

Private memory and public myth, from Ctesiphon to the Cam

King's College Chapel, 27th November 1955

by Rebecca Wober

What can an architect, a quarter of the way through the 21st century, add to the written discourse regarding architecture and poetry? Is there a parallel between the construction of architecture and the construction of other languages? First, we could distinguish between building for necessity or for other purposes, whether spiritual, community, or personal legacy. Likewise for language, there are words which tumble out for survival and others which are arranged with complete consideration of placement and meaning to articulate the condition of being alive.

We could consider built and written form as human creations, of matter and of the mind. Both encounter permanence or impermanence; they survive or fall by means of what humans seek to support or pull down. Both are outward facing and depend on resources or the heat of publicity to self-perpetuate. And so the Anglophone world knows little about, say, the massive Sasanian mud-brick arch Taq Kasra at Ctesiphon, built as scribes were compiling the Babylonian Talmud, in the same microclimate of date palms, fig trees, walnuts, almonds and pomegranates.



Fig. 1 Taq Kasra, ruins, c.1881-4

This thin catenary arch was built centuries before similar ultra-thin structures engineered by architect Eladio Dieste in 20th Century Uruguay or the heavyweight Antoni Gaudí in Barcelona. Somewhere between, in the Northern Europe of the cathedral builders, the masonry vault was being tested wherever the means allowed it, made possible in service of dominant ideologies where material wealth was amassed.

Devices from poetry and architecture, rhythm and structure, are regularly used as a metaphors for one other. It is song that occupies the space in between, and looking for a monumental example of this, my mind turns to Cambridge where Henry VI decided to locate King's College in 1440. He did not live to see it completed 75 years later, but apparently laid the first stone for the Chapel in 1446. The construction took place in three phases, interrupted by decades of political jostling and war. Originally, master mason Reginald Ely anticipated a ribbed vault ('lierne') as seen at Wells and Ely and white magnesian limestone was quarried and brought from Yorkshire, but when Henry VI was imprisoned, the first fifteen years of construction stopped. And so it was that for the next fifteen years a skeletal structure stood, most likely, open to the elements.

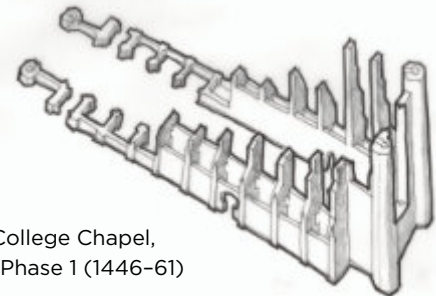


Fig. 2 King's College Chapel,
axonometric, Phase 1 (1446-61)

During the reigns of Edward IV and Richard III, 1476–1485, walls of oolitic limestone from Peterborough (slightly darker than the magnesian), were built to their full height, but only to the southernmost half of the plan. Master-carpenter Martin Prentice drew out trusses at scale 1:1 on parchment and installed the roof to these first five bays, in timber from Essex, clad in lead. Eventually, Lady Margaret Beaufort, the wealthiest person in Tudor England, promoted her son to complete the chapel and to become King Henry VII, (once he had killed Richard III). The ceiling of phase three, completed in the reign of her grandson Henry VIII, was to hide these oak trusses from the chapel interior forever.

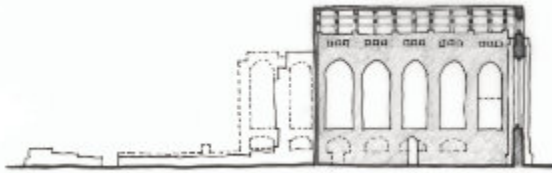


Fig. 3 Longitudinal section, Phase 2 (1476–85)

In the mid-1950s my father, a second-year undergraduate in Natural Sciences, invited newly arrived Fulbright scholar and poet, Sylvia Plath, to Evensong in the chapel at King's College on the first Sunday in Advent. He was 19 and she turned 23 during the three months they knew each other. They had met in the October of 1955 at the Labour Party Dance. That autumn, Plath was acting in **Bartholomew Fair** by Ben Jonson, first staged in 1614, which dramatised the raucous market thriving in the London of the 12th–19th centuries. This was before being performed as the centenary production of the Amateur Dramatic Club (ADC). Her role in the play as “*PUNK ALICE, mistress o' the game*” involved wearing yellow satin and throwing oranges about in rage. My dad would meet her after rehearsals, bringing an apple for each of them to eat as they walked and talked back to her digs. A week and a day after the Advent service, Plath wrote to her mother,

“I shared the most magnificent experience with him: Advent service at the King's Chapel. Since Mallory belongs to King's College he got two tickets. Honestly, mother, I have never been so moved in my life. It was evening and the tall chapel, with its cobweb lace of fan-vaulting was lit with myriads of flickering candles

which made fantastic shadows play on the walls, carved with crowns and roses.”

Plath's letters to family, friends and, during the autumn of 1955, to my father are published in a fat tome, each recipient accessing a tangibly different voice of her authorship. These letters sit firmly in the region of the private, so there is a certain voyeuristic frisson in reading such urgent messages of prose, where she mulls over the minutiae of her experiences almost in real time.

Her tone, one week later, is attuned to her friend Elinor and judging by the abbreviations and lack of capitalization, written at high speed,

“music: king's college chapel advent service: millions of candles flickering on tall, lacy, fan-vaulting that Henry 7th dreamed about, with tudor roses & gargoyles: crystal choir-boy voices singing 15th cen. Carols about maid-mary, organ like roar of god, thousands singing “adeste fideles” and the young, black-bearded Moses standing beside me.”

She continues,

“I am meeting his family in London this week: all the relatives are coming to see me: I am the tabu: the “Christian girl” (I can't convince them I'm a healthy pagan). never in God's o so green world will his like grow again.”

I adore how she shares the hilarity of the situation with her friend but although she did not meet “all the relatives”, (my grandfather still worked in India), she did come round for tea and meet my granny and a couple of her sisters: for sure Auntie Mercia, who had starred as Vimala, age 14, in the first talkie filmed in Bombay **Nur Jehan** by Ezra Mir, and quite possibly Auntie Gracia too, who had worked as secretary to author Rumer Godden in Calcutta. They didn't eat mahashas or cheese samosas or anything reminiscent of my granny's heritage, (Aleppan and Baghdadi via Calcutta); no, they ate sandwiches.

This pedestrian choice befits the conundrum my family happily navigated when they came in 1947 from West Bengal to the UK. For Plath, who had grown up at latitude 42°N, the circadian adjustment of living in the climate of at Cambridge, 52°N, shouts out to me through her letters.

With this in mind, I can relate to Plath's self-professed "healthy pagan" with delight as it speaks to my own inner heathen, happily cultivated on walks across Hampstead's own Heath or from reading historian Gerda Lerner.

Sitting in the chapel, what they saw above them was not the timber roof. It was the stone ceiling: an arrangement of self-supporting conoid forms, the largest 'fan vault' in Europe. The metaphor of 'fan vaulting' to describe the structure of this chapel leaps out to me as an anomaly. The era of its construction was not one when people in the Fens would commonly need a fan, unlike the fertile crescent of Moses or Malachi or the maid-mary of the carol. Yet Plath was entirely accurate to write "that Henry 7th dreamed about", because the canopy of stone was not built in his lifetime. Stonemason John Wastell and carpenter Richard Russell built it in the final three years of the chapel's 69-year genesis, from 1512 to 1515. So for thirty years from 1485 to 1515, the voices of the choir, singing polyphony of unparalleled complexity, as in the Eton Choirbook, were carried up to bare oak timbers.

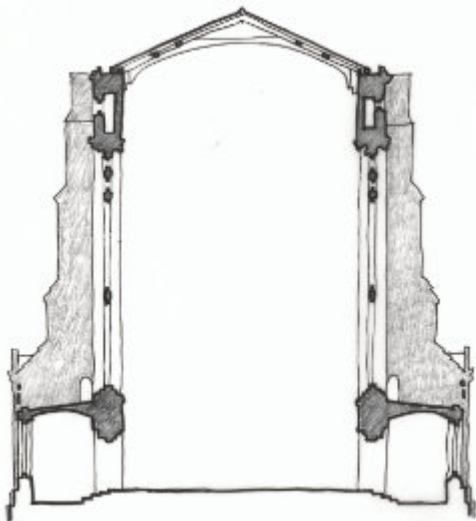


Fig. 4 Transverse section, Phase 2 (1476-85)

What did it take to raise a purely decorative stone ceiling? Had the structure been built with calculated forethought to support a future valued ceiling of stone? Yes, but not the 'lierne' vault planned by Ely. Instead, the political will was found to materialize a cloud of timber 'falsework' supporting the construction of an inverted

Gaussian curve, in stone components of such thinness that today's engineers describe it using the analogy of an eggshell. The production and manufacture of this amount of material cannot be undertaken in wartime; it needed peace for a mythmaking enterprise at this vast scale to continue.



Fig. 5 Transverse section, Phase 3 (1512-1515)

The curious leftover cavity at King's, above the stone ceiling and below the timber roof, was visited by my father and fellow students who enjoyed a tour from John Saltmarsh in the mid 1950s, the Casaubon-like archivist of the construction paperwork for decades of his life. Saltmarsh records that for the stone ceiling alone there were 150 men at work, building timber scaffolds - platforms for the 'centering' work demanded to support the stone ribs and masonry shell until it is stabilized by the central spandrels and pendants.

Were they 'journeymen' who travelled between places, plying their trade? What did they believe in, these craftsmen who preceded the Mechanicals in Shakespeare by only a century? Their world was contemporary with the Bartholomew Fair, later dramatised by Jonson. Drinking, eating, foraging, harvesting - they would have known very little about lands further than where their feet could take them. It follows that the stories which came to them via their king-makers had to be adapted so they could

consume them. Stories morph as they travel and East Anglia is not the land of pomegranates, figs or citrus.

Back in November, precisely 70 years after the date my dad sat with Plath in the pews of King's, I found myself making space to sit by a window in Edinburgh and start a watercolour, because staring at an apple and giving my attention to representing its form and how it throws light is the closest I get to meditation. I set a dusky russet picked on an 'apple day' out of town onto a plate and in between layering on the paint, I look for a carol to quote, to send this image out as a midwinter greeting to friends and family. For some reason, I know I've sung about an apple at this time of year. When I open my copy of *Noël* to page 2, the one I want is there: Boris Ord's setting of a 15th century Norfolk poem:

"Adam lay ybounden, bounden in a bond.
Four thousand winter thought he not too long.
And all was for an apple, an apple that he took,
As clerkes finden written in their book."

But why an apple if this is the nativity and not creation?

"Ne had the apple taken been, the apple taken been,
Ne had never our lady a been heavné queen."



Fig. 6 Russet apple on chequered plate

I read this as an astonishing post-justification of one origin story by another because I know full well that there is no apple in the original Genesis text. Fruit, yes, but as to which one, we are left to conjecture. I wonder if Ord had any connection with Cambridge, and immediately find not only was he Director of Music at King's College, but that he composed this carol for the very same Christmas, 1955. Why "Four thousand winter(s)"? The Hebrew calendar was reaching the year 4000 in the era just preceding the Emperor Constantine, when the Taq Kasra arch was being built. Later I come across Plath's Christmas card to my dad, reminiscing, "vivid, warm, witty aunts; wonderful supper on gay checked plates" and I look at my painted apple, placed on one of the three remaining plates of my granny's that I'd grown up with, (eating crisps and pink wafers in front of the TV in her flat after school), and it occurs to me that these were the ones which held the sandwiches back in 1955.

Stand in a forest in wintertime, look up and what do you see above? Branches. So for the first few decades, the choir in the chapel looked up and saw wooden trusses. Then the decision was taken to add something even more like branches than the timber that holds up the roof: an organic network of stone which had never been done before. Stone piers had to be amended and built to take the new design. Outside, pinnacles were added to provide the downward force to counter-balance the thrust of the new stone vault. Unlike Wastell's 'retro-choir' vault at Peterborough, formed from a continuous series of 'fans', the innovation of King's College Chapel is its transverse stone ribs, enabling a span of more than twelve metres - the greatest vault of its type in Europe, far exceeding Peterborough but less than half the span of the Ctesiphon brick arch, achieved in mud brick apparently with no temporary timber support.



Taq Kasra, ruins, c.1915-18

With the gift of deep perspective it seems to me that the stone at King's has been assembled in the language of nature. I don't see 'lace' to pattern the fringes of garment or 'fans' to agitate Middle-Eastern air but stone, crafted by humans into something organic. The ribs and double-curved vaults suggest to me the bones of a bird's wing and its muscular fascia or the veins of a leaf and its chlorophyll surface - structures which exist to allow for movement in the wind and which have come about entirely without human agency. I wonder about human creativity and consider whether inspiration, as in the flow state of early Wordsworth, comes from something other than human. The exercise of drawing and painting shows me that if we are looking for form to convey meaning, then we set out a structure and try to follow it through. The necessity of this production is in Plath's words to her mother about one week before she dropped my dad,

"When I say I must write, I don't mean I must publish. There is a great difference. The important thing is the aesthetic form given to my chaotic experience."

During that same month she was busy crafting an essay on the Matisse chapel in Vence, France, which she had just visited and adored. And why wouldn't she? It sits at her own 42°N. At the King's evensong they sat under a canopy of stone held up in the air as if by a forest of petrified palms while voices sang, "*Four thousand winter thought he not too long*" and I think of a brick vault more than 1000 years older than the stone one they were under and a story that was already ancient even 1000 years before that. When words are set to music, introducing them to pitch, interval, melody, harmony, rhythm and cadence, something else takes over in time and space, greater than the sum of its parts. I look for those times when art can transcend its medium and bring us to a position where we reach a sense of awe. Framing our experience in relation to the habit of our internal rhythms and our access to light, I think yes, perhaps for a moment they did share a connection to the continuum of time, and that any of us can, when we allow ourselves to listen afresh.

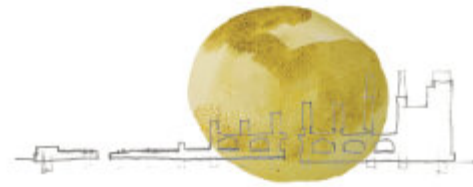


Fig. 8 Elevation sketch, Phase 1 (1446-1461)



Fig. 9 Elevation sketch, Phase 2 (1476-1485)



Fig. 10 Elevation sketch, Phase 3 (1508-1515)

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Bibliography

- 1 kings.cam.ac.uk/history-chapel
- 2 *Kings College Chapel, an architectural masterpiece and the man who told his story*
cam.ac.uk/research/features/
- 3 'King's College', in *An Inventory of the Historical Monuments in the City of Cambridge*, Royal Commission on Historical Monuments (England), (London, 1959) British History Online p98-136
- 4 To Aurelia Schober Plath, Monday 5th December 1955, p.1030, *The Letters of Sylvia Plath*, Volume 1: 1940-1956, ed. Steinberg, Peter K. & Kukul, Karen V. (Faber & Faber 2017)
- 5 To Elinor Friedman Klein, Monday 12th December 1955, *ibid*, p.1040
- 6 *A visit to the Kings College Chapel* Bedfordshire & Adjoining Counties regional hub, (IStructE, June 2025)
- 7 *Tudor Dedications to the Blessed Virgin: History, Style and Analysis of Music* from the Eton Choirbook, Cheung, Vincent C.K., (MIT, 2000)
- 8 "The Stone Skeleton" in *Structural Engineering of Masonry Architecture*, Heyman, Jacques, (Cambridge University Press, 1995)
- 9 *King's College Chapel: A History and Commentary*, Saltmarsh, John, ed. Monteith, Peter & Vaux, Dr Bert, (Jarrold Publishing, 2015)
- 10 *Statics of fan vaulting: current state of knowledge and open issues* Bagi, Katalin. (The Royal Society, February 2021)
- 11 Bernhard (Boris) Ord, Archive of Recorded Church Music
- 12 Christmas card to J. Mallory Wober, Monday 19th December 1955, *The Letters of Sylvia Plath*, *ibid*, p.1062, George Rouault "The Old King" 1936
- 13 *Scaffolding to Structure, Construction in thin-shell masonry*, Block, Prof. Dr. Phillippe & Davis, Lara, (BLOCK Teaching, ETH Zurich, 2010)
- 14 To Aurelia Schober Plath, Wednesday 25 January, 1956, *The Letters of Sylvia Plath*, *ibid*, p.1090

Fig. 1 Wober, R. after photo by Jane Dieulafoy c.1881-4

Fig. 2 Wober, R. Phase 1 *Axometric* view, after Elevation by Royal Commission on Historical Monuments (England), (London 1959)

Fig. 3 Wober, R. Phase 2 Longitudinal section from John Willis Clark (Macmillan and Bowes, 1902)

Fig. 4 Wober, R. from *Transverse Section* Frederick Mackenzie 1787-1854

Fig. 5 Wober, R. *Phase 3 Transverse Section*

Fig. 6 Wober, R. Russet apple on chequed plate

Fig. 7 Wober, R. after photo by Rev. William Ewing c.1915-8

Fig. 8-10 Wober, R. *Sequential Elevations*, (after Elevation by Royal Commission on Historical Monuments (England), (London 1959)