through the centuries, since without the eastern metaphor attention would not have been focused upon the tower nor would a significant moral lesson have been drawn from it.
To place the story in its historical perspective, Parrot concludes:

"At all events it is recognized and admitted by all biblical scholars that the narrative in Genesis 11 had its 'starting point' in ... one of those huge towers which archaeologists call "Ziggurats" and that the Tower of Babel could only be the Ziggurat erected at Bablyon in the very heart of the land of Shinar."

2) The Esagil Tablet

A very factual description is given by the author of the Esagil tablet which is in the Department of Oriental Antiquities at the Louvre. He gives the dimensions of the Etemenanki, the Ziggurat of Babylon. This was written in the Seleucid period and a strong point in its favour is that the date is very carefully given: "The twenty-sixth day of the ninth month of the eighty-third year of Seleucus King" (i.e.: Seleucus II, 12th December, 229 B.C.). The tablet was written at Uruk (Erech of Gen. 10. 10.) and is likely to have been a copy of an older original from Borsippa, a town near Babylon.

The detailed measurements, in lines 37 to 42 of the tablet are as follows:

"First storey. Length 295 ft; breadth 295 ft; height 108 ft.
Second storey. Length 256 ft; breadth 256 ft; height 59 ft.
Third storey. Length 197 ft; breadth 197 ft; height 19\frac{3}{4} ft.
Fourth storey. Length 167\frac{3}{4} ft; breadth 167\frac{3}{4} ft; height 19\frac{3}{4} ft.
Fifth storey. Length 138 ft; breadth 138 ft; height 19\frac{3}{4} ft.
(Sixth storey. Length 108\frac{1}{2} ft; breadth 108\frac{1}{2} ft; height 19\frac{3}{4} ft.)
Seventh storey. Length 79 ft; breadth 79 ft; height 49 ft.

The figures for the sixth storey are bracketed because André Parrot worked these out himself, the originals being
missing. The accuracy of the Esagil tablet is supported by the measurements made on the actual site by Koldeway, who reported a square of side 298 feet, approximately. In fact, the whole of this very precise document is more relevant to the more scientific discipline of archaeology than to an examination of works of literary merit.

3) The Account of Herodotus

The most reliable and comprehensive description of the actual structure of the Tower of Babel inherited from the ancient world is that of Herodotus. It was written in Athens just after the year 447 B.C. of a visit probably made during his travels while exiled from Greece, 452-447 B.C.

Paragraph 181 of Herodotus' Book I reads:

"These walls are the city's main defence; but inside them there is another encircling wall, not much less strong though of less thickness. And in the midst of each half of the city there is a walled precinct, in one of which is the royal palace, in a spacious and strongly fortified enclosure, and in the other the temple of Zeus Belus", still standing in my time, within a square of two furlongs, each way closed with gates of bronze. In the middle of this square a tower, one furlong in length and breadth, has been built, and on it another, and so forth, eight towers in all. The ascent to these is by a circular way carried round the outside of the building to the highest part; and in the midst of the ascent is a place where those who go up may rest upon seats. Inside the topmost tower is a great shrine, and in it a great bed with rich coverings and a table of gold beside it; but there is no image there at all. None of mankind passes the night there, except only a woman chosen from the women of that country, as the Chaldeans say, who are the priests of this cult, by the god."
One aspect of Herodotus' account which is immediately striking is its conflict with the particular version of the Biblical story which has been common since the Middle Ages. This is that the tower was destroyed by Jehovah as a punishment at the same time as the dispersal of the city's inhabitants. How could Herodotus, writing c. 447 B.C., have seen the tower which had been destroyed over one century before? Either Herodotus is inaccurate or the tradition of the destruction of the Tower is incorrect. Herodotus is known to be very much a story-teller when describing places he has not actually visited and it is proved that he went as far as Susa in Mesopotamia but uncertain that he went to Babylon. The comment of André Parrot is typical:

"La relation d'Herodote fut très diversement appréciée. Rawlinson estimait que l'historien grec n'était jamais venu à Babylone et partant qu'il n'y avait guère à retenir de renseignements qu'Unger déclare au contraire s'accorder avec les fouilles et avec les données de la "description de la ville" (tablette de l'Esagil). Cela ne signifie pas que tout soit à accepter sans examen et nous aurons à faire plus loin la critique de cette première source documentaire". 17

However, despite the uncertainty as to his accuracy, Herodotus may in this instance be correct. I have reason to suppose this since a careful reading of Genesis II reveals only that "they left off building the city", not that it was destroyed. The Tower may therefore have been standing at the time of Herodotus, and for centuries after. The story of its destruction handed down to us could be a fiction
arising from the tales of medieval travellers who arrived in
time to see only a crumbling ruin whose bricks had been used
a millenium for local building material.

Herodotus' description of his visit to Babylon is in any
case convincingly detailed. His credibility rating in the
description of rare artifacts has been improved by the recent
discovery of items described by him the existence of which had
previously been doubted. The Greek bronze vase of unusual
height (five feet) discovered at Chatillon-sur-Seine is an
example of this.

The content of his narrative in Book I is that of a trav­
eller's tale, told in retrospect:

"In the middle of this square" (the temple square of
Zeus Belus)

"a tower one furlong in length and breadth has been
built, and on it another, and so forth, eight towers
in all..." (and so on, as on page 71).

An arithmetical check on this reveals that a Greek furlong
was in fact 200 yards, not 220 yards as ours is. However, this
is still very different from the 298 feet known base dimensions.
Nevertheless, it is Herodotus' general outline which we would
expect to be helpful and the number of stages is correct if
we count the temple on top as the eighth. The resting places
are details which sound authentic.

There is no doubt that the writings of Herodotus, the
Esagil tablet and the Biblical account of the Tower are basic
documents in a study of the artistic representation of the Tower of Babel. Herodotus is particularly important as an example of the information available in Classical times and again in the Renaissance when these writings were resurrected. The Esagil tablet gives an accurate view of the conception of the Tower held almost current to its final form in the Middle East. The Biblical account and its interpretations has been the most persistent influence upon artists throughout the Christian era. As we have seen, that account, plus the one given by Herodotus, is most likely to have had an important influence upon the work of Peter Bruegel.
FOOTNOTES TO PART II

   Genesis 11: 1-9, p. 11.

2. Frequent examples occur, as in *Exodus* 19:
   "In the third month after Israel had left Egypt,
   they came to the wilderness of Sinai.... where
   they encamped, pitching their tents opposite the
   mountain. Moses went up the mountain of God, and
   the Lord called to him from the mountain..."
   (verses 1-3)
   or
   "Moses brought the people out from the camp to
   meet God, and they took their stand at the foot
   of the mountain. Mount Sinai was all smoking
   because the Lord had come down upon it in fire;
   the smoke went up like the smoke of a kiln...
   The Lord came down upon the top of Mount Sinai
   and summoned Moses to the mountain-top, and
   Moses went up...Moses answered the Lord, 'The
   people cannot come up Mount Sinai, because thou
   thyself didst solemnly warn us to set a barrier
   to the mountain and to keep it holy!'" (verses 17-23).

   Arnold Busck (Copenhagen, 1942) p. 45.

4. See page 71 of this chapter for Herodotus' description.

5. The number of stages given by Parrot, Dombart, Unger and
   Busink is seven. Herodotus gives us eight, but may
   have been counting the temple on top. The well-
   preserved earlier Ziggurat of Ur obviously had
   three.

   Archaeology No. 2, Philosophical Library (New York,

7. See page 76 of this work for archaeological details.

9. Parrot, pp. 16 and 17.
10. Loc. cit.
13. The reliability and comprehensiveness of Herodotus' description is more relative (to others available) than real. See p. 72 of this chapter.
15. Identical with Etemenak.
APPENDIX

ARCHAEOLOGICAL EVIDENCE

In order to arrive at a clear idea of the appearance of the Ziggurat concerned, we should look at the available evidence on the plans and elevations of such structures — especially the one at Babylon **likely** to have been the Tower of Babel. The evidence stems from a variety of sources, mainly:

1) Reports of ancient travellers.
2) Literary and epigraphical evidence.
3) Pictorial evidence on ancient Mesopotamian seals, etc.
4) Archaeological evidence.

In passing we should note that there seems little doubt that the Biblical Tower of Babel was situated in Babylon. The story originated with the sources of the Semitic writer of Genesis 11 and the city of the Biblical narrative is given the name of "Babel", which obviously is more definitely related to Babylon than to any other Mesopotamian city (Baghdad dates from 760 A.D. and Basra is very modern); for the Babylonians the etymology was **Babili**, i.e. "Gate of God", which, having in mind the purpose of the Ziggurat (page 66 - 67) applies to its structure; lastly the name has survived the play on words between Babel and the Hebrew word root **bll**, which means "to confound", so it is likely that Babel was a name with an enduring significance, such as a word associated with a place-name like Babylon would have.
ARCHAEOLOGICAL EVIDENCE

It is worthwhile noting the progress of archaeology in the Tigris-Euphrates Valley from a nineteenth century dilettante affair to that of the well-organized and respected profession of Assyriology that it is today. Excavations were initiated by the French consul at Mosul, P.E. Botta, at Kugunjik (Nineveh) and Khorsabad in 1842-44, and the scene shifted to Babylon in 1852 when Fresnel, French consul at Baghdad, did some explorations. But it was not until 1897 when a mining engineer, Jacques de Morgan, headed a large French expedition to Susa, that the quest for museum trophies gave way to a more judicious view of the way in which scientific excavation should be conducted. Babylon was assigned to a German architect, Robert Koldeway, who enlisted three now-famous architects as collaborators: Andrae, Jordan and Müldeke.

It seems certain that before this stage when Biblical Archaeology became a science there lingered an idealistic, medieval motivation—perhaps related to that for the Crusades—for an interest in that area. It was an emotional although not necessarily an invalid one. Friedrich Delitzsch (1850-1922), the German Assyriologist and philologist in his lecture "Babel und Bibel" sums this up:

"What is the purpose of this toiling in a distant inhosp-
itable land...for this expensive churning up of a rubble that has lain undisturbed for many thousands of years, for this digging down as deep as ground water, with no hope of silver or gold...for this ever-mounting, world wide interest in the excavations in Babylonia-Assyria? To both questions there is one answer: the Bible!"  
This form of enthusiasm is clearly related to that experienced by historical artists in portraying the Tower of Babel.

It is abundantly clear that we must look chiefly at research within the twentieth century in order to obtain a scientifically reconstructed image of the real Tower of Babel.

To isolate the prominent characteristics of such an edifice, we should look at the work of Andrae and Jordan, who transferred their meticulous methods from Assur to the White Temple at Uruk in 1912. André Parrot says of this small structure built on an artificial mountain, that it inaugurated "a long architectural tradition: that of the staged towers, named Ziggurats, prototypes of the Tower of Babel described in the Book of Genesis."  
The Temple actually dates from the fourth millenium B.C., and creates a precedent in that it is much smaller than forerunners built at ground-level. According to Parrot, "the reduced scale indicates that the builders were already catering for the god himself rather than for a large concourse of worshippers".  

longer invited, and only a group of priests awaited the celestial visitor who, after sailing through the empyrean, made his landfall in the temple. The temple was on a mound because men had begun to attempt to build a ladder from heaven to earth in an effort to facilitate the descent of their gods. So one feature we should look for, in the Tower of Babel, is a top storey consisting of a temple.

Sir Leonard ascribes the ever-increasing height of the new Ziggurat to the facts that the skeletal remains of the al 'Ubaid people of Sumer show a Caucasian-type skull, that they were affiliated to the Elamites, and they therefore came originally from hilly country up the Euphrates Valley. Their religion would naturally be associated with the outstanding feature of their old homeland: the mountain. What is more significant is that the staged tower was developing. It already had the characteristic stepped platforms with temple on top and it also had the stairway seen in various forms on Ziggurats (Illus. 54).

The Ziggurat at Ur is especially important as it was built by the same ruler, Ur-Nammu who constructed much of the Ziggurat of Babylon which became, in Hebrew tradition, the Tower of Babel. Its importance had been realized from the preliminary excavations of J. E. Taylor, British consul
at Basra in the mid-nineteenth century, who had been commis-
ioned by the British Museum to investigate some of the
ancient sites of what was then a dangerous region difficult
of access. He cut down rather unscientifically into the top
of the mound of sand and rubble covering the Ziggurat ruin:

"I began excavating the S.W. corner, clearing
away large masses of rubbish, formed of the remains
of burnt mingled with sun-dried bricks. I worked
along, at a depth of 10 feet and a breadth of 6,
without finding anything. I then returned, and worked
a few feet north along the brick casing of the
western wall;" (i.e. south-west) "here, 6 feet
below the surface I found a perfect inscribed cyli-
der. This relic was in the solid masonry; it had
been placed in a niche, formed by the omission of
one of the bricks in the layer, and was found stand-
ing on one end. I excavated some little distance
further without any success, and then relinquished
this corner for the N.W. (i.e. west) one. Here also,
I found a second cylinder, similar to the one above
mentioned, but at 12 feet from the surface. At this
corner I sank a shaft 21 feet deep, by 12 broad....
The sun-dried bricks, composing this solid mass
within, were here of an amazing thickness; their
size was 16 inches square and 7 inches thick....

"I naturally concluded that the same objects
would be found in the two corners still remaining.
I sank a shaft in each and found two other cylinders
precisely in the same position...."

Apart from the documentation of the primitive methods
used in this treasure-hunt, it is worth noting that vital
information was obtained from the texts. These date from
about 550 B.C., from the time of Nabonidus, the last of the
Kings of Babylon, and state that the tower, which had been
founded by Ur-Nammu, had been restored and completed by
Nabonidus. The excavations produced the first information
obtained about that Ziggurat and, also identified the site
called by the Arabs al Mughair\textsuperscript{12}, the "Mound of Pitch", as Ur of the Chaldees, the original home of Abraham.\textsuperscript{13}

It seems probable that Abraham would have brought the concept of the Ziggurat into Israelite lore when he moved from Ur around 2000 B.C.\textsuperscript{14} There had been a First Dynasty Ziggurat. As that Dynasty lasted from 2800 to 2470 B.C. it seems highly likely that the general idea of the Ziggurat's appearance and function would have been understood in the Middle East from that time and so the seed would have been sown for the Tower of Babel story later.

To return to the theme of the tower's appearance, Woolley has the main dimensions carefully worked out and his detailed description is important:

"In form the Ziggurat is a stepped pyramid having three stages. The whole thing is solid. The core is of mud brick (probably laid round and over the remains of the First Dynasty Ziggurat) and the face is a skin of burnt bricks set in bitumen mortar, about eight feet thick. The lowest stage, which alone is well preserved, measures at ground level a little more than 200 feet in length by 150 feet in width and is about fifty feet high; from this rose the upper stages, each smaller than the one below, leaving broad passages along the main sides and wider terraces at either end; on the topmost stage stood the little one-roomed shrine of the Moon-god, the most sacred building in Ur, for whose setting the whole of the vast substructure has been planned.

"On three sides the walls rose sheer to the level of the first terrace but on the north-east face (see Illus.\textsuperscript{55}) fronting the Nannar temple was the approach to the shrine. Three brick
stairways, each of a hundred steps, led upwards, one projecting out at right angles from the building, two leaning against its wall, and all converging in a great gateway between the first and the second terrace; from this gate flights of stairs ran straight up to the second terrace and to the door of the shrine, while lateral passages with descending flights gave access to the lower terraces at either end of the tower; the angles formed by the three main stairways were filled in with solid flat-topped buttress-towers."  

We now have a clearer picture of the positioning of the stairways, the number of stages and appearance of the walls. However, readings of other accounts of the Ziggurat at Ur produce impressions at some variance with those of Woolley. For instance, Gressmann says that the tower "was built in four stages, which sloped like a mountain", as compared with Woolley's "stepped pyramid having three stages" in the quotation above.

Leaving aside the differences in geometrical terminology used in these two descriptions, which may or may not reflect appreciable differences in opinion as to actual appearance, we see from Woolley's reconstruction that his version could also be taken as having four stages, not three, if we include the very substantial buttressing in front, on which the staircases and main gateway seem to rest. Woolley himself counts this frontal buttressing as a stage, since he mentions that three brick stairways converge "in a great gateway between the first and second terrace."
first terrace, therefore, must consist of the top of the first buttressing, since the gateway is between this and what is described as the "second terrace". There are clearly two terrace levels above the second terrace, without counting the temple itself. Consequently, we arrive at a total of four stages for the front (or main staircase) facade of the structure and an indisputable three on the other three facades, plus the temple on top. Gressmann must have mis-counted, since he mentions "four stages, which sloped like a mountain" and we know that he was not including the temple in his total as its walls, apparently, did not slope. This numerical conclusion agrees with Woolley's first-hand description and leaves Gressmann's in some doubt.

Finer points still in Woolley's details, such as the creation of a deliberate optical illusion of strength by slight outward curves in the side walls (in both horizontal and vertical directions, like the later Parthenon) are not sufficiently obvious to affect artistic renderings of the subject, and need not be taken into account here.

This then is the Ziggurat of Ur which was until recently described as being the best-preserved example known. It is a good starting-point, as many of Woolley's findings modified the reconstructions of that meticulous excavator of Babylon, Robert Koldeway, who had a less complete remnant to work on.
Koldeway was appointed in 1898 to carry out a systematic excavation of the site of Babylon and was associated with this German Oriental Society project for eighteen years. The immensity of the architect's task is revealed by this quotation from Champdor:

"Excavations in the residential quarter known as Merkes, the oldest part of Babylon", disclosed a series of occupation layers, the most recent being Parthian, a few feet below the surface. Father down were the Hellenistic, Persian and Neo-Babylonian levels; and lower still, those of the Assyrians and the Kassites. At forty feet down lay the ruins dating to the time of Hammurabi (1792-1750 B.C.) and the First Dynasty of Babylon. Below these it was impossible to investigate because of the rise in water level."

Where did the Tower of Babel fit into this scheme of things? Apparently Koldeway found the site of this great edifice to be nothing more than a quarry. André Parrot says:

"The site of the tower was indeed found there, at a spot named now es-Sachnu, but the discovery was disappointing in the extreme. It was not merely that the Ziggurat was in ruins. Xerxes had at one time set about demolishing it (478 B.C.). Alexander the Great, wishing to rebuild it, had ordered the site to be cleared of debris - an Herculean task which was begun but left unfinished. The Arabs had found it an exceptionally useful source of building material, furnishing them for centuries with excellent baked bricks for their homes. When ..., Koldeway arrived the destruction was irreparable."

It seems apparent that little concrete evidence of the dimensions of the tower could be obtained from such a ruin, except perhaps the base plan. This was in fact obtained, and again, Parrot's comments on the subject are worthy of scrutiny.
On a square foundation (each face measures slightly more than 298 feet) it was constructed with a kernal of sun-dried bricks enclosed in a solid shell of baked bricks 49 feet thick."

However, further deductions were possible on the basis mainly of what was left at ground level:

"Access to the upper stories from ground level was made possible by means of three staircases, two set against the south face, and the third centrally placed, at right angles to the facade."

This arrangement is identical to that seen on the Ziggurat at Ur and furthermore:

"...only the damaged remains of these stairways were to be seen, but judging by the height of their steps, it was nevertheless possible to calculate that the lateral flights must have risen to a height of nearly 100 feet, and the central flight to about 130 feet."

This suggests that the three stairways did not meet at a central arch as they did at Ur. In fact, the lateral flights may have risen to the top of the first stage and the central flight to the top of the second. The explanation for differing stairway heights may well be the same as those offered by Woolley in Ur Excavations, Volume V regarding the Ziggurat of Ur-Nammu:

"The set-back of the second stage of the building does not give sufficient horizontal space for a stairway connecting the two levels; consequently, if the converging flights of stairs from the terrace had attained only the height of the first stage it would have been impossible to reach the second stage by a continuation of the central flight; to achieve that, the landing of the gate-tower had to be higher than the pavement of the first stage." (See Illus. 56)
It may be significant that there are plan differences between the Ziggurat at Babylon and that at Ur. The base dimensions at Ur were about 200 feet by 150 feet. This puts Ur in a category with rectangular plan rather than square plan and this may well mean substantial superstructural variation as well as having deeper religious implications.

As the on-site evidence of appearance above the first level is so meagre for the Babylonian Ziggurat, we can only look to similar, preferably nearby, structures for further suggestions. As the Tower of Babel impressed those who saw it in its original state during the reign of Nebuchadnezzar, it seems likely that its dimensions must have been at least as generous as those of its neighbours. Birs Nimrud (the ancient Borsippa, a few miles south-west of Babylon) is still 154 ft. high, while that of Agarguf (built in the fifteenth century B.C. near Baghdad) is 187 feet above the level of the plain. Although the latter provides an excellent example of the performance of bonding of bricks "chained by means of layers of reeds," it is thought to have once been much higher than its present impressive height.

Fortunately, new discoveries enable us to arrive at more precise measurements. The extent to which this field of research is still evolving is shown by the fact that as late at 1950 Robert Pfeiffer of Harvard could refer to the Ziggurat of Ur as being "the only fairly well preserved one." Since then,
Roman Ghirshman has been able to document "the most complete Ziggurat known to date." This is the ziggurat at Choga Zanbil (sometimes transliterated Tchoga-Zanbil or Tepe Choga Zanbil) which Ghirshman was still excavating when he wrote about it in 1955. Its dimensions were: 174 ft. high (against a present 83 feet) with a square base side of 346 ft. These dimensions are obviously slightly more modest than others, but contribute when taken with others towards estimating an average height for important ziggurats of between, say, about 160 and 190 feet.

Ghirshman has also something important to say about the prime function of this ziggurat which is likely to have a bearing on others of this religious type. It will be seen that the temple function, apart from affecting the shape of the structure on top, must affect aspirations as to height, amongst other things.

Looking at the purpose of the Choga-Zanbil ziggurat, it appears likely that it fell into the temple-tomb category. Not only did it have a temple on top like the ziggurat of Ur (see page 66) but Ghirshman mentions finding buried in the second stage some rooms reached by stairs. He suggests that "they may have been intended to receive offerings or perhaps even to serve as royal tombs. Other rooms on the
northeast face, which was the most sacred, were completely walled in with baked brick, up to their vaults. No staircase communicated with them. According to the hypothesis which we have proposed, these rooms might be the 'symbolical' tombs of the divinities. 29

The tomb function theory is reinforced by the fact that in Mesopotamia the house of an inhabitant was also the place where he was buried (under the floor so that his spirit would continue to take part in the life of the family). It would be natural for the people to think of the Ziggurat as being the tomb of the deity, since the upper temple was in any case described as being his "house" - on bricks which were once the casing of this temple. It is obvious, though, that the temple function affected the external appearances, including height, of the Ziggurat much more than its tomb function, which was obviously of secondary importance.

An example of a kind of ziggurat-in-miniature in which the order of the functions was probably reversed in importance is the Tomb of Cyrus II at Pasargadae which I visited in 1965. This "tomb-temple" was built on his palace complex by the early Achaemenid King around 530 B.C. (See Illus. 57). The ziggurat form is most likely explained by the fact that it would have become familiar to the Persians during their
incursions into Mesopotamia (Cyrus II captured Babylon in 539 B.C.) and, since they deified their kings, the placing of Cyrus' tomb at the top of the structure would be a logical conclusion. He would be able to continue his divine operations from the tomb which would thus be a temple as well. However, looking at the structure primarily as a tomb, the Persians would not have followed to a logical conclusion the temple implications which the Sumerians had so carefully thought out. The Persians could see no need to build a structure that reached as near to heaven as possible in order for the god to be in his real domain. So this exceptional miniature "ziggurat" of Cyrus really reinforces the view that where the function was mainly that of temple, much greater height would be involved.

One other important consideration emerges out of this study of the Tomb of Cyrus. This is the number of stages which it had. There are six plus the tomb on top. One immediate response to this is that the Persians had in mind the provision of convenient steps for the ascent of priests and others to the temple. The stages themselves would form a staircase so that flights would not be needed. However, the height of each stage is substantially more than a man-sized step. The stages also vary in size from about eighteen inches to three feet, unlike regular steps. More like god-sized steps.
The late date at which this structure was erected makes it seem much more likely that there were at that time examples to follow which had six stages, twice as many as those of the Third Dynasty Ziggurat Woolley excavated at Ur. Woolley himself does a reconstruction of the Neo-Babylonian ziggurat, erected on the base of the Third Dynasty one by Nabonidus around 550 B.C. (See Illus. 58).

Nabonidus succeeded to the throne of Nebuchadnezzar II, who by 700 B.C. had made Babylon the greatest walled city the world had ever known. Woolley says of this:

"...the modern excavators were hard put to it to find, under the deeply sunk foundations of the uppermost level, anything that was older than Nebuchadnezzar; over a space of ten square miles virtually every building was due to him...at Ur also he embarked on an ambitious programme which seems to have aimed at the reconstruction of the entire city."30

In view of the magnitude of this undertaking, it is surprising that we find no evidence of his workmanship in the Ur Ziggurat. It is possible that Nebuchadnezzar either did not live long enough to start on this area (he left the rebuilding of Ur until after he had completed the task at Babylon) or that his work was unsatisfying to Nabonidus (who by contrast was a traditionalist, not an innovator) who therefore dismantled it.

Traditionalist Nabonidus could not find any evidence of
what the Third Dynasty Ziggurat had been like above that first stage previously mentioned. We know he looked because Woolley mentions finding the hole in the top of the first platform filled with Nabonidus' own bricks where he records finding Ur-Nammu's foundation tablet but nothing to show him what the tower had been like. Therefore:

"Nabonidus followed the fashion and the Ziggurat which he set up was entirely different from that which he proposed to restore. Instead of three stages the Neo-Babylonian Ziggurat had seven. Viewed from the front the effect was dramatic in the extreme. From ground level the three ancient stairways led up to the domed gate-tower at the top of the lowest stage; above that towered up six more stages, diminishing in size as they went up, with what looked like a spiral staircase encircling the building and leading from one stage to another and so to the topmost platform whereon stood the little shrine of Nannar, a small square building of bright blue-glazed bricks surmounted by a golden dome."

Archaeological proof of this impressive seven stages seems hard to find. However, Woolley arrives at an interesting conclusion regarding the staircase formation (above the conventional arched gateway where three main staircases met, at the top of stage one). A copy of his reconstruction is illustration 58. Moreover, if from the arrangement of stairways or by other means it is possible to prove that the ziggurat of Nabonidus at Ur in fact had seven stages, then it seems highly likely that Nabonidus who "followed the fashion" would have been following the principal city of Babylon whose Tower of Babel must then also have had seven stages.
Woolley's deductions regarding staircases were as follows:

"When you had mounted one of the three main staircases and had passed through the arched gate on to the first terrace there was on your right a little brick-built flight of steps leaned up against the wall of the second stage; the steps ran only as far as the corner of the tower and from that point a level gallery took you right round the tower to the centre of its facade"(this would be on the second stage, behind the top of the arched gateway) "where there was just such a shallow recess as Herodotus mentions in his description of the Babylonian Ziggurat. Then you made a left-about turn to mount a second little flight of steps, this time leading up to the left, and so round the building on the flat to where, on the facade, a third flight running to the right took you up to the gallery forming the fourth stage; then round the building to another *sitting-out* recess, and so on. The total height of the 'Mountain of God' on which stood Nannar's Holy of Holies was just over a hundred and sixty feet." 32

This ingenious solution to staircase arrangement must surely be given considerable weight, having in mind the stature of the archaeologist who proposes it. Each logical step has been carefully thought out and the above description by Woolley is supported by reasoned justification, a sample of which is as follows:

"What we found was the brick pavement of the lowest stage, showing that Nabonidus made this uniform throughout, obliterating the stepped form of Ur-Nammu's first stage, so that at either end the Neo-Babylonian floor was nearly ten feet above the old, and on the whole conformed his second stage to that of the original; but here, on the facade we found the first little flights of steps virtually intact and, on the left hand side, what at first seemed an anomalous feature, the front wall of the second stage (which, like the containing-wall of the little staircase, was relieved by the same sort of shallow buttresses as Ur-Nammu had used in the lower stage)
stepped forward actually beyond the line of the staircase wall. Above this, everything had vanished. The problem of reconstruction bothered us for quite a while, but at length we realized that if we planned the third stage exactly on the lines of the second, but in reverse, and the fourth in the same way with the steps on the right hand side, as in the second stage, and so on, for seven stages, we not only could explain all the features of the ground plan that survived but we had an absolutely symmetrical building, of a reasonable height, and one to which Herodotus' description of the contemporary Ziggurat at Babylon would very aptly apply. This cannot be coincidence, and I think that we can fairly claim to have recovered the likeness of Nabonidus' Ziggurat...." 33

Much that was true of Ur was evidently true of Babylon also. The realization of the most acceptable ziggurat proportions seems ultimately to rest on the solution to the problem of staircase arrangement. The above synthesis means that the Ziggurat of Babylon was perhaps a unique combination of two main types. The Ziggurat of Ur, as noted on page 86, like those of Urak and Nippur, was of rectangular type. These were always accessed by ramps placed either at right angles to the main facade or running, broadly up its flank to meet at a central point rather than by flights of steps attached to the sides. The square type, such as Birs Nimrud, Choga Zanbil and Khorsabad, were accessed by the usual flights of steps. The rectangular type was found in the south and the square type to the north, so that the Babylonian Ziggurat, somewhere in the centre and having ramps ("main staircases") to its first terrace and then flights of steps thereafter, was geographically and structurally a focal point of the two main types.
The wide dispersal of these two categories suggests that the inhabitants of the land of Shinar were in fact near to being one people (as stated in Genesis 11:6). This must have been particularly true of their religion, if not linguistically or in other cultural aspects.

We have now arrived at a projection of the appearance of the Babylonian Ziggurat as far as archaeological evidence will allow. Dimensions are:
- a square base with side of 298 feet;
- a main access ramp at right angles to the facade of 130 feet, two main side staircases rising only 100 feet;
- a conjectural height of between 160 and 190 feet (based on the "national average"). However, in view of the height of the main staircase, this seems low.

Other general features include a mass of clay masonry, or unburnt bricks, protected by a layer of burnt bricks; six or seven stages plus a temple on top, each successive stage being smaller than the one below it. A strong mortar which included bitumen was probably used (Genesis 11:3). The sides of the stages sloped a little, like the sides of a mountain. Beyond this we can only look to forms of evidence other than archaeological ones for suggestions which might
sharpen our definition of the most likely form of the Tower of Babel.
FOOTNOTES TO APPENDIX:


5. Parrot, p. 68.

6. Loc. cit..


8. That Ur-Nammu had built the Ziggurat at Ur was proved by "foundation-cones" - nails driven deep into the mud mortar between inner brick courses of the foundations. These had the inscription: "For Nannar, the strong bull of Heaven, most glorious son of Enlit, his King, has Ur-Nammu the mighty man, King of Ur, built his temple, E-temen-ni-it" (Woolley, p. 127).


10. Taylor made the mistake of assuming that the sides, not the corners, were at cardinal points of the compass. His S.W. corner should be the south corner.


12. Also transliterated El-Mugaygar.

13. Woolley: Excavations at Ur... pp. 127-128.
14. Abraham is thought to have lived about 2000 B.C. Ur-Nammu was the first of five kings of the Third Dynasty, who reigned with Ur as capital of the empire. Dates of this dynasty are often set at 2112 to 2015 B.C. although Parrot has 2124 to 2107 for the reign of Ur-Nammu.


18. Merkes was adjacent to the E-temen-anki temple precinct and Ziggurat area, immediately to the east of it.


20. Loc. cit..


23. Woolley, p. 130.


25. Loc. cit..


35. Revealed by M. Charles Picard, speaking to the French Institut on 16th January, 1953.
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