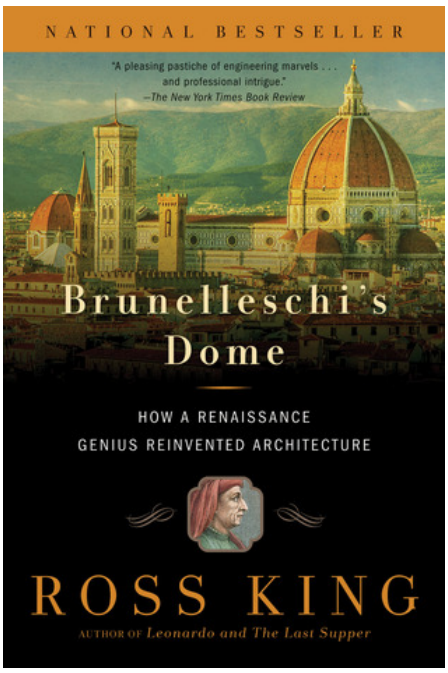

Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture

Ross King

Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture

Ross King

Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture Ross King
On August 19, 1418, a competition concerning Florence's magnificent new cathedral, Santa Maria del Fiore--already under construction for more than a century--was announced: "Whoever desires to make any model or design for the vaulting of the main Dome....shall do so before the end of the month of September." The proposed dome was regarded far and wide as all but impossible to build: not only would it be enormous, but its original and sacrosanct design shunned the flying buttresses that supported cathedrals all over Europe. The dome would literally need to be erected over thin air.

Of the many plans submitted, one stood out--a daring and unorthodox solution to vaulting what is still the largest dome (143 feet in diameter) in the world. It was offered not by a master mason or carpenter, but by a goldsmith and clockmaker named Filippo Brunelleschi, then forty-one, who would dedicate the next twenty-eight years to solving the puzzles of the dome's construction. In the process, he did nothing less than reinvent the field of architecture.

Brunelleschi's Dome is the story of how a Renaissance genius bent men, materials, and the very forces of nature to build an architectural wonder we continue to marvel at today. Denounced at first as a madman, Brunelleschi was celebrated at the end as a genius. He engineered the perfect placement of brick and stone, built ingenious hoists and cranes (among some of the most renowned machines of the Renaissance) to carry an estimated 70 million pounds hundreds of feet into the air, and designed the workers' platforms and routines so carefully that only one man died during the decades of construction--all the while defying those who said the dome would surely collapse and his own personal obstacles that at times threatened to overwhelm him. This drama was played out amid plagues, wars, political feuds, and the intellectual ferments of Renaissance Florence-- events Ross King weaves into the story to great effect, from Brunelleschi's bitter, ongoing rivalry with the sculptor Lorenzo Ghiberti to the near catpure of Florence by the Duke of Milan. King also offers a wealth of fascinating detail that opens windows onto fifteenth-century life: the celebrated traditions of the brickmaker's art, the daily routine of the artisans laboring hundreds of feet above the ground as the dome grew ever higher, the problems of transportation, the power of the guilds.

Even today, in an age of soaring skyscrapers, the cathedral dome of Santa Maria del Fiore retains a rare power to astonish. Ross King brings its creation to life in a fifteenth-century chronicle with twenty-first-century resonance.

Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture Details

Date	:	Published August 13th 2013 by Bloomsbury USA (first published January 1st 2000)
ISBN	:	9781620401934
Author	:	Ross King
Format	:	Paperback 208 pages
Genre	:	History, Nonfiction, Art, Architecture, Cultural, Italy, Art History, Biography

From Reader Review Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture for online ebook

Roman Clodia says

A quick, 'popular' read about the construction of the Duomo in Florence. Lots of gossip, facts, technical information taken from secondary sources but not well referenced. Still, an ideal preparation for, or companion to, a trip to beautiful Florence.

Alisa says

Great book, fascinating history covering everything that went into the building of this amazing world landmark. Architecture, art history, culture, Italian politics and drama, of course. I learned a lot and was thoroughly enchanted by this book.

Lewis Weinstein says

When you stand in the Duomo in Florence and look up, even though you know the dome has been there for over 5 centuries, it's still hard to believe it stays in place. It's even harder to imagine how it was constructed - without supporting scaffolding. Read this book and you will understand, not only the construction but also the nature of the Renaissance civilization that encouraged and financed such a miracle.

Jason Golomb says

I'm no engineer and I only vaguely understand the basic tenets of architecture. But I'm a great admirer of history and have tremendous appreciation for the significance of milestone art and architecture. So in advance of an upcoming trip to Florence, I picked up Ross King's "Brunelleschi's Dome", assuming that King would do as good a job with this seminal Renaissance creation as he did with Michelangelo's Sistine Chapel in "Michelangelo & The Pope's Ceiling". The book is thorough and enjoyable and scores its highest marks on fleshing out the personality of Filippo Brunelleschi and connecting the building's construction to the greater context of the burgeoning Renaissance.

The Dome, of course, refers the famed Santa Maria del Fiore in the heart of Florence, Italy. The book is fascinating in it's detail of the monumental effort that went into creating such an enormous structure. Filippo Brunelleschi was a goldsmith and clockmaker, and by the time he was given the commission to build the Dome, he'd had very little experience in large-scale construction (and this was one of the most large-scale ever conceived at the time).

Work on the dome began after Brunelleschi won one of the ubiquitous Florentine architectural/design contests, and 50 years after construction on the rest of the church began. King writes, "even the original

planners of the dome had been unable to advise how their project might be completed: they merely expressed a touching father that at some point in the future God might provide a solution, and architects with a more advanced knowledge would be found."

The core problem Brunelleschi faced was the sheer scope of what the leaders of Florence were asking for. Specifically, King writes, "An architect must design a structure that will counteract (push and pull) pressures...a game of action and reaction-- and channeling them safely to the ground." This had been traditionally handled through the use of flying buttresses, which can be seen throughout gothic architecture in Europe, but the Florentine leaders had previously accepted a design with no external buttresses.

After losing the "da uomo a uomo" battle of the bronze doors to Lorenzo Ghiberti, the intense Brunelleschi spent a few years traveling, including significant time in Rome. It's documented that he extensively explored the ancient Roman ruins, none of which would have been in the clean and, sometimes, rebuilt state that they are today. He undoubtedly visited the one monument, which is in, in fact, a comparable state to when it was originally built almost two thousand years ago: the Pantheon. The largest dome in the world clearly was built to handle the 'push and pull' pressures and Brunelleschi was sure to translate his learnings into his efforts back home in Florence.

I had some trouble conceptualizing some of the more nuanced engineering hurdles that Brunelleschi overcame. King incorporates drawings and images and writes very plainly, but I think my architectural and construction vocabulary is simply too small.

Throughout the long and protracted construction of the Duomo, Brunelleschi battled against supply issues, war-related interference (he was also Florence's Military Engineer), logistical concerns, as well as internecine battles from within the Florentine artistic and engineering community. In creating numerous novel mechanisms to aid in his construction, Brunelleschi clearly gained the trust and financial assurances from the Florentine leaders and was able to knock down just about every obstacle thrown his way.

This read was a worthwhile investment ahead of my trip to Florence. At only 150 pages, this is the perfect introduction to a surprisingly complex set of problems faced at the forefront of the European Renaissance. While a terrific primer on the specifics of the Duomo, the books' even greater value is it's explorations, however shallow, into the culture and context of the time in which it was built.

Amie says

This was a fascinating book about the dome of Santa Maria del Fiore in Florence. It talks about Filippo Brunelleschi, and his absolute genius in constructing a dome that spans 140 feet, without any sort of supporting framework. He solved each problem as it arose, and even invented a lot of the machinery and equipment he needed.

It is amazing to me that a good portion of the duomo had been built before there was even a call for plans to construct the dome. Still more amazing that Brunelleschi's ambitious model was selected, though he didn't know exactly how he would execute it. And most amazing that it all worked out, resulting in one of the most beautiful structures of the Renaissance.

I thoroughly enjoyed this book. Its subject matter had the potential to become tedious, but never did. Ross

King even managed to slip in a little information about Brunelleschi's personal life, and his professional rivalry with Lorenzo Ghiberti, who designed the bronze doors of the baptistry.

King has written other books on various topics of art history. I plan to look for them, based just on how much I enjoyed this read.

Lucy says

Gee, when I was younger, I thought I wanted to be an architect. I didn't pursue it because I knew I was terrible at math. What I didn't take into account was my complete lack of physics knowledge. After reading this book, I know I made the right decision.
There is A LOT of description of pulleys, machines, construction, etc.. I didn't understand most of it. I felt like an idiot. I was determined to persevere and finish slogging through this book. I did it, but not without falling asleep MANY times.
The title architect was not a particularly likable figure and so it was hard to care about his travails. I didn't feel the author created a fully developed portrait of his complex subject. Of course, the book really is about the dome. Maybe if I'd ever seen Santa Maria del Fiore in person I might have liked this book more.
The best thing I can say about Brunelleschi's Dome is that it has made me want to go to Florence and see what all the fuss in about.

Teresa says

I found the first half of the book much more interesting than the second half: the innovation in the architecture of the dome held much more narrative interest in than the chapters on the various machines invented in order to construct the thing. Although it has been several years since I read the book, I do also recall being vaguely disappointed with the ending: The Dome Goes Up! Still, an incredibly interesting portrait of the convergence of many sciences in this beautiful masterpiece.

Will Byrnes says

Updated July 17, 2013 - added image and links

At the height of the Renaissance in Florence a competition was announced. The cathedral, Santa Maria del Fiore had been under construction for more than a century, but no one knew how to construct the massive dome that was called for in the original design, a design from which the city rulers were loathe to depart. The task was widely considered impossible, but Filippo Brunelleschi, a goldsmith and clockmaker, submitted a construction plan that was breathtaking in its radicalism. His achievement revolutionized architecture. In dedicating his life to this project, he had, of necessity to invent hoists and cranes of extremely original design to perform tasks never before mechanized. The dome remains aloft today, still one of the largest on earth.

The book is interesting and offers a nice picture of some aspects of life in the fifteenth century. The subculture of high end artistes of the time, the warfare between city-states, impact of the plague

The photo was taken from the Getty Museum site

P 14
The Black Death was a faithful visitor to Florence. It arrived, on average, once every ten years, always in the summer….Various remedies were tried to drive it away. Church bells were violently rung, firearms discharged into the air, and the portrait of the Virgin from the church at nearby Impruneta—an image with miraculous powers that was said to have been painted by Saint Luke—borne in procession through the streets. Those rich enough escaped into the country. Those who stayed behind burned wormwood, juniper and lavender in their hearths. Ox horns and lumps of sulfur were also burned, because stenches were considered equally effective in clearing the air. So intense were these fumigations that sparrows would fall dead from the rooftops.

P 34
Perspective is the method of representing three-dimensional objects in recession on a two-dimensional surface in order to give the same impression of relative position, size, or distance as the actual objects do when viewed from a particular point. Filippo is generally regarded as its inventor, the one who discovered (or rediscovered) its mathematical laws. For example, he worked out the principle of the vanishing point, which was known to the Greeks and Romans but, like so much other knowledge, had long since been lost.

P 71
Freshly cut from a quarry, limestone and sandstone smell of rotten eggs, and the stronger this sulfurous stench, the better the quality of the stone.

P 121
In 1492 [Filippo Maria] captured both Brescia and Genoa, and a year later seized the town of Forli, only 50 miles from Florence. The following year, as plague raged through Tuscany, his forces defeated the Florentines at Zagonara, in Romagna. There were only three casualties, all Florentine soldiers who fell from their horses and drowned on the battlefield in their heavy plate armor (it had rained heavily in Zagonara the night before). This lack of bloodshed shows that warfare in the Middle Ages and Renaissance, contrary to popular conceptions, could be reasonably civilized. Most battles resembled chess matches in which opposing commanders sought to outmaneuver each other, the loser being the one who conceded that his position was technically vulnerable. These engagements were fought by mercenaries who settled the terms of warfare in advance, rather like sportsmen deciding the rules of the game.

==========**EXTRA STUFF**

A small web site dedicated to the dome

Here is a nifty article on Brunelleschi and the dome in the latest (Feb 2014) NAtional Geographic mag - You may have to sign in or sign up to actually get to the article, but NG is free

---

Ruth says

This one's going back to the library unfinished. I'd heard so often that it was good. Though my MFA is in Painting, I did teach a year long Art History survey course, so I've even lectured on the darn dome. And I've

always been interested in architecture.

But I am 75 years old and I don't have time to waste on books I'm not enjoying. This one is so poorly written I can't believe it got the good reviews it did.

The writing is plodding and awkward. The author introduces technical/architectural terms without defining them and there is no glossary. He discusses complicated bits of machinery with no clear diagrams of how they worked. Somebody can do better than this.

Kalliope says

This is an account of how the monument that human ingenuity could build to itself came into being.

During the 13C the prosperous Florence deemed that its small Cathedral needed more than just more repairs. **Santa Reparata** was then demolished and a new and considerably larger building was commissioned to **Arnolfo di Cambio**, the architect who had already designed other pleasing churches in the city. The new Cathedral would also drop its no longer suitable old name and take on the radiant designation of **Santa Maria del Fiore**. Work began at the turn of the century but soon came to a halt when its designer passed away. More unfortunate events followed and it was not until the very strong and wealthy *Arte de la Lana* (the Guild of Wool Merchants) undertook to give its completion a new push.

That it would have to be such a guild the one who could spin stone out of yarn should be of no surprise. The wealth of the city was based on the turning around and trading such golden fleece.

During the calamitous 14C the fortunes of the Cathedral went through more ups and downs. **Giotto** and **Pisano** were there and helped; the Black Death walked its scimitar; other architects like **Orcagna** and **Neri di Fioravante** followed and considerably modified the original plan. About one hundred years after it was begun, it was nearly finished.

Except for its Dome.

When the design was altered the model proposed by Neri di Fioravante had won the day. It was so very attractive because it seemed so very Italian. It would have a huge Dome (reminiscences of the glorious Roman past?) and would have no ugly external Gothic (barbarian) buttresses.

What had not yet been resolved was how something of the sort could be built?

Its size and its elevation on relatively thin walls, were unprecedented. A cross view comparing it to the also baffling Roman Pantheon speaks better than many words.

Ross devotes this book to tracking how such a solution was forged. And the story is fascinating. He starts with the Competition that again the Arte de la Lana, who was still spinning the functioning of the city, opened up to the public. He expands on the rivalry between the two geniuses who have become the most famous contenders of the Italian Renaissance. Ghiberti and Brunelleschi had to measure each other up repeatedly during those years, first with the Baptistery doors and then with any new of the many commissions that were stemming out of that vibrant city. These two had the required invective and dexterous mind.

Ross then proceeds to tell us how Brunelleschi solved the problems similarly to the way Brunelleschi himself revealed them. That is, gradually: stone-by-stone, or chapter-by-chapter. If Brunelleschi feared plagiarism, Ross seems concerned with losing the narrative interest.

Ross then does not present the architectural scheme as it stands, and he prefers to unveil in installments about what made the dome possible: the double shells; the inadequacy of wood centering; the octagonal crossings and ribs; the pointed fifth arch; the side chains as braces around the ribs; variation in the density of materials; the herringbone brickwork; internal trusses, etc. This approach has somewhat dampened a clear representation of how it all holds together. But in so doing Ross succeeds in showing how each small advance was fraught with difficulty and considerable danger. He engagingly elaborates on these temporary uncertainties, obstacles and technological problems and on the very many additional ingenious solutions that Brunelleschi devised.

For these were not just a few. All the practicalities in the actual building, to the smallest detail, had to be contended by Brunelleschi, the *capo maestro*. He devised his ox-hoist; the *Castello* or novel crane; the lantern hoist; the hidden staircase in between the double shell, amongst others. Brunelleschi's training in clock making clearly helped him to keep his pace.

For he finished it. He also had time to design the Lantern as well, although he did not see its completion since he died soon after it was begun, in 1446.

The ceremony of its consecration has also passed into history. The population felt as if they were witnessing a miracle. The heavenly motet that **Guillaume Dufay** composed especially for this occasion, *Nupem Rosarum Flores*, must have been conducive for the mystical reception in the congregation.

Later, the celestial frescoes designed by **Giorgio Vasari** completed the embellishment of such a realized impossibility.

And even if Ross' writing reminded me somewhat of the style of guidebooks, or had the taste of isolated research, or irritated at times for not giving more of the original Italian names and adapting the material too much for an easy reading, he does succeed in bringing forth Brunelleschi's extraordinary achievement.

Apart from all the technical details and all the circumstantial considerations, what this Dome by Brunelleschi proves to us is that there was new faith in the power of the individual who had a complete confidence in his own human capabilities.

It was not just the Dome; it was that conviction of himself and of his own ingenuity that was so very new.

And if any one feels like climbing up the more than 450 steps of the dome from his/her armchair, there is is this fun video by someone who got inspired by this very book...

https://www.youtube.com/watch?v=ohB1s...

Krista says

> *Even the original planners of the dome had been unable to advise how their project might be completed: they merely expressed a touching faith that at some point in the future God might provide a solution, and architects with a more advanced knowledge would be found.*

I was in Florence a couple of weeks ago, and although I hadn't really noted the omission at the time, it's now oddly sad to me that at the Accademia we were told, “This is Michelangelo's Statue of David”, and at the Uffizi we were told, “This is Botticelli's Birth of Venus”, but at the cathedral of Santa Maria del Fiore we were told, “The original architect of the church died without explaining how to build the dome you see here. The church would be under construction for over a hundred years before someone came along and figured it out.” So while Michelangelo and Botticelli are familiar names – and rightly so – it is kind of sad that the “someone” who came along and figured out how to build this iconic dome isn't really known to history; an omission more or less corrected by Ross King's Brunelleschi's Dome. And I only say “more or less” because it would seem that biographical information on Brunelleschi himself is scant, making this book more the story of the dome than of the man; an interesting tale, but not perfectly matched to my own interests.

What is known of Brunelleschi: Trained as a goldsmith and clockmaker, he entered a competition to design the bronze doors of the Baptistery of Saint John. When Brunelleschi was declared a co-winner along with another young goldsmith, Lorenzo Ghiberti, the notoriously hot-headed Brunelleschi declined to work in partnership and left Florence: starting his self-directed training in architecture and beginning a life-long rivalry with Lorenzo. Brunelleschi travelled to Rome (where he studied the dome of the Pantheon and the proportions of various columns and facades), and when he returned to Florence, he reintroduced vanishing point perspective to painting. When the main body of the Cathedral was nearly finished and a competition was finally opened for a plan for constructing its massive dome, Brunelleschi's design barely beat out that of Lorenzo Ghiberti, and once again, they were asked to work together. This time Brunelleschi agreed, but with few of the specifics written down – and many that were, recorded in a cipher – Brunelleschi took control of the project, leaving Lorenzo to share the title of *capomaestro* in name only (but why should Lorenzo care? He enjoyed equal pay and was free to pursue many lucrative and prestigious projects on the side.) In addition to working out how to construct the huge, uniquely-shaped dome without the need for props and centering devices, Brunelleschi also won every competition for the designs of the necessary hoists and cranes that would be used in the dome's construction. He had many engineering successes (he received the first ever

invention patent), a few failures, exchanged insulting sonnets with his rivals, and died shortly after the last brick was placed on the dome (and before construction began on the dome's surmounting lantern; the design for which Brunelleschi also beat out Lorenzo in yet another competition). In many ways, Brunelleschi was as successful, inventive, and groundbreaking as a Leonardo da Vinci, and with his greatest accomplishment dominating the skyline of Florence, it's a sad wonder to me that I've never before heard his name; even while in the shadow of a structure that still stands as the largest brick and concrete dome in the world.

Like da Vinci, Brunelleschi kept ciphered notebooks, but unlike the great Leonardo, Brunelleschi was too secretive of his designs to have left behind diagrams of his greatest inventions; even today, engineers have to guess at how his hoists were built; guess at how he designed and inserted the various “chains” that are hidden within the dome's structure and balance the forces at work there. If I had more interest in engineering, I would probably be more awestruck by what Brunelleschi achieved; more interested in a passage like this one:

> *The horizontal thrust of an arch or dome varies inversely with its rise, and since a pointed arch rises higher than a rounded one, it naturally generates less thrust. In fact, the architects of the Cathedral of Milan believed that pointed arches produced no horizontal thrust whatsoever. They were mistaken, of course, though a* quinto acuto *arch does generate as much as 50 per cent less radial thrust than a shallower, semicircular one. It therefore requires less abutment and has a lower tendency to crack or burst at its base.*

Ross King is heavy on the engineering of the dome – which is, I suppose, the point – but I preferred the human moments. I liked the idea of the original architect's large scale model having a home in the under-construction Cathedral, which the wardens touched every New Year's Day while vowing, throughout the generations of construction, to follow faithfully. I also like that once the dome was finally underway, this scale model then served as a lavatory for those same wardens. I liked King's description of the Plague and wars that carried on throughout the dome's construction; liked the description of the decimated Rome that Brunelleschi found himself in:

> *A million people had dwelled in Rome during the height of the Empire, but now the city's population was less than that of Florence. The Black Death of 1348 had reduced numbers to 20,000, from which, over the next fifty years, they rose only slightly. Rome had shrunk into a tiny area inside its ancient walls, retreating from the seven hills to huddle among a few streets on the bank of the Tiber across from St. Peter's, whose walls were in danger of collapse. Foxes and beggars roamed the filthy streets. Livestock grazed in the Forum, now know as* il Campo Vaccino*, “the Field of Cows”. Other monuments had suffered even worse fates. The Temple of Jupiter was a dunghill, and both the Theater of Pompey and the Mausoleum of Augustus had become quarries from which ancient masonry was scavenged, some of it for buildings as far away as Westminster Abbey. Many ancient statues lay in shards, half buried, while others had been burned in kilns to make quicklime or else fertilizer for the feeble crops. Still others were mangers for asses and oxen. The funerary monument of Agrippina the Elder, the mother of Caligula, had been turned into a measure for grain and salt.*

The bottom line: I was a little bored by the engineering details (but appreciate their importance), and while King was forced to repeatedly say, “Little is known of this period in Brunelleschi's life”, I was grateful that he was able to assemble what *is* known; Brunelleschi deserves this and more; tour guides ought to say, "This

is Brunelleschi's Dome." Four stars is a rounding up, only reflecting my own reading enjoyment.

Sharon Barrow Wilfong says

Fascinating account of the construction of the dome of the Cathedral Santa Maria del Fiori in Florence, Italy centering around it's main architect, Filippo Brunelleschi.

Brunelleschi was the first man in the renaissance to re-invent the major dome like structures that covered many ancient Roman edifices, such as the Pantheon in Rome. This information was lost over the 1500 years since the Roman Empire but Brunelleschi figured out how to use physics and engineering to create a massive dome structure that could support itself and not come crashing down.

Not only do we learn on a layman's level how Brunelleschi accomplished this, we learn about the man himself, his rivals, such as Lorenzo Ghiberti of "Doors of Paradise" fame and others. We learn about Brunelleschi's successes and his failures and also about Florence and Italian Renaissance history and politics.

Anyone interested in Italian Renaissance Art, Architecture, and history will thoroughly enjoy this book.

Ted says

I read this book about a year before six of us traveled to Italy. A fantastic book from engineering, history of the Renaissance, and history of architecture viewpoints. Having read the book, I knew we had to visit Florence and climb up to the top of *il Duomo*. I spent many weeks before we left walking up and down two flights of stairs in our house to prepare myself. It was a wonderful experience, a great view from up there (the Duomo that is, not the top of my stairs).

If you ever visit Italy, do not miss Florence, and take a walk to the top of the dome if you are able. It really isn't too hard, the only one of our group who didn't make the trek was one person who didn't like heights. Of course I was the only one who had "prepared". I like to think that it was at least a little easier for me than it was for the others. :)

following photos taken 6 September 2007. (Click any photo for a somewhat enlarged view.)

the interior of the dome
Begun by Vasari in 1568, completed by Federico Zuccari in 1579. This work, representing *The Last Judgement*, was commissioned by Cosimo I de'Medici, and extends over 3600 sq. meters of the dome's interior.

il Duomo

In this photo (7 September 2007), taken from across the Arno in the Giardino Bardini, the visitors' walkway at the top of the dome (above the rust colored segments) can be seen. People are visible, though none of those people include the photographer, unless something very strange occurred. The rest of the photos were taken from this walkway.

Campanile de Giotto
This marble clad bell tower lies just off the south west corner of the cathedral, maybe 10-20 yards away; but is farther away than that from *il Duomo*, which is at the east end of the cathedral. The tower was begun in 1334, and completed in 1359. The design is by Giotto di Bondone, a painter who in his later years took up architecture. He is held, along with Brunelleschi, as one of "the founding fathers of Renaissance architecture". (Wiki)

Tempio Maggiore
Well, the beautiful blue dome of this synagogue (also called the Great Synagogue of Florence, or Tempio Maggiore Israelitico), which was built in the second half of the nineteenth century, is just the most notable feature in this photo, which looks to the east of Florence.

Basilica of Santa Croce
This church, associated with the Franciscans, lies about half a mile (800 m) to the south east of *il Dumo*. It is known as Tempio dell'Itale Glorie, since it is the burial place such famous Italians as Michelangelo, Galileo, Machiavelli, Gentile and Rossini. Begun in the 1290s, it was consecrated in 1442, a century and a half later.

(view spoiler)

Monica says

(Nov '08)-Have to put this aside, have to cram on South America...Dec. '10-- Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture, by Ross King, was scholarly, yet had a lighter touch than most art history dissertations. It was even a best seller. Extremely well researched, it details the competition and execution of the building of the dome of the cathedral in Florence, an architectural and artistic accomplishment few understand. The scope King gives us, although at times heavily laden with civil engineering and mechanical descriptions difficult for a lay person to understand, this book vividly brings mid 15th Century Florentine life alive. We become acquainted with Brunelleschi, his detractors, the hundreds of laborers who devoted their lives to the project, and the guild who supported his genius. 21st century readers can appreciate personality conflicts, financial concerns and the herculean effort made by the people of those

times. Though not handsome or well loved, Brunelleschi became more famous in death than life, and in this book he is given the credit he is most certainly due.

Lorna says

Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture was a fascinating look at the personal struggles and brilliance of Brunelleschi in his engineering, design and erection of the dome over the beautiful new cathedral Santa Maria del Fiore in the heart of Florence. However, it had already been under construction for a century when, in 1418, a contest was announced for designs to be submitted for the construction of a dome that would vault over the cathedral.

"However, of the many plans submitted, only one--a model that offered a magnificently daring and unorthodox solution to the problem of vaulting such a large space--appeared to show much promise. This model, made of brick, was built not by a carpenter or mason but by a man that would make it his life's work to solve the puzzles of the dome's construction: a goldsmith and clockmaker named Filippo Brunelleschi."

"The hoist that he created was to become one of the most celebrated machines of the Renaissance, a device that would be studied and sketched by numerous other architects and engineers, including Leonard da Vinci. And before the dome was complete, the hoist would raise aloft marble, brick, stone and mortar weighing an estimated 70 million pounds."

This is an engrossing tale of the struggles, obstacles and brilliance of one man as well as a wonderful look at the history, art and architecture in fifteenth century Florence for all who are still amazed at the awesome beauty and grandeur of the cathedral of Santa Maria del Fiore.
