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**The Ponte Vecchio : a Symbol of Florence
and Florentine Culture**

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Introduction

The aim of this thesis is to study the Ponte Vecchio as a designed piece and as a symbol of Florence and Florentine culture.

The idea of writing a thesis on the Ponte Vecchio was inspired by the first sight of the bridge during an Easter visit to Florence, which followed a period of six months study at the Faculty of Architecture, Politecnico di Milano on the ERASMUS exchange programme. As a piece of architecture the Ponte Vecchio seemed to possess little or no overall plan or design, yet it demanded further visual study. Questions of construction, practicality and aesthetics needed to be answered.

This prompted a somewhat frustrated batch of research in Italy and on return to Ireland where, apart from brief encyclopedia and guide book references, relevant information on the Ponte Vecchio appeared non existent. Excluding a 1947 Firenze publication by Renzo Baldaccini entitled *Il Ponte Vecchio*, which is printed in Italian text and proved impossible to locate, there has been no publication devoted primarily to the Ponte Vecchio and certainly none regarding the bridge as a symbol of Florence and her culture. Extraordinary that one of the worlds most famous bridges should have inspired so little serious documentation. During a second visit to Florence the bridge was videoed. Photographs, interviews with local traders and artists and a handful of guide pamphlets would become the backbone of the research to follow.

George Holme's *Florence, Rome and the Origins of the Renaissance* and John White's *Art and Architecture in Italy 1250-1400* were consulted to provide a necessary overall view of the culture of the Renaissance and the social and political background to

Florence. J.R. Hale's *Florence and the Medici* , Marcel Brion's *The Medici* and Mary McCarthy's *The Stones of Florence* provided background information of the Florentines, their way of life, their characteristics and their government. J. Wood Brown's publication *The Builders of Florence* provided relevant historical and architectural background to Florence. Although the above provided ample background knowledge of Florence and its people, they offered little specific reference to the Ponte Vecchio. Throughout research it appeared that there was a gap to be filled regarding serious documentation of the Ponte Vecchio, this thesis intends to lessen that gap.

The objectives of the study are as follows: to identify the design objective of the Ponte Vecchio and to solve whether or not this objective has been reached. To identify the designers of the Ponte Vecchio as being the Florentines themselves, showing that the evolution of the bridges design is a direct result of the Florentine people, their culture and characteristics. To question how a design of practicality became known for its form and developed as a symbol of Florence and entered into the mainstream of European imagery.

The Ponte Vecchio will be analysed in context with other relevant Florentine architectural buildings, for example some architectural features of the Palazzo Vecchio, Uffizi and Palazzo Pitti shall be included. In order to fulfil the objectives a background to Florence the city, its society, its people, their characteristics and the architecture is essential. The first half of the thesis shall offer this background where relevant to these objectives in order that they may be fully explored in the latter half of the study.

Chapter One

Establishing the need for a bridge.

Florence was founded around 1 B.C. as a colony for Roman armies. The town was placed between the River Arno and a small hilltop town, Fiesole. Fiesole determined the passage and course of the great middle road from North to South Italy.

Florence was used to control the only practical north to south crossing of the Arno. On the whole Florence was designed not as a station but as a junction on the Northern road, with all the advantages which such a junction was sure to command. North and south runs the road to Lombardy on one hand and to Rome on the other, then steadily westward flows the river to Pisa and to the sea. So by road and by river Florence was located in a potentially great market place. The character of the land too formed a natural junction, surrounded by the Tuscan hills. The valley occupies a doubly central position, east-west within the Mediterranean and north-south within a prosperous Europe. The mountains offer excellent building stone, white marble at Carrara and in the south deposits of iron and copper.

The relationship between the city and its river is an important one. The Arno was already navigable between its estuary and Florence during Roman times. At the height of the commercial period it was used to transport timbers for shipbuilding, import wool, minerals and goods of every type to Florence. Apart from communication it was also an important source of energy. It powered mills and fulfilled a number of industrial functions, especially the cleaning and dyeing of woollens and textiles. (Wood-Brown, 1907, p.4) The Florentines are proud of their river and greatly appreciate its worth as a visual amenity.

By 3 A.D. Florence was a provincial capital of the Roman Empire, a major crossroads of the Italian peninsula, and a pros-

perous commercial centre. As the city grew so too did its parameters. There was a need to cross the Arno, a need to build a bridge. At the narrowest span of the Arno (100m) between today's Via Por S. Maria and Via Guicciardini a wooden bridge was constructed and Florence expanded over the Arno, everything across the bridge became known as Oltarno.



1. Central Florence.

Florentine culture

The present glory of Florence is its past. The Florentines hold a great pride in their city and since the Thirteenth century have been convinced that their city is unlike any other, save Rome or Athens, perhaps. Their buildings are works of art encompassing yet more works of art, each picting their personal passions for religion, art, power and money.



There is an aura about the Florentines which may be referred to as The Classical, that is, the native Florentine trained by a force of Roman forms and directed by Greek inspiration. Florence has possessed a Greek colony from early times and this hugely carved the character of the Florentines (Wood-Brown, 1907, p.24). As the Romans built Florence, a city, truly Roman in concept and even named it Picola Roma. The Florentines sought to realise the high ideal set by its capital. The Greeks spirited the city building one which had foundations, whose "Builder and Maker is God" (Wood-Brown, 1907, p.26). When the rest of Italy had fallen under the Empire quest for feudalism, the Florentines boldly rebelled and sought help from the church in order to maintain their *civilitas* (classical ideal). Roman in structure and Greek in spirit, from this *civilitas* came Dante, Petrarach and Boccaccio offering a foundation for Humanism while scripting the Florentine vernacular enabling it to become the base for the national language. (Wood-Brown, 1907, p.44).

Of all Florentine characteristics two dominate the rest, their artistic eye and shrewd business aptitude. Florentines dyed and dressed cloths to suit their own taste and with road and river as export vehicles, the Florentine style travelled all over Europe. The dye techniques used were found to be Greek in origin. (Wood-Brown, 1907, p.24) Under Roman guide and Greek inspiration the Florentine aesthetic developed into an original form. A shrewd business aptitude accompanies the artistic eye to create a trading Florentine. Their keen business aptitude is best seen where they perceived the advantage of treating their money as they treated their cloth, furnishing the world with a coinage of such refined superiority as might command all markets. In 1252 they struck the first Florin in gold, which quickly replaced the English silver mark sterling as Europes preferred currency (Brucker, 1983, p.71) this gave Florence a lead over all commercial rivals and also established Florence's association with gold which still exists today.

Eventually feudalism fought its way into Florentine politics and

in 1421 Giovanni di Baci de Medici was elected. The Medici family came from a background of banking prestige and solidarity, their history and that of Florence were intertwined for three centuries, combining their financial resources with diplomacy, frequent magnanimity personal flourish and artistic taste to fashion the Florence of the Renaissance, the city that by and large has impressed itself upon the present. (Brion, 1971, p.48). It is this combination of the Classical Ideal and distinguished rule which create an aura the present Florentine glorifies in and is desperate that we should not forget their entitled eliteness.

Today the Florentine is much different, the city and its people now seem to be but servants to the tourist industry. On a visit to Florence it would not be unusual if one never met a Florentine but only other visitors. Florence has become a shopkeepers city owned by foreigners. Tourism is, in a certain sense, an accidental by-product of the city, with architecture so beautiful, a powerful history, a market centre, a railway junction and manufacturer of furniture, shoes, leathers, gloves, handbags, picture frames, gold and jackets it is a tourist heaven. The streets have become overcrowded, dirty, noisy and cluttered with immigrant stall sellers. What's stopping the city totally succumbing to tourism and becoming little more than an upmarket cultural theme park? The Florentine is, they live in a different Florence, thousands of them work in the industrial suburbs, they socialise only with one another, rising above the growth of tourism, they continue to live in their city as they had prior to the invasion. Although the days of Florentine power have long since evaporated, the people of the city retain the posture of the bygone age. Arrogant and untouchable, the Florentine culture lives on inside their city, the true Florence. Their vanity potentially masculine, is visible at the early evening hours when they troop to their cafes while performing the rituals of hair smoothing, lapel patting, trouser adjusting and *ciao bella* ing. The visitor cannot enter their frame, they must be content with a Sony Handycam view of a plastic Florence.

Street architecture

Florence is different, her fragrance is definitely one of femininity but her buildings are so masculine standing foreshore and direct with no attempt to illude or hide. Their facades are gen-



2. Unstudied irregularity, towers revealing the Duomo.

erally plain and basic with almost no trace of Gothic lace or baroque swirls, flamboyance and decoration are reserved exclusively for church shells and they too are quite severe, coated with dark green and white calculated geometric marble shapes. The streets of the city host shabby blocks of mustard, buff, cream and pale yellow stone, which seem to gather above, under, on and around one another. The domestic architecture of Florence is purely functional arising out of necessity but Florence is famed for its beauty and elegance.



The city was planned out as a rectangular garrison town. Two main roads divided the town into unequal quarters which, in turn were broken up into uneven rectangular building plots by the lines of the lesser streets (Brucker, 1983, p.71).

The original building block of Florence was the tower, a house built on a narrow foundation sufficient for one small room, which was added to vertically room by room until the needed accommodation was provided (Wood-Brown, 1907, p.70). For defensive reasons the tendency was to restrict the surface area of the town and the circumference of its surrounding walls. Therefore house sites were reduced to the narrowest possible dimensions and while the population grew developments sprung upwards.

As Florence was a town of trade the ground floors of the towers were commonly reserved for shops, workshops and storage areas, with the living quarters occupying the upper stores. This kept the dwellings off the damp ground and above the noisy streets. It was common that the ground floor would have lofty arched doorways to allow the passage of large animals and even carts through for trade. The doorways were kept shut by means of heavy wooden shutters with wrought iron bolts forged locally (Wood-Brown, 1907, p.75). As towers and living rooms rose above the shop basement, so Florence was formed architecturally and socio-economically on a commercial basis growing with the developments of trade.

The facades of the towers were riddled with columns and rows of square holes and protruding radiused blocks. These holes, called put-log-holes, and blocks were a means of supporting portable wooden balconies called galleries. Each balcony would be sheltered by one directly above. These were used as an airy escape from the cluttered tower rooms. In times of peace the balconies would be draped with flamboyant Florentine cloths, creating a vast multicoloured vertical blanket which brightened the dark winding streets. In war times the uppermost balcony

would be a ready vantage point for defence and would be filled with crossbowmen. (Wood-Brown, 1907, p79).

Towers of vertical blocks began to line themselves side by side along streets and up along the other side, thus creating high trench-like street channels all over Florence called *Bargo* . Behind, on the side facing away from the street solid stone walls rose without windows but only a few thin vertical slots called *spiracula* . Sometimes *Bargo* would be closed in at one end by a gate-tower creating a cul-de-sac or *antiporta* . (Wood-Brown, 1907, p.80). It was common that families and clans would group their towers together side by side. As the family grew a cluster of nearby towers would be taken over and the gap between filled creating a square of towers with a common courtyard within. Population continued to rise so towers rose higher and higher in a fine unstudied irregularity arising from the differing needs and resources of each family. When families gradually died off newcomers took their places and began to modify the original house groups. Sometimes arches would be built to join opposite facing towers where families lived. Then more towers were built upon these arches. Thus a thousand unforeseen circumstances evolved giving Florence the charming irregularity.

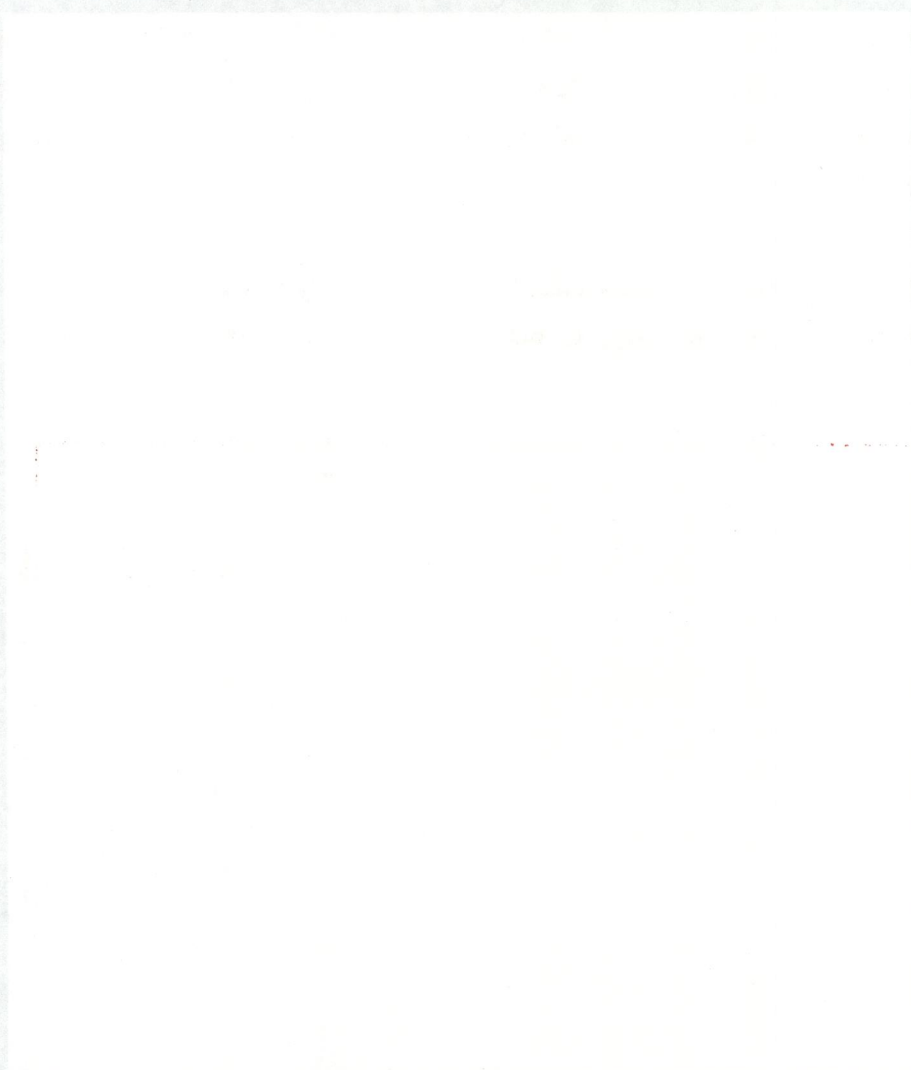
Eventually when population grew too much and it was no longer a practical solution to build any higher, rooms had to be extended elsewhere, the wooden galleries were used. On the level of the first floor the wooden supports were replaced by solid stone structures, arched between and built upon up to the roof in brick and half timber as permanent additions to the house. These extended the rooms outwards, the structures were called *sporti*. (Wood-Brown, 1907, p.95) They formed a natural arched shelter beneath on ground level which later, when a roof was added became known as *loggia* . These encroached in on the street at either side creating perfect sites for the market halls of the city to locate themselves. As the *sporti* rose the original roofs of the towers became unsightly. This provided an unsatis-

factory skyline facade, so something had to be done to replace what had been lost, as it were to crown the towers anew. Hence, the characteristic Florentine roof of the fifteenth and following centuries. A wooden structure which would hand the *sporti* at an angle leaving but a ribbon of blue sky visible from the narrow and shady streets.

In 1250 a law as passed which stated that all buildings exceeding a certain height must be reduced to a standard height (Wood-Brown, 1907, p.101). As a result groups of towers were



3. A View of a bank of the Arno, note *sporti* over the river.



cut down forming a level flat lined top. Blocks of towers took on a more solid cubic form. Stone corbelled battlements were added to the flat tops, similar to Medieval castle tops. (Wood-Brown, 1907, p.101). This technique was most common in the Palaces of the city. Palazzo Vecchio and Palazzo Pitti are good examples. Since palaces were obviously going to be much larger in surface area than a domestic tower. There was no need for an irregular aesthetic as the whole palace would be built at one time. This led to plainly decorated palace facades, in order to overcome this a technique called rustication became fashionable. This meant that convex building blocks were used purely decorative in function to create interesting plays of light on the facade. In 1533 another law as passed forbidding the addition of further *sporti* this accelerated the flat aesthetic in Florence. (Wood-Brown, 1907, p.107).

Despite numerous floods and bombings of World War II Florence hasn't changed vastly in appearance. Thanks to



4. Palazzo Pitti, note rustication technique.



lengthy and detailed restorations. It is possible that a Renaissance Florentine would know exactly where he/she was at any location in the city today. Through the flooding of tourism the Florentines have tried desperately to hold onto their past. Only the ground level of the city has changed somewhat. On the main streets the lofty arched doorways have given way to wooden rib framed windows which display the rich goods inside. Goldsmiths, leather shops, high fashion outlets, banks, *gelateria* 's, cafes, fast foods joints and camera shops now line the streets as the towers foundations while above the locals dwelling places have remained unchanged.

The rest of the world might alter, but, in the jealous eyes of its foreign owners, Florence was supposed to stay exactly as it was when they found it - a dear bit of the Old World". (McCarthy, 1956,p.21).



5. Florence today, Via Toscanella in the Oltarno.



Chapter Two

Historical development of the Ponte Vecchio

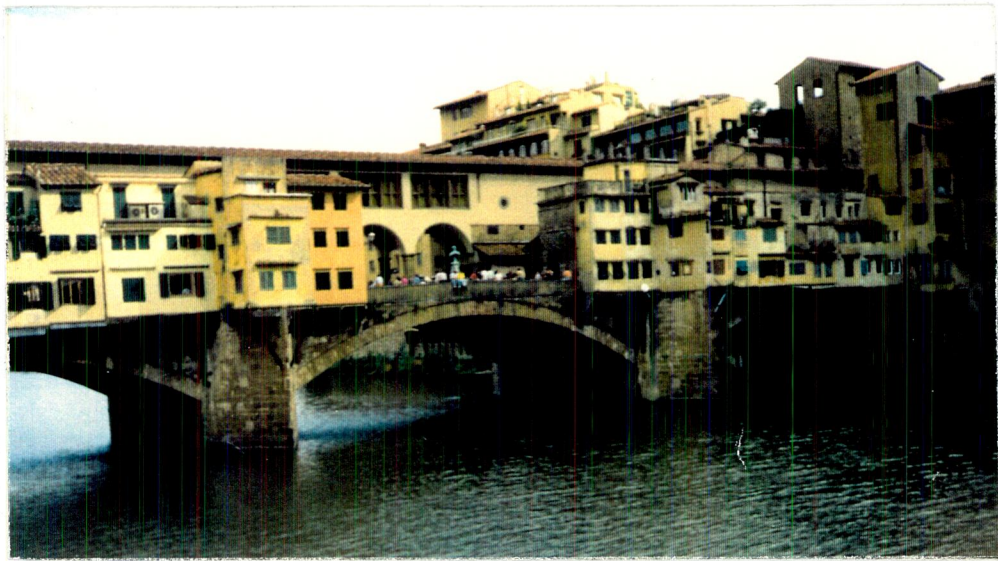
Florence's first bridge, a wooden footbridge spanning the narrowest point on the Arno, was washed away by a flood in 1177. By then Florence was a large town, which depended for its prosperity on having a bridge over its river. Luckily, it was rich enough to build a new bridge to replace the old one. A replacement bridge was built on the same site, again wooden but this time with nine arches offering greater support but being somewhat riddled with technical difficulties. Nevertheless with thirty years the city had become so large and prosperous that a new bridge had to be added in 1218, the Ponte alla Carraia, the first bridge became known as the Ponte Vecchio or Old Bridge in order to distinguish it from the second. These two were followed by two more, the Ponte alla Grazie, completed in 1237 and the Ponte Santa Trinita in 1252. The building of these new bridges clearly indicates the remarkable growth of Florence in the first half of the Thirteenth century.

The other three bridges have all had their tabernacles and pilleries but the Ponte Vecchio, since time immemorial, has been a bazaar. The first tenants were tanners and purse-makers. Theirs was a pretty aromatic trade, for the hides were left to soak in the Arno for eight months and the chief curing agent was horse urine! By 1206 the Commune of Florence had established a special agency, the *Opius Pontis*, for bridges maintenance and the renting of the shops. (Borsook, 1988, p.73).

The new Ponte Vecchio was to last only 150 years for in the winter of 1333 history repeated itself. Continual torrential rain caused a devastating flood which washed away this bridge, much of the town and the other three bridges. Florence was so completely ruined that it inevitably took some time to recover and to rebuild. But again the Florentines were traders and they

could not do without their bridges. Trade and prosperity was rapidly restored and plans to rebuild all four bridges began.

It took twelve years to complete and in 1345 Taddeo Gaddi's three arched bridge opened for business. This time the rents for the shop rooms were supposed to pay for the bridges reconstruction. But in 1378 the Commune farmed out the rents to Alamanno de Medici as a reward for his families support of the Ciampi Revolt. (Borsook, 1988, p.173).



6. Ponte Vecchio from the West.

By 1422 the butchers had left their old sites in the Vi della Terma and Bargo SS Apostoli and gradually took over most of the shops on the bridge. After the expulsion of the Medici in 1494 the Signoria sold the shops in order to fill the depleted treasury. But the Ponte Vecchio, together with the other bridges continued to be administered by a public agency called the Gilbert and Sullivan name of 'The Officials of the Five Things' or *gli ufficiali della Cinque case* the five things were mills, bridges and walls, the offices of port officials and tax collectors, and the property of expropriated rebels. Gradually besides the butchers linen merchants, hosiers, green grocers and blacksmiths moved onto



the bridge (Borsook, 1988, p.176).

For the occasion of Francesco de Medici's marriage to Joan of Austria in 1565, Cosmio I had Giorgio Vasari (1511-74) design a private corridor between the Palazzo Vecchio and the Palazzo Pitti, which would pass through the Uffizi and over the Ponte Vecchio. The young couple were to live there, it was built in five months (Borsook, 1988, p.177).

By 1593 the Grand Duke Ferdinando I could no longer tolerate the vile arts such as the butchers and green grocers which continued to do a bustling business beneath the elevated corridor. Ferdinando decided to restrict the shops tenancy to goldsmiths and jewellers in an attempt to portray a more elegant civilised image. Quickly 41 goldsmiths and 8 jewellers settled in and rents were promptly doubled, which may explain why the artisans went by the name of *banco rotti* or broken benchers/bankrupts.

In 1944 the retreating German army of the Second World War came up through Italy and Florence, In order to disturb their trail they bombed all three bridges on the Arno but spared the Ponte Vecchio, rumoured under direct orders from Hitler, himself a lover of art. Nevertheless they bombed its neighbouring buildings at either end so that for several days all traffic across the Arno was effectively blocked. Again the Ponte Vecchio proved a survivor in 1844 and 1966 when Gaddi's structure stood still after two more devastating floods which ruined most of Florence.

Today the Ponte Vecchio has three landlords, the Ministry of Public Works owns the foundations, the city has its piers, the roadway and Vasari's corridor but the merchants now own their own shops (Borsook, 1988, p.178).

Chapter Three

Design analysis of the Ponte Vecchio

Although the birth of the Ponte Vecchio proceeds that of design history by far, certain design related questions may be raised in its analysis. Firstly what was its objective? Did it reach this objective? How and why did it take its present form? Who was responsible for its form? In order to resolve these questions the bridge shall be broken down into separate sections and then analysed. Chapter Three may be referenced to the accompanying video cassette.

Foundations

In 1345, when the corporation of Florence decided to replace the Ponte Vecchio, the entrusted the work to architect-sculptor-painter Taddeo Gaddi (c. 1300-66). His brief and objective being to redesign a bridge at the same location complete with shops which would be capable of resisting future possible floods.



7. The Ponte Vecchio, three arched bridge.

Gaddi, true to Florentine artistic tradition, broke new ground in the aesthetics of bridge design, by improving the common Roman semi-circular arch system. Gaddi's design would create partial rather than full semi-circular arches. This meant that the springing of the arch would not start vertically from each pier but at an angle to it. The bridge therefore could be lower and

less massive than those of the Romans, enabling a steadier centre of gravity. The design introduced a new engineering principle, the mass of a new arch no longer pressed vertically on its piers, but at an angle which tended to force them apart. The piers which supported two arches did not produce a problem, since the sideways thrust of one arch balanced that of the next, causing the piers to support a vertical weight. But at each end of the bridge the abutments had to be designed differently. Instead of acting merely as supports for the last half arch at each end of the bridge, the abutments also had to withstand the sideways thrust of the end arches as well. This segmental circular arch set the pattern for many great bridges of Italy and Europe. The new Ponte Vecchio has only three spans. The centre span is 30m wide and the other two 27m each.

Passageway

The roadway of the bridge was to be lined with rooms for letting. Rather than just stick on blocks of shops, Gaddi designed an arch system which would run the lengths of the bridge, only breaking in the middle to clear a central space. Each arch would facilitate the site of one shop. This left a symmetrical gathering of letting spaces lining the roadway. Florentine streets are narrow and cramped with little room to permit casual traffic flow. Therefore their footpaths have to be equally narrow, often sufficient to grant only one person enough room to walk on. A long narrow path rims the foot of Gaddi's shop arches on either side to line the roadway creating a street aesthetic. Looking directly down the bridge from north to south or vise-versa, it no longer resembles a bridge but a common Florentine street. The ram-belling visitor may feel suddenly disorientated when reaching the central space on the bridge to sight the Arno on either side.



8. Pedestrian road through the Ponte Vecchio, south entrance.

Thus Taddeo Gaddi successfully solved this design problem showing that he was an engineer as well as an architect.

Shopblocks

Gaddi designed shops which were small and compact structures each identical to the other and each fitting snugly into an archway. To this point the bridge was regular and symmetrical. In 1593 when the gold and silversmiths moved in they needed much more room (Chierichetti, 1984, p.82). In typical Florentine fashion they decided to add and extend their shops as they pleased. In keeping with the domestic tower system they began to extend vertically. There was a need for workshop rooms in which to craft the gold and silver ware. Again, continuing the tower format, the existing room on ground level would be used as the trading store. As years went by trade blossomed and there was need for further extension development. At this stage each tenant owned their own shop and could do as they wished



with it. Every shop needed extension but some required more room than others, here the irregularity begun. The towers unstudied irregularity was born of the differing needs and resources of each family. The Ponte Vecchio began to take form from the differing needs and resources of its tenants. Further



9. Blocks overhanging the Arno.

constructions were to follow the tower route, when an impractical height was reached, extension crawled outwards, encroaching in over the street with Ponte Vecchio *sporti*. Tenancy would be passed from family to family, generation to generation following deaths and time. Each newcomer would demand an alteration to the letting space. This unsettled the regularity of the inner facades of the bridge, soon the outer or rear facades would swim randomly. Following seventeen century strengthening of *sporti*, blocks of stone rooms began to sprout over the Arno. Some shops required one single room but others demanded two or even three stories at a time. Over a period every shop had been fitted with a three story extension overhanging the Arno each supported by long double brackets and struts. To view from the side these blocks seem unsafe, as if they have been stuck on randomly "as if part of a crannogue has been



pulled up, piles and all, to be planted here not in but above the water on its coign". (Wood-Brown, 1907, p.99). One shop has three stories somehow jammed beneath the arches of Vasari's corridor. The ground floor hosting the sales room, accountant and merchandise, a tiny spiral staircase leads to a workshop where a craftsman practices and above still in a tiny cubby-hole of a room with no space in which to stand erect, the goldsmith crouches over his work. Although cramped and cluttered each room boasts an envious view of the Arno through a window perched in the rear wall. The layout is perfectly functional, a totally self contained process where the goldsmith works on his piece and hands it down to the craftsman on the lower floor when its ready for treatment then the piece is handed down to the sales room for public consumption.

Shop facades

The only regularity you will find on the inner facades is at ground level. Here, because of the rows of arches and restricting footpath, each shop front is relatively similar.



10. Rows of east side shops, view from the central area.



Each shop window is divided into two plains, the top plain descends at an angle to meet a vertical bottom plain. The windows rest, at their height, on a concrete bed which perches the gold ware at a suitable height to entice customers. The window frames are purposefully in rib-like bevelled wood to provide maximum glare to the glint of gold within. This wooden theme is carried throughout the interior with floor and furniture stained as the wooden frames, this gives the appearance of an elegant authentic dwelling. The shop name is usually printed on a canopy which may be pulled down to shade from the sun.



11. Shop facade.

Shop shutters

The lock-up shutter on the jewellers shops are designed to resemble those of traders in older times. Again, Medieval hinge systems and riveted furnishings both through the solid wooden panels which close to wrap the shop up in the Old World. A stroll over Ponte Vecchio at siesta or night time when the shops are wrapped is like a medieval flashback, save the talent-less



portrait artist behind you. Opening the shutters is like peeling off a shell. The vertical shutters flop down to rest along the concrete bed, the descending top shutters may be raised and hooked onto rafters overhead by chairs. The door section is again in keeping with the Old World aesthetic, the heavy panelling is furnished with wrought iron letterbox, knocker and peephole. The shutter system is designed to amplify the bridges 'craft' character lending to a more personalised feel.

Windows

Window shutters seem to be thrown about the bridge blanking windows at every angle. Due to the spontaneous growth of the rooms on the bridge windows were knocked out in random fashion. Shutters are common to many Italian buildings but are used on the Ponte Vecchio to block the dazzling mid-afternoon sun and its Arno glare from reflecting upon the treasure in the shopblocks. On the Ponte Vecchio two designs are used. The first are solid heavy wooden panels and the second updated panels with vents designed to release some light into the interior. Again wrought iron hinges are included, set into the store



12. Shutters at rear of the shopblocks.



walls. Light blue, green and teal finishes contrast beautifully with the pale yellow, terracotta and cream of the shopblocks. Windows which don't require shading incorporate another medieval design feature, wrought iron grids which serve as protection.

Rooftops

Roofs hang over the shops at a constant height along either side of the bridge, breaking only at the central area. This forms a useful straight horizontal line from which one can really appreciate the contrasting irregularity of the workshops block above. Structurally, these roofs are nothing but the beamwork of the old galleries set at a new, falling angle. There is a drop in their heads showing how these inclined eaves-brackets were derived from the straight put-log brackets, Terracotta slates, again traditional in Florentine roofs contrast with the colouring of the stone blocks. The roof edges are rimmed with networks of drains which wander all over the bridge creating an interesting ribwork. This technique is common to Florentine facades where the drain system crawl all over buildings like ivy, rather than hide or disguise the drains the Italians tend to display their practicality lending to the form follows function ethic.



13. Roofs of blocks and shops.



Central area

The central space on the Ponte Vecchio consists of an area capable of holding a group of three towers, a span of three arches. Only the Florentines could have conceived its concept, an area whose only function is to provide a platform from which to study and appreciate the surrounding view of Florence and the Arno.

The bridge... is the most enchanting feature of the scene. The space of one house, in the centre, being left open, the view beyond is shown as in a frame; and that previous glimpse of sky and water, and rich buildings, shining so quietly among the huddled roofs and gables on the bridge is exquisite. Charles Dickens' *Pictures from Italy* (King, 1991, p.84)

Today the footpath and walls provide comfortable voyeur plots for straying eyes. The west side is roof free and the cool river breeze which rushes over it is welcomed on humid summer days. The east side is sheltered somewhat by Vasari's corridor and segregated into three sections by pillars supporting the three arches. The Old World is again picted by two heavy medieval doors which flank two east side shops. They are arched at the top and riddled with wrought iron rivets and still ageing bolts. These doors mark the entrance to the overhead workshops via narrow spiral staircases. A cast iron water fountain hugs the east wall close by to quench the thirst of the loitering and to mark the bridge as a tourist spot, this is amplified with the presence of the bust of Benvenuto Cellini, a favoured 16th century goldsmith and sculptor opposite on the west side.

Vasari's corridor

When Vasari was commissioned to design an elevated corridor to link the Palazzo Vecchio, through the Uffizi over the Ponte Vecchio onto the Palazzo Pitti, he was faced with problems of contrasting architectural styles. The formality of the Palaces to the spontaneity of the bridge. Plain symmetry versus unstudied irregularity. Vasari's solution was bold and indicated little compromise. The corridor would run through the foot of the Uffizi along Lungarno Medici and Piazza Pesce over the Ponte Vecchio

and off to the Palazzo Pitti sporting all its Palace symmetry. Its roof is perfectly level, constant in height and regular arrays of archways each centred under a square window. The colour too is uniform all in bland cream. An impression is given that the corridor came first and the shops later. The corridor, the norm and the blocks somehow were flung barbarically onto it. But there is a compromise, subtle, but nevertheless building a link between corridor and bridge. The archways are common to those Gaddi originally used in his 1345 design to line each side of the bridge. The roof tops, although level boast no corbelled battlement common in Palace architecture, they hang out over the edge like the roofs of the shopblocks. The square windows too, from a distance resemble the window shutters of the bridge. Looking in from the west where the Uffizi section is not visible,



14. Vasari's corridor from the south bank.

the corridor acts, as the shop roofs, as a horizontal gauge from which to contrast the scattered blocks. Three large windows are placed directly over the three arches where royalty used view their city. Vasari's corridor presents the Ponte Vecchio with balance, solidifying the structure and nestling it in with its surroundings. Instead of killing the spontaneity of the shopblocks



growth the horizontal contrast tends to enhance it in a subtle manner. Until recently the Ponte Vecchio section of the corridor was closed because bombardement badly shook the bridges foundations and the passageway. The weight of the corridor tended to pull the walls of the shops riverwards. Now the city's engineers have imbedded pieces of glass into the walls of the workshops to serve as strain gauges. Years of structural repairs



15. Vasari's corridor from the Uffizi end.



have now been completed and the corridor is once more in use as the gallery of artists self-portraits. As the corridor passes off the south end of the bridge a diversion had to be made in order to avoid an old tower. Vasari built around the tower supporting the block on brackets of the *sporti*, not in wood but in solid stone, in beam-like structure suggesting the wooden brackets the *sporti* originated from. The tower is complete with brackets and put-log-holes, Vasari designed the block to give the impression that his stones fall almost exactly, as if they were the very struts of wood that have replaced as well as reproduced the originals.



16. Vasari's corridor avoiding the ancient tower.



Insets

The bridge is littered with wrought iron insets which seem to be prodding out from everywhere randomly. Whether a hook, a ring, torch socket or angle lantern, each has or had a specific function. Hooks to keep the shutters open, rings to barricade areas with chairs and lanterns of Medieval times. These struts still remain to cast an Old World time warp on the bridge.



17. Late evening Ponte Vecchio.



Chapter Four

A symbol

The Ponte Vecchio demands a second look, the first view is one of confusion. To the visitor this is not like anything they have seen previously. A bridge, so cluttered, so old, too confusing, a mass of three dimensional colour blocks ready to collapse into the river. Its top heavy and almost disturbing. The first sight of the Ponte Vecchio is cluttered with puzzlement, it genuinely tends to ask questions, how is it constructed, how is it possible and for what reasons? There is so much movement and activity yet it stands there still in the Arno, you can sense its maturity. Immediately the bridge strikes you with its character, a human element, much more than just a bridge. Here there are houses of some sort with people in them, a definite human connection not just an architectural structure.

Strange that an object, where each element in design stems from practical development, common to numerous buildings in Florence, should raise so much attention. What should make the Ponte Vecchio different, what renders it unique? Something has happened to the Ponte Vecchio which has turned it into a symbol of Florence and of the Florentine spirit causing it to become known for its form and character. As the Acropolis best evokes the whole history of Athens and the Capitol the whole history of Rome, so the Ponte Vecchio performs a similar service for Florence. "The old bridge symbolises the emergence of Florence from the artistic and intellectual construction of Medieval times into the freedom of the Renaissance" (Chierichetti, 1984, p.79)

Florentine love

The Ponte Vecchio captures the imagination of the two Florences (the Florentines city and the visitors city), so easily a vehicle for the plastic consumption but the true Florence nurtures her too. The Florentines have an unquestioned love for their bridge. In

his Mornings in Florence, Ruskin calls the Ponte Vecchio "the old treasure bridge", adding that it is "the most historical link of all, tottering under the weight of shops and galleries" (King, 1991, p.83). The Ponte Vecchio command the deepest of respect from the locals as it has stood the test of time, older than any generation of Florentines. It has remained with them during floods and wars but more importantly, the Ponte Vecchio was part of Florence in her greatest years when the Florentine conquered the artistic intellect of the world. Today it is their source of identification when the Florentine may be caught in two minds, truly despising what has come of their city at the hands of tourism, undoubtedly because of its unparalleled history but still they wish, even need to hold on to that history which offers them an eliteness in mind. They may have had to compromise in what has happened to their beloved Florence but they are desperate that they should not lose it. They strive for the sacred image of old Florence, the Ponte Vecchio offers this. The bridge looks untreated today. As a result, its shabby and ready to fall down perhaps it is almost too genuine a part of the bygone age. Everything about the bridge reflects the past, even the artisans, most of whom have been there for generations, a younger son, nephew or cousin usually worked beside the master craftsman. Their tools, save the welding equipment, have not changed much throughout the centuries. They still lie about in odd corners next to ancient machines which roll gold into wire and the finest thread. Everything as they were centuries ago, each object is original and of genuine quality. The bridge is an authentic package, the Florentines cling to this.

An account of a "terrible and unprecedented flood" in 1844 by Thomas Trollope best defines the Florentines love of their bridge.

But very great fears were entertained for the very ancient Ponte Vecchio, with its load of silversmiths and jewellers shops, turning it from a bridge into a street. The only remaining example in Europe, I believe, of a fashion of construction once common. The water continued to rise as we stood watching it.....But at last came a cry from those who were watching it close at hand.

That for the last five minutes the surface had been stationary; and in another half hour it was followed by the announcement that the flood had begun to decrease. Then there was an immense sensation of relief; for the Florentines love their old bridge; and the crown began to disperse. (King, 1991, p. 81).

The Ponte Vecchio embodies all that is Florentine more so than any other form in all of the city, the bridge has become the perfect symbol of Florence. Its location maps the Ponte Vecchio, not geographically, but mentally, as the centre point of the city, bridging a link between the old city and the Altarno. The streets of Florence wind as a maze in narrow trenches which break into crowded piazzas now and again. Sight of the Arno and its broad span is a welcome release from the claustrophobic trenches. The Arno offers both breathing and visual space and in the centre of it all, stands the Ponte Vecchio, possibly the only piece of architecture in the entire city which may be viewed from any side with ease. The Ponte Vecchio is a gathering of everything traditional in Florentine architecture, standing foresquare and direct with no compromised curves or frills of elegance, its blocky and top heavy.

The Old Bridge embodies the spirit of the people too. The city's people are traders primarily and the city primarily a market place, so too is the bridge which was founded firstly on a commercial basis and developed its form through the development of trade. The Florentines are business people, the Ponte Vecchio goldsmiths best render the Florentine business aptitude and the gold itself is but an offspring of the Florin, their world conquering coin and link to commercial power. Florentine artistic innovation is also reflected through the Ponte Vecchio where Gaddi's ingenious archsystem solidifies the bridges construction in a new way. Overhead, Vasari's corridor shelters the bridge with all the conservatism of Palace architecture to symbolise all that was powerful in historic Medici reign. When looking for something specifically Florentine, one may look no further than the Ponte Vecchio, a symbol and source of identification. This is

why the Florentines love their bridge.

Tourism

If the Florentines love of their Old Bridge is so deep, why have they willingly sold it to tourism? We recall that the Florentines are primarily traders and today trade lies in the form of a tourist. Their pocket guide books direct them to "the ancient Ponte Vecchio" (Chierchetti, 1984, p. 150) where the visitor falls in love with Florence their love of the city almost challenges that of the Florentine, for the Ponte Vecchio is not only a fine symbol of the Florentines Florence. The bridge is one of the most taxable packages the city has to offer.



18. Tourist treasures.

The sight-seeing trail leads the foreigner from the reproduction of David in Piazza del Signoria through the 'you just gotta see it' Uffizi to the 'quaint' Ponte Vecchio and off to the Palazzo Pitti. But the tour groups don't just pass through the bridge. They pause for a half hour in its central area, this is the perfect spot



to capture Florence on that sixty minute Handycam reel, perhaps a shot beside that old bust, or the kids drinking from the fountain. The central area is Florence's most popular 'rest' location, here the visitor may loiter, lap a *gelato*, listen to a busker or capture the view on 35mm. The local *ragazzi* (male youths) often line the pathway in crouched groups of dashing smiles to introduce themselves to naive female prey. Nearby a portrait painter amuses a handful of *stranieri* (foreigners) with witty verses but these are not real artists but salesmen with easels. The Ponte Vecchio is not a place for artists, an attempt to set up surface for street painting was met with refusal of permission by a passing *Carabiniere* (police man). A local artist commiserated, complaining that the goldsmiths controlled the bridge and only permitted suitable arts outside their shops. Such a shame that this city of art has killed off her own artists, today the artists fight for commission via A4 watercolour landscapes. This is the Florence that sells, the Ponte Vecchio is booming. The money spinners rush from Via Por S. Maria (Florence's main shopping street) in direct route to the gold of Ponte Vecchio, there are no cars, no motorinas (vespas). This is a shopkeepers street, one the tourist loves.

....oh laugh at yourself, Bella
For your features have fallen in
Deaths rotten wrinkles disfigure
That once-miraculous skin.

The motorcar shouts in your lanes
Your houses fill me with dust;
You have given yourself to the stains
Of Europe's billous yellow dust.

by Alexander Blok (King, 1991, p. 224)

Literature

What of the Renaissance, what of the romantic imagery which the Ponte Vecchio symbolises, how has this symbol been generated? For centuries Florence has attracted a particular kind of artist, one who values the motions of the Classic. Each drawn by the beauty of its surroundings, the quality of its light and the treasures it houses in its palaces and churches. This is the city

from which the great masters originated and they have left their mark in every *piazza* (square), their work is embodied in every corner of the city, they have left Florence with a fragrance which beckons the creative mind. This is why the city has been frequented by a cultured community of diverse and colourful personalities over the years, many of whom have been writers. It is they who generated this romantic imagery. In a time when the written word travelled the world as the only form of communication from country to country. Their love of Florence may have been rediscovered in England via their prose and poetry.

...that bridge covered with the shops of jewellers and goldsmiths - is the most enchanting feature of the scene.... it takes its jealous course among the streets and houses, with true despotism, going where it lists, and spurning every obstacle away, before it". From Dickens *Pictures from Italy* . (King, 1984, p. 84)

The bridge became a most popular subject of prose and often when then writer would search for something to symbolise the atmosphere of the city and the Renaissance he would choose the Ponte Vecchio. In *Il Paradiso* (XVI.140) Dante writes of the tragedy of Buondelmonte dei Buondelmonti arising from his will to marry a Donati lady and not an Amedei lady, he set the tragedy on the Ponte Vecchio,

O Buondelmonte, ill did'st thou to flee
Those nuptials when another prompted it!
Glad had been many, who now must mournful be,
If God thy blood had into Ema thrown
The first time that the city welcomed thee.
Yet fit it was that to the battered stone,
which guards the bridge, our Florence should present
A victim in the last peace she hath known.
(King, 1984, p. 87).

Today the Florentines have named a local perfume *il Ponte Vecchio* and you'll find a leather shop of the same name in a nearby stall. In Belfast you may sit and drink a Guinness in its very own 'Ponte Vecchio' public house. The little bridge has travelled afar as a symbol of its city.

Conclusion

In 1345 Taddeo Gadi's objective was to redesign a bridge at the same location as its predecessor, complete with shops, which would be capable of resisting future possible floods. The objective was one of harsh function and practicality. This design objective was reached, after all Gadi's structure still stands 450 years later but the bridge has become much more evolving into areas which had never been anticipated at its birth. Although the Ponte Vecchio is saved from being labeled one of the great Florentine buildings or monuments because of its evident practicality in design but nevertheless what it has become seems to defy its original objective.

Throughout this thesis it has been shown that the only possible designers of the Ponte Vecchio could have been the Florentines themselves, the form of the bridge rests directly as a result of their personalities and needs. The very location of the Ponte Vecchio was marked by the growth of trade and the need to cross the Arno. Only in Florence would a sculptor-painter be requested to engineer a solution so ingenuitively. The bridge's growth over the Arno and the spontaneity of the shopblocks is a direct recreation of their street architecture which was again carved by their needs of accommodation, trade and restrictions. The overall upkeep of the authentic aesthetic in the bridge serves as a reminder to the present Florentines of the great age of their cities past. Every detail of the Ponte Vecchio from the development of shopfronts, shop and window shutters, insets, rooftops and the central area embodies the motions of the bygone age. The central area is an ultimate Florentine expression, an area which function is solely one from which to sample the view of the city, such an arrogant statement of an appreciation of their cities visual amenity. Vasari's corridor too is a bold statement of a style so alien to the rest of the bridge but again Florentine ingenuity formed a structure to compliment that of its predecessor.

The Ponte Vecchio has developed from a design of practicality into one which is famed for its form. The value in which the Florentines place in their bridge lends to this development. It symbolises them, acts as a source of identification and is their most historical link of all. They strive for the sacred image of the old Florence and the Ponte Vecchio offers them this. They hold it as the perfect symbol of their city, it embodies all that is in their architecture, market place, gold, artistic innovation and Medici ruling.

Florentine value is not enough, the Ponte Vecchio symbolises the visitors Florence too. Set in the middle of the most popular guide route, the Ponte Vecchio's central area is a tourist dream zone. Here at the height of the season it tends to turn into a squalid mixture of market place, airport lounge and dormitory which is so densely packed with people, each present to view the surrounding beauty, that it is no longer possible to sight the bridge.

It was the writers who were responsible for exporting the Ponte Vecchio as a Florentine symbol throughout the world via their prose and poetry. Each drawn to Florence in a attempt to basque in its beauty and atmosphere, each becoming totally wrapped with the charm of the city, their pens capture these feelings of romance dressed in Renaissance elegance. From Dante to Dickens their imagery may be rediscovered in lands afar

Although not entirely designed by a master and not a product of the Renaissance the Ponte Vecchio symbolises all that Florence was and all that it has become.

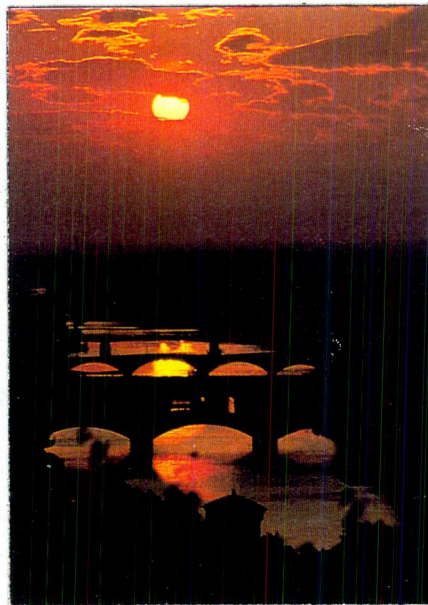
The Old Bridge of Florence

Taddeo Gaddi built me. I am old,
Five centuries old. I plant my foot of stone
Upon the Arno, as St. Michael's own
was planted on the dragon. Fold by fold
Beneath me as it struggles, I behold
Its glittering scales. Twice hath it overthrown
My kindred and companions. Me alone
It moveth not, but is by me controlled.

I can remember when the Medici
Were driven from Florence; longer still ago
The final wars of Ghibelline and Guelf.

Florence adorns me with her jewellery;
And when I think that Michael Angelo
Hath leaned on me, I glory in myself.

by Longfellow (King, 1991, p.84)



18. A symbol.

Bibliography

- BORSOOK, Eve, Florence, London, Collins & Sons Ltd., 1967.
- BRION, , The Medici, London, Elek, 1969.
- BRUCKER, Gene Adam, Florence 1138-1737, London, Sidgwick & Jackson, 1983.
- CHIERICHETTI, Sandro, Florence, Milano, Nicola Moneta S.p.a., 1984.
- CRONIN, Vincent, The Florentine Renaissance, London, Clowes & Sons Ltd., 1967.
- GOZZOLI, Benozzo, Medici Society, London, 1969.
- HALE, J.R., Florence and the Medici, London, Thames & Hudson, 1977.
- HOLMES, George, Florence, Rome and the Origins of the Renaissance,
- KING, Francis, A Literary Companion Florence, London, John Murray Ltd., 1991.
- McCARTHY, Mary, The Stones of Florence, London, Penguin, 1959.
- WHITE, John, Art and Architecture in Italy 1250-1400, London, Penguin, 1966.
- WOOD-BROWN, J., The Builders of Florence, London, Methuen and Co., 1907.

Journals

- BRUSCHI, Alberto, "Old walls new lifestyles : a home in a tower", Abitare, Vol. No. 238, October 1985, p. 56-59.
- CRUM, Roger J., "Cosmos, the world of Cosimo : the iconography of the Uffizi facade", The Art Bulletin, Vol. No. 71, June 1989, p. 237-53.
- DANNATT, Adrian, "The Uffizzi's new back door", Art News, Vol. No. 90, May 1991, p. 60.
- TRACHTENBERG, Martin, "What Brunelleschi saw : monument and site at the Palazzo Vecchio in Florence", Journal of the Society of Architectural Historians, Vol. No. 47, March 1988, p. 14-44.

