Embodied Time: Applied and Incidental Architectural Narratives

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Abstract

In this analysis of storytelling through building, encompassing a search for practical applications for how future buildings can embrace the passing of time, narrativity has been categorised into: the 'applied' or 'artificial', meaning the construction of a directed story, identity or philosophy; and the 'incidental' or 'organic', the accidental erosion and patination caused by weathering and human use. In 'Building Time', David Leatherbarrow considers three groupings for his analysis of buildings inhabiting the temporal dimension. The 'Time of the Project', the alterations, adaptations and adjustments made to a building, can be considered a prototype for 'applied' narrativity, while his 'Time of the World' can be linked to the gathering of 'incidental' narrativity. Leatherbarrow's third aspect, the 'Time of the Body', can be compared to the phenomenological aspects linking these categories together, directing human passage and activity through design cues and through the traces of those who have come before (Leatherbarrow, 2021). At times these categories overlap and intertwine with each other, mirroring the idea that in the communication of narrative the "the corporeal is not more fundamental than the intellectual, but… are entangled" (Austin, 2012: 108). In summary, the aim is for an architecture that may "articulate the experiences of our very existence" (Pallasmaa, 2009 :19). Therefore, as time passes and our experiences become history, we can still tell our stories through the medium of building. This methodology to create buildings with a high degree of 'story-ness' was later tested in the design of a new library and literary museum. Based in Nottingham's Lace Market, the existing tale of County House, a derelict and crudely adapted Georgian townhouse, was clarified, curated and secured, while the adjacent plots provided opportunities to experiment with applied and incidental narratives told through new buildings..

Keywords: Applied, Architecture, Incidental, Narrative, Time.

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Figure 1. Detail view of 1:20 elevational model of St. Bartholomew the Great's Church Gatehouse, Smithfield, c. late 17th Century.

INTRODUCTION: NARRATIVITY AND THE BODY

The human mind appears carefully attuned to seek out narratives and stories, through which we attempt to make sense of the chaos of existence. This inherent drive to find meaning, or "*the notion that we understand things in terms of images, or by 'telling stories' about the world*" (Hale, 2000: 109), is labelled as a result of humanity being 'ontogenetic', in opposition to the idea that the search for narrativity is a result of cultural influences (the 'phylogenetic' perspective). It is, however, "*not impossible to conflate these positions by accepting narrative may be hard-wired into the brain but can also be prompted and developed through practice*" (Austin, 2012: 108). Though storytelling can occur through the recital of facts and figures, 'narrative environments' have the advantage of "*appeal[ing] to the visitor's intellect through their body and, vice versa, through their body to their thoughts… through a variety of sensory means*" (Austin, 2012: 108), resulting in a far more emotive and 'primal' engagement. Though an individual's response to a narrative space will be subjective and can never truly be an accurate summary of interlocked and inconclusive events, the power of architecture in its role as a storage vessel for history represents the greatest possible chance for our own narratives to be remembered.

Phenomenological philosophy would appear to support the 'ontogenetic' viewpoint, with information gathered through the body's senses and naturally reconstructed into meaningful concepts by the mind though "*a kind of pre-linguistic understanding, the notion that the world is already meaningful for us before it is 'parcelled up' into language*" (Hale, 2000: 105). Deriving narratives by picking up on clues from our surroundings therefore provides the potential "*to return to that world which precedes knowledge, of which knowledge always speaks*" (Merleau-Ponty in Hale, 2000, 105). In architecture, then, narratives can be written that create bridges through time, speaking of the values and technologies of previous societies, personal identities and aspirations, the history and traces of human movements and desires, and further back to an area's geological past, its climate, resources and flora, along with our own place within

history. Via the various senses received by the body, the past can live again, aiding us in 'orienting' ourselves within the world. While phenomenological place can be defined as anywhere where 'dwelling' (human activity) occurs, where environments are felt to be 'meaningful' (Norberg-Schulz, 1980: 5), narrative too can be said to be 'gathered' wherever human activity takes place. While technologies and fashions may pass, it is the notion that humans never truly change that provides our 'existential foothold'.

In this analysis of storytelling through building, encompassing a search for practical applications for how future buildings can embrace the passing of time, narrativity has been categorised into the 'applied' or 'artificial', meaning the construction of a directed story, identity or philosophy, and the 'incidental' or 'organic', the accidental erosion and patination caused by weathering and human use. In 'Building Time', David Leatherbarrow considers three groupings for his analysis of buildings inhabiting the temporal dimension (Figure 2). The 'Time of the Project', the alterations, adaptations and adjustments made to a building, can be considered a prototype for 'applied' narrativity, while his 'Time of the World' can be linked to the gathering of 'incidental' narrativity. Leatherbarrow's third aspect, the 'Time of the Body', can be compared to the phenomenological aspects linking these categories together, directing human passage and activity through design cues and through the traces of those who have come before (Leatherbarrow, 2021). At times these categories overlap and intertwine with each other, mirroring the idea that in the communication of narrative the "*the corporeal is not more fundamental than the intellectual, but… are entangled*" (Austin, 2012: 108). In summary, the aim is for an architecture that may "*articulate the experiences of our very existence*" (Pallasmaa, 2009 :19). As time passes and our experiences become history, we can still tell our stories through the medium of building.

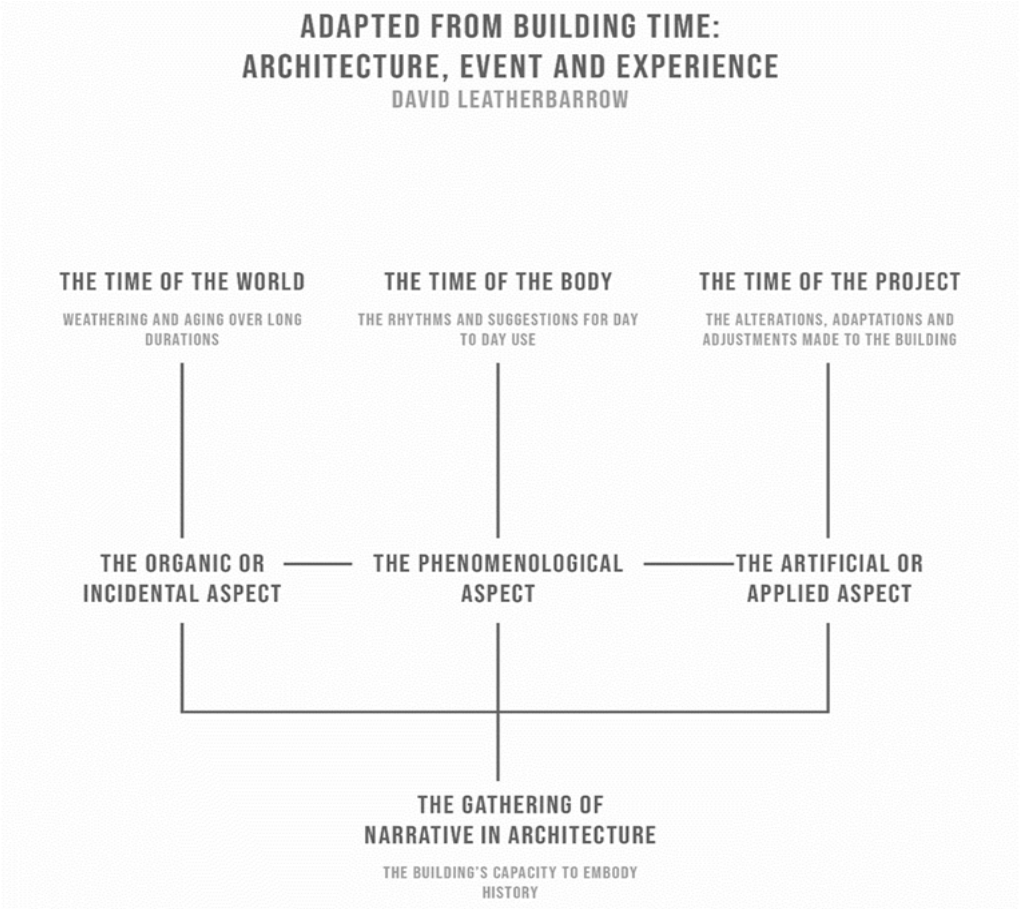


Figure 2. Adaptation from Leatherbarrow's 'Building Time' tracing 'Applied', 'Incidental' and 'Phenomenological aspects of narrative in architecture.

APPLIED NARRATIVITY: THE TIME OF THE PROJECT

As buildings are "*created out of specific circumstances… determined by the available means, techniques and traditions*" (Cramer and Breitling, 2007: 15), all buildings inevitably hold a fundamental (but at times unintended) level of applied narrativity. Within this lies the story of the cultural, technological and material qualities of a structure's time and place. This can be seen to some extent in any building: Le Corbusier's Villa Savoye speaks of a conscious rejection of a certain past and an optimistic belief in purity and new technology after the Great War, while the Nottingham Contemporary communicates a curated viewpoint of the development of its site in its form and materiality, as well as of its increasingly eco-conscious time of construction. In responding to its surroundings, architecture can manifest a place's 'genius loci', allowing, whether "*based on religious beliefs or the structure of the cosmos… narratives [to be] 'concretised', in ways specific to their geographical context*" (Hale, 2000: 115), but also a building's positioning within time.

This 'applied' narrativity can also be seen in the continued adaptation, alteration and deliberate destruction of buildings to suit new uses. While entropy will naturally alter a structure over a period of years, "*more often, it is functional requirements and the needs and wishes of the owner and user that result in changes being made to existing buildings*" (Cramer and Breitling, 2007: 15). These changes can result as a rich palimpsest of history, brought about by *the* "*quick succession of different historic circumstances, of fashions and styles and the rapid development of new building techniques*" (Cramer and Breitling, 2007: 17). In a pertinent historic residential case where variables other than the changing of fashions have largely been controlled, Shropshire's Bletchley Manor features two surviving Elizabethan forms and one 1830 rebuild. These iterations are similar in form, spatial characteristics and material technologies, but distinctly different in styles, as a result of Georgian financial difficulties that foreshadowed *The Society for the Protection of Ancient Building*'s (SPAB's) deliberate approach to denoting change by forty-seven years. Elsewhere, Eric Parry's germane work at the late fourteenth century Old Wardour House, Wiltshire, "*weaves a skein of connections between past and present*" (Hunt and Boyd, 2017: 133), evoking the spirit of the ruin through the use of contrasting lightweight glass and solid stonework, ensuring a key period of the house's history can be experienced in changing lighting conditions and senses of mass as it is passed through. While built using the same materials as the older building, the join is legible, with new stone being contrastingly "*smooth and refined – as if imitating the characteristic of glass… and inviting the striations of history that will themselves become history*" (Hunt and Boyd, 2017: 133). Even where a building's physical fabric has been largely preserved, the narrative of a place can be read in the reconfigured spatial hierarchies. At Astley Castle in North Warwickshire - a moated fortified sixteenth century manor house where new intrusions do not "*mimic the original or pretend to be historic*" (Slocombe, n.d.: 18) and can be understood clearly as part of the building's evolution - another layer speaking of the castle's downfall and resurrection can be experienced (Figures 3-4). The Great Hall, once the heart of the building, now forms a dramatic open courtyard that poetically underscores Astley's changing fortunes (Figure 5).

Figure 3. 21st Century alterations to Astley Castle show obvious signs of contemporary repair, highlighting the building's recent history.
Figure 4. The stabilisation of a ruin, fixing it at a certain point of decay, overlays an applied narrative over the incidental damage that has occurred over time. Shown here are Nottingham's 1857 Great Northern Railway warehouses, damaged by arson attacks and left a roofless shell.

Figure 5. Changing spatial hierarchies over time at Astley Castle can be read in the building's fabric.

The SPAB's approach is not uncontested, with classicist Robert Adam seeing *"nothing wrong and everything right about using obvious and understandable tradition in new design"* (Adam, 1998: 37) and arguing that this is a practice that has been occurring for centuries through the periodical revival of older styles, and perceiving that in the present-day modernism has become *"no longer a break with tradition; it has existed for over seventy-five years to become our tradition"* (Earl, 2003: 85). A potential weakness of this approach is that abiding by the rules of a style too rigidly and not daring to change and adapt to new times can result in the erasure of true narrativity. Rather than contrasting for its own sake, the grammar and language of a building can instead be understood and adapted to in manners which transcend notions of architectural style. At Poundbury, an experimental development that seeks to replicate the characteristics that make historic towns and cities rich in activity and persistence, alterations to buildings must adhere to principles set out in a design code, which limits even minor alterations to the colouring of doors and window frames (Figures 6-9). In pathologically preserving an applied 'sense of place', this mentality avoids the fact that a place's spirit (genius loci) develops through a history of inhabitation, and *"is never complete. A [place] can never completely escape its own time, whatever misfortunes may befall it, but neither can it remain locked changeless in that time"* (Earl, 2003: 75). While later editions of the code are more permissive towards alterations, narrativity, adaptability, and therefore durability are potentially stifled by a lack of recognition of a changing world. Focusing solely on outward appearance, the code does not consider spatial characteristics and alterations, through which a rich history of bodily responses and connections through time are possible.

Figure 6. Poundbury elevation original. *The natural selection of architecture: Poundbury's potential futures when narrativity and adaptability are stifled. A structure that cannot adapt will fall into disuse, while one which may adapt will survive.*

Figure 7. Poundbury elevation abandoned. If a lack of adaptation is enforced excessively strictly, the durability of Poundbury's architecture will be reduced, contrasting the Georgian structures Poundbury seeks to emulate which have survived through changes in functions, lifestyles and facilities.

Figure 8. Poundbury elevation traditional. Alterations carried out to the design code may allow a building to adapt to changing times, but real narratives are made illegible where buildings cannot speak of their own time and evolution. New spatial types, such as garages, may sit uncomfortably in an existing style.

Figure 9. Poundbury elevation modern. Where a building can freely adapt to suit changing times it has a greater chance of long-term survival. The applied story of the building is made readable, with adaptive reuse of existing elements (the garden wall arch) contributing to the accumulating layers of history.

This category of narrativity also considers the architectural choices made to direct visitors through a building. Orientation towards natural light can direct desires and potential bodily actions, while the denial of it can "*dim the sharpness of vision, make depth and distance ambiguous, and invite unconscious peripheral vision and tactile fantasy*" (Pallasmaa, 2012: 50), heightening more 'primal' sensory experiences. Museum design, the central purpose of which is often to construct and relate a coherent narrative, commonly manipulates bodily responses to communicate stories. All the senses can be involved: with sound creating "*a wider space; it implies excavated architectural space and makes us aware of the not-immediately-visible, of presences we can sometimes only intuit*" (Pollard in Littlefield and Lewis, 2007: 196); touch "*mediat[ing] the messages of invitation or rejection, nearness or distance, pleasure or repulsion*"; with even smell and taste at times adding to recreating an atmosphere, be that of oily machinery or sea air, as is the case at Portsmouth's Mary Rose Museum. In "*recreat[ing] the dark and claustrophobic atmosphere found below a ship's deck*" (Frearson, 2013), WilkinsonEyre have enclosed an amphitheatre-like space, representing "*a coming together*" (Norberg-Schulz, 1971: 44) across time, and putting visitors into the sphere of orientation of their Tudor forebears by replicating the missing half of the hull. Dim lighting and cool temperatures heighten the experience while aiding in the conservation of artefacts, while sound effects and projections mimic the lives of Tudor seafarers as part of a constructed narrative. This results in far more emotive and connected responses than could be achieved through a straightforward recital of known facts.

INCIDENTAL NARRATIVITY: THE TIME OF THE WORLD

"It seems possible, even probable, that given this intimate symbiosis between people and buildings… buildings might absorb some of the evidence of our existence, our narratives." (Littlefield and Lewis, 2007: 228)

The laws of entropy dictate that disorder and degradation occur naturally as time passes. This is an unavoidable fact of existence, despite frequent attempts to resist it in the quest for timeless idealism. Rather than fighting against it, mild dereliction can instead be a boon for design: traces of human life are left in the erosion and decay of architectural elements, recording an 'organic' or 'incidental' narrative and providing a phenomenological link through time to the actions of generations who have come before, thereby placing people in direct contact with the same bricks and stones that were scuffed and handled by our predecessors. This ability to relate and emote via *"the traces and scars of history [that have left] their mark[s] on the building fabric in successive layers"* (Cramer and Breitling, 2007: 15) is arguably a far more powerful tool for an assessment of an ancient building's significance than its relative completeness: these characteristics become *"an inseparable part of a building and its qualities."* (Cramer and Breitling, 2007: 15).

At its most literal, incidental narrative can be 'gathered' by an architectural work through the accruing over time of *"biological debris – the dust of flaking skin, the hair, the exhaled air, the humidity, heat and bodily fluids that get left behind by generations of occupants"* (Littlefield and Lewis, 2007: 10), all of which can *"only combine to form a peculiarly human trace"* (Littlefield and Lewis, 2007: 10). Though traces of human activity may fade as time passes or surfaces are cleansed, for long periods *"the warmth, grease and breath of past inhabitants will have contrived, however subtly, to alter the fabric of the place"* (Littlefield and Lewis, 2007: 11). It is clear that this 'gathering' of a building's incidental narrative is a quality that must be earned, rather than created. The discovery that implied aging and erosion expressed through a building has been falsified, however effectively, *"diminishes [the building] in stature and [makes it] less worthwhile: and this although the building remains the same. The entire change has been in the mind"* (Warren, 1998: 16), thus illustrating the subjectivity of experiencing a story. While the mental abridging and editing of the stories implied by factual physical evidence of human activity can perhaps never accurately recreate the past, the act of experiencing an ancient building *"is about as good an expression of how people lived as it is possible to get"* (Moth in Littlefield and Lewis, 2007: 20).

A physical link to the past through repetitive human activity can be found in the eroded stone steps of the Chapter House at Wells Cathedral, Somerset. Dating from c.1286 (Historic England, n.d.), these stairs have been worn smooth over the last seven centuries by the continued passage of users, with a clear groove having been cut in the floor one arm's length from the handrail running alongside the passageway. A second, less defined trace runs parallel to the main channel, standing as testament to those who have walked alongside others, pushed out towards the centre of the staircase. A less desirable inner route up the stairs, obstructed by a stone moulding at the base of a column, remains almost pristine (Figure 10). This is architecture acting as a record of human life, and *"implied in that record are human interests, orientation, and desires. As ages pass and the temporal horizon widens, the work functions less like a clock or calendar than a chronicle… These steps… have authored a book whose later chapters are still to be written"* (Leatherbarrow, 2021: 15).

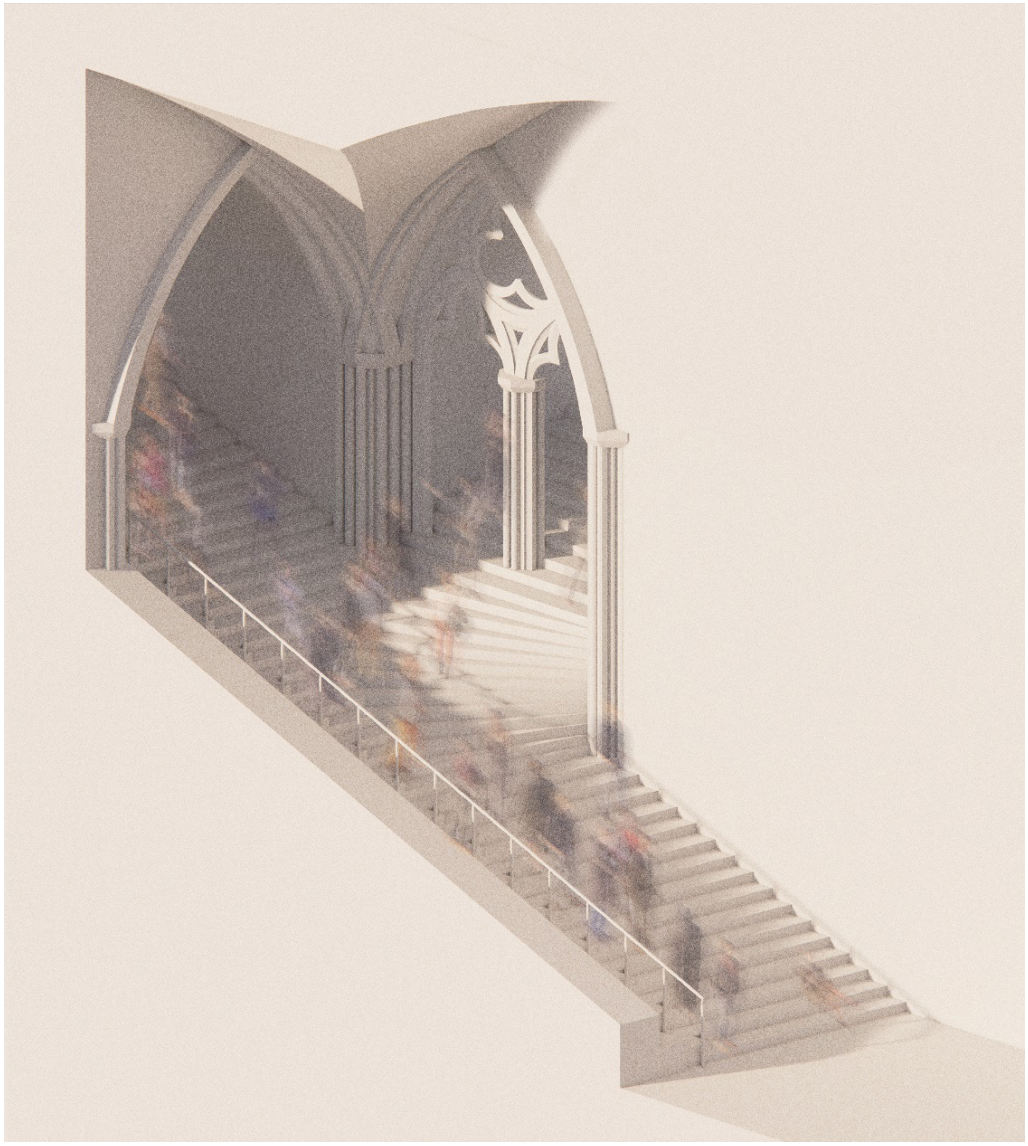


Figure 10. Steps on the approach to the Chapter House at Wells Cathedral record centuries of activity.

The erosion of the Chapter House steps physically positions the user in the footsteps of their predecessors, the traces of their footsteps echoing through time as *"a continuous meeting and joining of the hands of successive generations"* (Pallasmaa, 2009: 51). The stone surfaces act here as *"coordinated elements of visual and tactile sensations"* (Hale, 2000: 121). This can perhaps be considered as a reconciliation of the 'mortal' and 'divine' of Heidegger's 'gathering of the fourfold', with each individual (mortal) user seemingly barely impacting the surface but primally acknowledging their part in the broader continuum of humanity with our similarities across time (the divine). The faint trace left behind by every person to have ever climbed these stairs *"is the impression that appears once the force comes to rest; or, put differently, it is the rest of the movement, its remainder, or remnant. In perceptual experience, a remainder is often a reminder. Legible architecture offers experience remnants of this kind"* (Leatherbarrow, 2021: 67).

The other pairing gathered by 'the fourfold', the earth and the sky, is recorded in the ways in which the building's material elements weather and change with age. The greying of timber in sunlight, the erosion of brickwork caught in the wind and the streaking of walls from rainwater, like *"a face thus saddened by tears… also bear[s] witness to being in the world and the passing of time"* (Mostafavi

and Leatherbarrow, 1993: 69). The concept of aging and weathering on a building as a negative factor, supported by the modernist view of architecture as a Platonic ideal, can be opposed by the Aristotelian system of assigning more value to real objects, 'added to' by their imperfections. New buildings are often spoken of as 'bedding in', the reality of which is that they are subtly physically adjusting and responding to their place and beginning to record its story. This 'genius loci' (Norberg Schulz, 1979), recorded through weathering, will include the building's orientation towards the sun, where in a notional building towards the north a surface may "*become darker in colour; on the sun side, the hue has lightened, saturated, and bleached surfaces*" (Leatherbarrow, 2021: 68). Local climate conditions and the area's history will also be recorded in time. The soot blackened façades of Lenton's Holy Trinity Church in Nottingham, streaked vertically by falling rain, narrate clearly the city's industrial heritage along with frequent precipitation (Figures 11-13). Though weathering tends to *be "a power of subtraction, a minus, under the sign of which newly finished corners, surfaces, and colours are "taken away" by the rain, wind and sun"* (Mostafavi and Leatherbarrow, 1993: 6), the relatively recent scrubbing of Manchester Athenaeum's sooty crust seems a loss, the erasure of the city's coal-fired past in an 'applied' alteration to the city's apparently self-conscious image to erase the time when *"the soot had crystallised and the buildings actually glittered in black"* (Crompton in Gallagher, 2018). This romanticism, however, is admittedly not always practical; after all, *"the patina of decay… lose[s] all sense of meaning in the wreckage of a long-empty building… if decay goes unchecked, the building will eventually fall apart and become a ruin."* (Littlefield and Lewis, 2007: 17).

Figure 11. Holy Trinity Church, Lenton, Nottingham. Axonometric sketch.

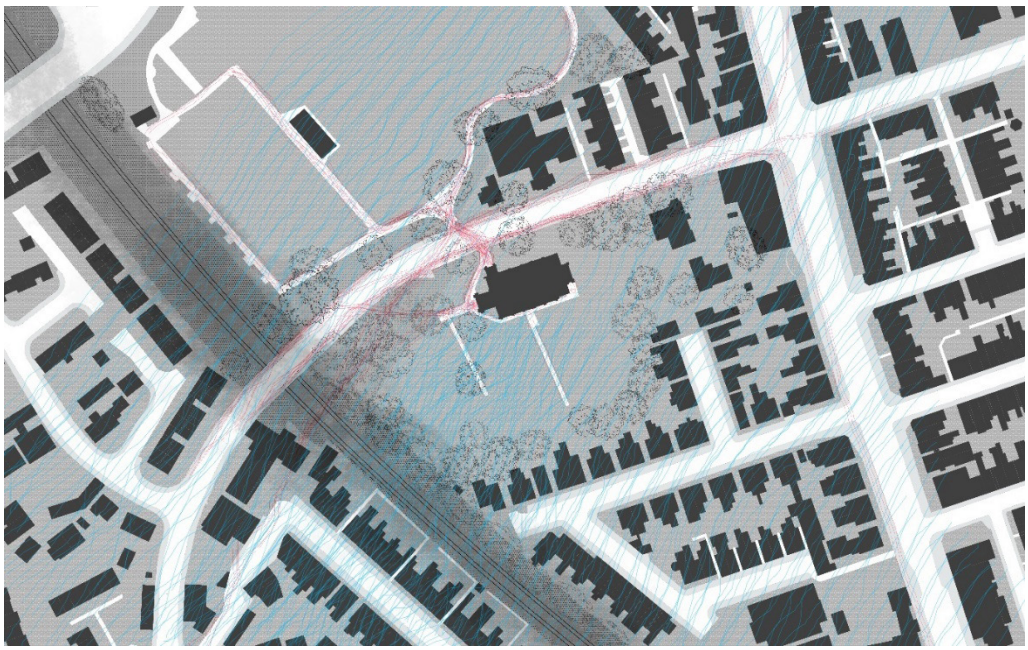


Figure 12. Holy Trinity Church, Lenton, Nottingham. Weathering patterns.

Figures 13. Holy Trinity Church, Lenton, Nottingham. Photographs of weathering.

Analysis of routes, local building traditions, the climate and societal and technological trends can allow the broad sweeps of incidental narrativity to be predicted and applied narrativity to be understood. A useful tool for design work, this methodology can be tested against architectural works that have stood long enough to have gathered weathering, in this case Lenton's Holy Trinity Church of 1842. Analysis suggests that the south and western facades should be the most heavily streaked with soot, with prevailing winds driving pollution from the adjacent railway onto these faces and sunlight fixing particles into place. The greatest foot traffic occurs to the north and is likely to have resulted in deterioration of steps and surfaces. The history of the building can be read in the legible repairs and alterations which have taken place over the years, and a phenomenological link can be made to past generations through the actions of chisels on stones, feet on steps and hands on railings.

NARRATIVE CYCLING: BUILDINGS THROUGH TIME

Narratives written into the construction of buildings, along with the alterations wrought by natural and man-made interactions, do not exist in isolation. Proverbially, from "*the moment the last craftsman has left a house… decay begins*" (Cramer and Breitling, 2007: 15), immediately pushing a building along a

linear spectrum from the applied towards the incidental. Once the accumulated palimpsest of aging and alteration has been ongoing for centuries, how can a building as a complex whole be considered to embody only one of these narrative types? A more appropriate model, based on the historic precedent of buildings aging and crumbling before being repaired and altered, may be cyclical, with history repeating itself time and time again (Figure 14).

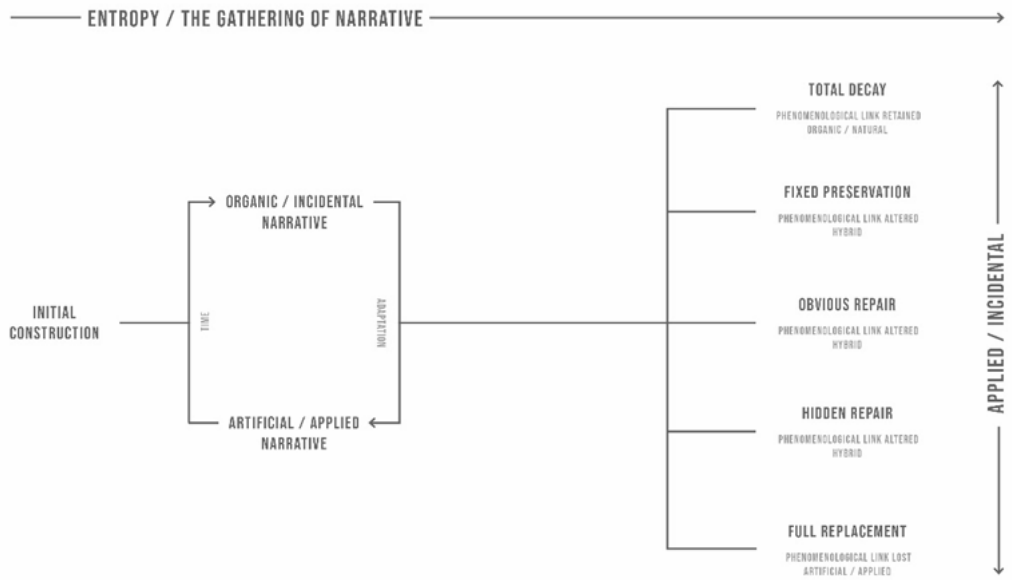


Figure 14. Diagram demonstrating narrative cycling.

This conclusion is most apparent when the building elements most susceptible to change are examined, often the parts most exposed to human touch or most exposed to uncontrollable external conditions, but which are large enough to warrant phased repair and alteration rather than wholesale replacement. This theory can be tested against the facades of the gatehouse of St Bartholomew the Great, Smithfield, itself initially constructed in the 13th Century as part of the church's nave (Figures 15-16). At the dissolution of the monasteries the building was ransacked and partially demolished in 1543 in an act of overlaying a new applied narrative (the removal of historic elements at times being an equally powerful tool in storytelling, in this case of the downfall of the priory and the supremacy of the Tudor monarchy). After a period of decay, a new timber-framed gatehouse was constructed over the old arch in 1595 as a London residence for the powerful Scudamore family, its grand, then modern, façade ornately decorated with their coat of arms and religious carvings. Over time, this timber structure will have warped and greyed in the south-western light, its wattle and daub infill crumbling and vegetation climbing the structure; an incidental narrative recording declining fortunes. In the Eighteenth Century the building's appearance was modernised with the addition of mathematical tiles mimicking brickwork, its inexpert bonding perhaps speaking of financial difficulties in contrast to the desired narrative of modernisation and a new London arising from the surrounding clay. As is inevitable, in time this elevation also decayed: period photographs document the loosening of tiles and the blackening of the brickwork amid the smog of the industrial revolution, but also small eddies of applied narrativity in the abortive attempt at plastering the façade and the addition of signage indicating the structure's new role as retail premises. These changes were lost in 1916 during a German Zeppelin raid, resulting in the collapse of the Georgian façade and the rediscovery of the gatehouse's medieval origins, at which point applied narrativity took over once more and the building was restored to its current condition, complete by 1932,

Figures 15. 1:20 models of the façade of the gatehouse at The Priory Church of St Bartholomew the Great through time, illustrating the cyclical relationship between applied and incidental narrativity.

as an artificially directed view of London's past. Though the traces of this raid were expunged from the building, losing an opportunity for phenomenological links back to the time of the First World War, an arguably less poignant memorial to the fallen was affixed to the building, along with a written record attesting to the building's 20th Century reconstruction. Since this time, the building has again begun to weather and change, embarking on another loop of its narrative cycle through the embodiment of incidental influences. In 2020, by which point *"the gatehouse had become dark and dingy, the handsome iron lanterns were not working, the paint was flaking and the ironwork was corroded"* (Heritage of London Trust, 2020), a new narrative eddy was applied in the restoration of the heraldic gates, although less telling to the observer due to their exact replication of what had come before.

Figure 17. Surviving fragments of the Augustinian priory, reused and heavily altered over the intervening years, record changing fashions, fortunes and technologies in physical form.

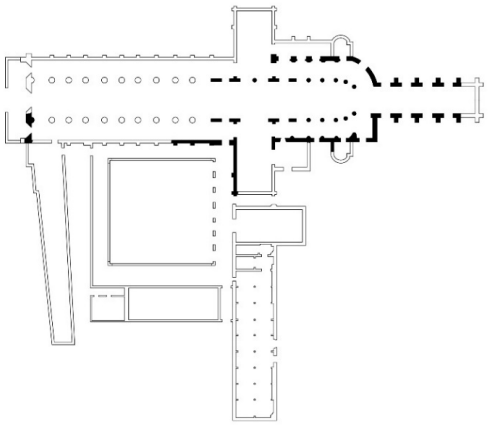


Figure 16. A speculative reconstructive sketch of the church's nave facing Smithfield has been created based on surviving fragments, archaeological data and 16th Century maps, giving an impression of the appearance of the building before 1543.

In writing about weathering and clear alterations to buildings, excessively *"romanticising the patina of decay could easily become a dangerous cliché"* (Littlefield and Lewis, 2007: 17). No building can last forever, and in time, once a building (or building element) reaches a point at which it can no longer be effectively used, a change must be implemented. While framed here as the outcomes of the breaking of a narrative cycle, it is also worth considering that these methods may form just another stage of that same loop, themselves eventually turning to dust. Returning to the example of the Chapter House steps at Wells Cathedral, a series of models illustrate five potential outcomes, each method increasing in its degree of applied narrativity away from incidental decay, but with each intervention diminishing a potential phenomenological

link to the past (Figures 18-23). Fred Scott divides the fate of all architecture into *"remain[ing] unchanged, to be altered or to be demolished"* (Scott, 2008: 26), though here alteration and remaining as-built have been further split to reveal differing approaches in restorative building philosophy.

Figure 18. Initial Construction: Potential to gather incidental narrative.
Figure 19. Total Ruin: Phenomenological link retained.
Figure 20. Fixed Preservation: Phenomenological link altered.
Figure 21. Obvious Repair: Phenomenological link altered.
Figure 22. Hidden Repair: Phenomenological link altered.
Figure 23. Fixed Preservation: Phenomenological link lost.

Arguably the purest approach, the least reliant on curated narrativity, would be to let old buildings fall into total decay without intervention. In this case, the traces left by our forebears and the other ravages of time remain unaltered, though of course these too will eventually dissolve beyond meaningful bodily interpretation. While it may be tempting to believe that a building can remain in this romantic state forever, this is *"largely an idle and pointless fantasy"* (Littlefield and Lewis, 2007: 17) if the building is to have any practical purpose. The wish to conserve a structure in a permanent state of decay, here titled 'fixed preservation', paradoxically involves an applied interpretation of the past. The resultant building, cleansed of 'the wrong type' of organic decay, *"does not represent a 'natural' state of the monument, neither can it be said to have achieved the perfectly sustained, nearly unchanging state of a museum object. It is in many ways a work created to fulfil instructional, aesthetic and emotional needs"* (Earl, 2003: 70). Rome's Colosseum, before the 19th Century was a wild and overgrown garden with *"long grass growing in its porches; young trees of yesterday, springing up on its ragged parapets, and bearing fruit: chance produce of the seeds dropped there by the birds who build their nests within its chink and crannies; to see its Pit of Fight filled up with earth… is the most impressive, the most stately, the most solemn, grand, majestic, mournful sight conceivable"* (Dickens in Cooper, 2017). Though saved from destruction through stabilisation and pruning, the lifeless sterility has meant a significant chapter of the building's history has been lost. A weakness in the interpretation (and therefore the rewriting) of narrative is its inconsistency: *"certain parts of a crumbling building, the ancient stones and arches, for instance, are deemed "proper." Other parts, like the plant life and the later historical stages of the ruin, are deemed "improper" and are removed"* (Cooper, 2017).

Where a building can be practically repaired, perhaps the more 'honest' approach is to make repair work visible and legible, as seen in the 2012 repair of worn 16th Century stone steps at the University of Cambridge where a composite resin was used to recreate the missing fabric. This can be juxtaposed with the almost untraceable repairs seen alongside. While undeniably exhibiting a high degree of craftsmanship, and while in both cases the experiential link to the traces of former users has been lost, where repairs are clearly denoted they can at least be read visually, balancing sentiment with practicality. Different

approaches will always be suitable in different situations: John Earl, writing in Building Conservation Philosophy, admits his tendency to *"sometimes wonder whether it is really necessary to shout the truth from the house-tops. Aggressively visible repairs can distract attention from the very qualities that mark out a building for preservation. A little discretion may be no bad thing"* (Earl, 2003: 109) A final outcome, and one which may follow many cycles of alteration, is a building's total demolition, taking with it all traces of those who once inhabited it. While this may seem like the end of one narrative and the beginning of another, this is not necessarily always the case: intangible traces of the old structure, and the world it was built into, may persist long after all physical traces are gone. New towers within the City of London remain constrained by a street plan that was set out centuries ago between plot sizes dictated by timber-framed spans. This pattern of new buildings squeezed into ancient plots is common to many British cities, and can be seen clearly in Nottingham's Lace Market, where few truly ancient structures survive (Figures 24-26).

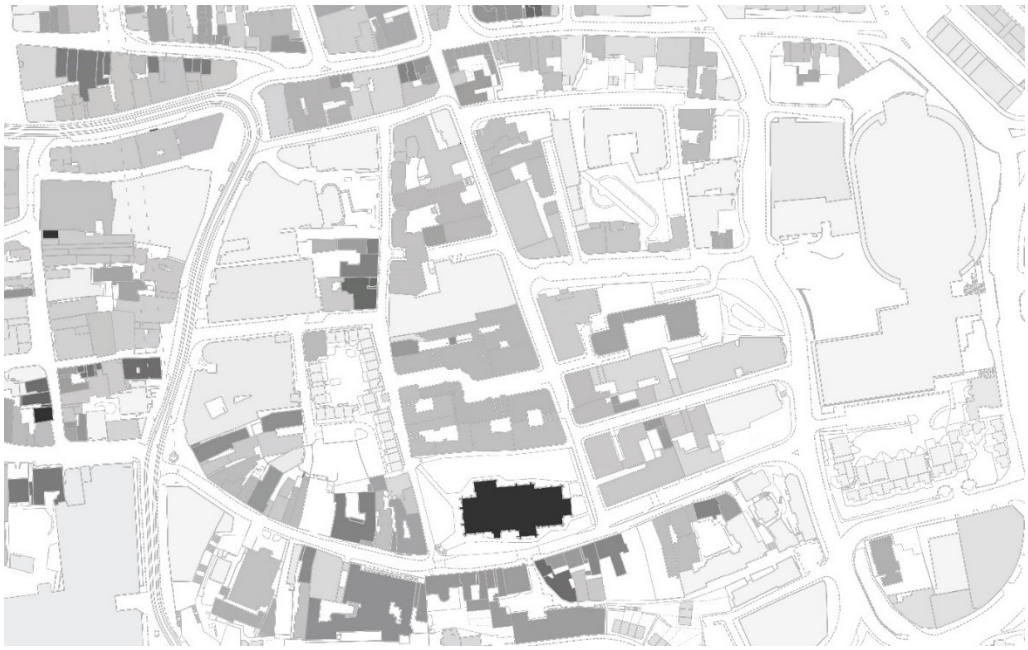


Figure 24. Building persistences.

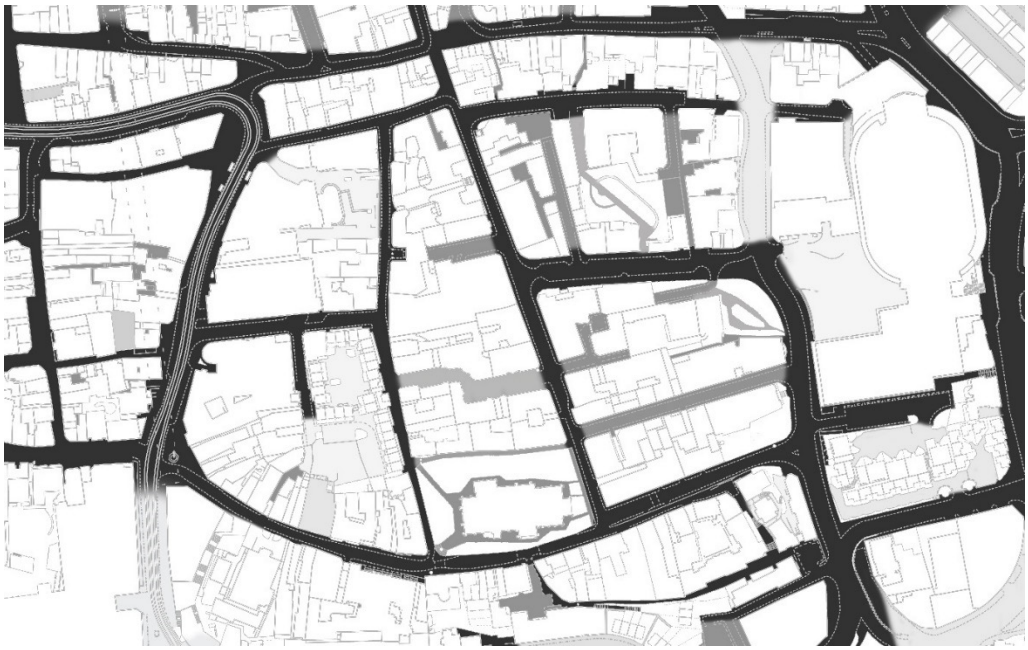


Figure 25. Route persistences.

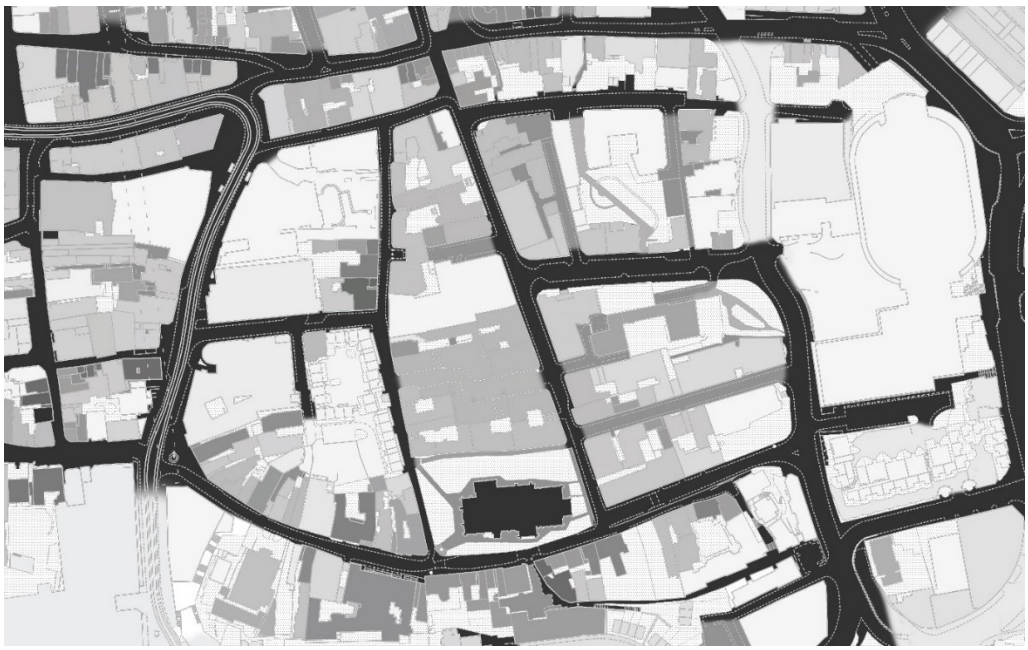


Figure 26. Composite persistence drawing.

Buildings within Nottingham's Lace Market are largely Georgian or Victorian but fit into a street pattern and plot sizes dictated by ancient spans of timber.

PREDICTING THE FUTURE: PRACTICAL APPLICATIONS

This analysis of architecture's capacity to embody and playback the narratives of those involved in a building's construction, use and adaptation raises a question: how can architecture be built with the capacity to record our own histories? Though initial storylines and atmospheres can be created using relatively conventional means, can the route a building takes on the proposed circle of narrativity be predicted, allowing initial 'applied' narrativity to direct 'incidental' change and growth? "*Might that be the measure of the project's intelligence: its capacity to absorb unanticipated effects and benefit from the result?*" (Leatherbarrow, 2021: 6).

While much has been written about 'appropriate' ways to adapt old buildings, predictions of the weathering and erosion of buildings through time appears less common, though still precedented. An early example of a designer's consciousness of entropy can be found in Joseph Gandy's 1830 painting of John Soane's Bank of England in ruins, standing as a monument to the might of the British Empire in a distant, future world where the "*City of London is imagined as a swampy wilderness, as desolate as the Roman Forum in the dark ages*" (Woodward, 2006). The painting illustrates Soane's intentions for his building as a receptacle for a directed form of incidental narrativity across time. A century later, Albert Speer, tasked with designing structures that would outlive the 'Thousand Year Reich', revisited these themes in 'A Theory of Ruin Value', arguing that "*buildings of modern construction were poorly suited to form that 'bridge of tradition' to future generations which Hitler was calling for*" (Speer, 1995: 97). Illustrating his theory through drawings of his work "*after generations of neglect, over-grown with ivy, its columns fallen, the walls crumbling here and there, but the outlines still clearly recognizable*" (Speer, 1995: 98), Speer proposed that future public buildings of the Reich should be constructed using solid stone masonry, the aim being to steer the ravages of time into creating appropriately 'heroic' monuments.

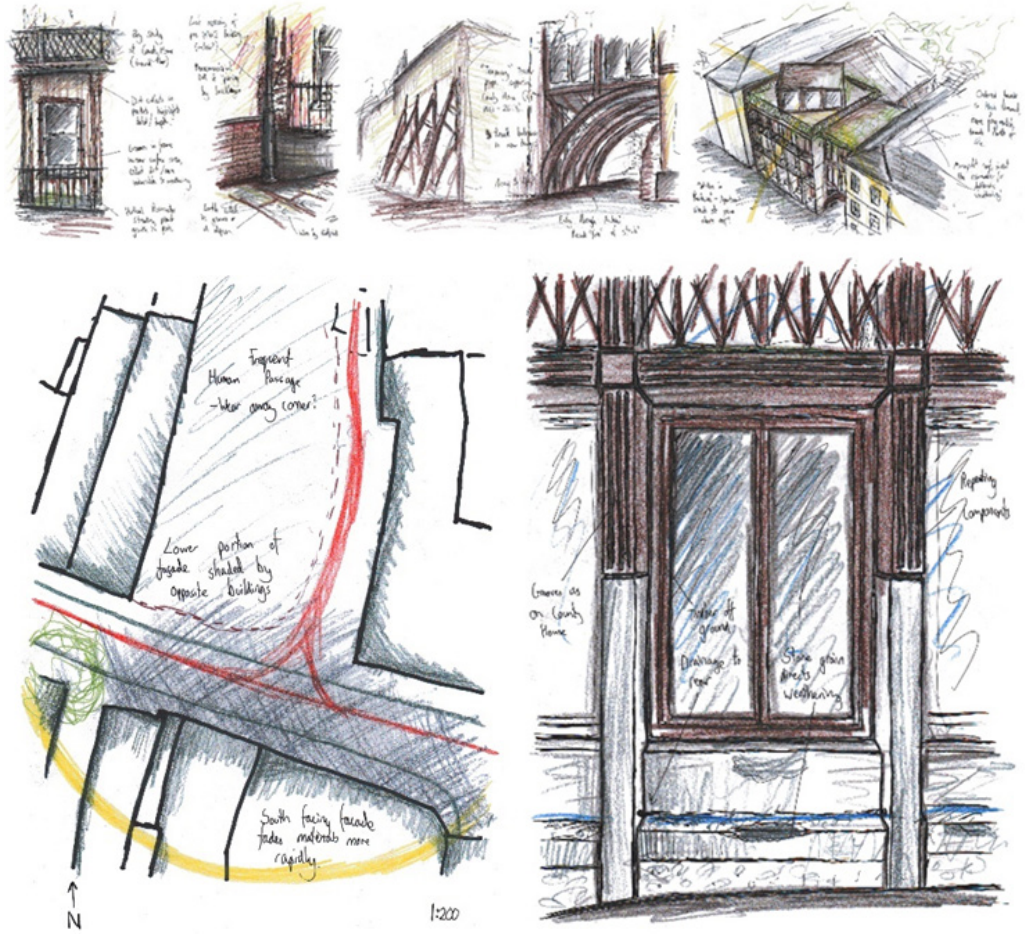
While both Soane and Speer utilised forms of classicism as a means of legitimising their respective societies as the heirs to Roman might, their consideration of the

material qualities employed have wider practical applications for new works. Though taken to an extreme in total ruination, the material specifications chosen at the time of construction are crucial to how the building will fare through time. In a phenomenological reading, so-called 'natural' materials "*allow the gaze to penetrate their surfaces and they enable us to become convinced of the veracity of matter. Natural material expresses its age and history as well as the tale of its birth and human use. The patina of wear adds the enriching experience of time; matter exists in the continuum of time. But the materials of today – sheets of glass, enamelled metal and synthetic materials – present their unyielding surfaces to the eye without conveying anything of their material essence or age*" (Pallasmaa, 1994: 29). Advocating "*materials and surfaces that speak pleasurably of time*" (Pallasmaa, 2000: 79), Pallasmaa goes on to note the primal knowledge of stone speaking of its ancient origins and its durability symbolising permanence, the manner in which exposed metalwork records the passing of history in its collecting of patina, timber recording its duality as both a growing tree and as a crafted object, and brick and its inherent suggested construction. These are materials where the tool marks of their creators, in the carving of wood or stone, or the moulding, carving and joining of brick, can be read, each recording "*an extension and specialisation of the [craftsman's] hand that alters the hand's natural powers and capacities*" (Pallasmaa, 2009: 47-48) that is subconsciously mentally mimicked by observers. These can, perhaps, be considered materials that naturally lend themselves to embodying both applied and incidental narrativity.

The SPAB also note that specific materials "*such as stone and timber, which can be used and enjoyed for their lively surface, character and colour, tend to weather satisfactorily, enduring well and looking better as they age*" (Hunt and Boyd, 2017: 90-1). Taking a step beyond simply praising the characteristics of different materials, the society urge caution at the design stage, noting that "*the way timber cladding is affected by the weather can be markedly different on north and south elevations*" (Hunt and Boyd, 2017: 90-1). Contrary to convention, why should this be considered negatively? The varying responses in material qualities depending on their articulation can be celebrated as part of an architecture unbreakably linked to the unique details of climate, orientation, exposure and human use of its site.

Leatherbarrow speaks of material usage in stages: that of pre-qualification (the inherent characteristics and strengths of a material); qualification (the manner in which they are assembled and located in a design); and re-qualification (the effects of weathering and aging) (Leatherbarrow, 2021: 10). While these phases can readily be mapped onto a model of applied and incidental narrativity, considering and altering the 'qualification' of materials contrary to their 'pre-qualification' may produce interesting results at the level of a building's components. Using a stone block as a case study, Leatherbarrow describes how in construction using load-bearing stone "*it was discovered that stones should not be placed vertically on their sides, with the grain pointing upward, but horizontally, in order to prevent pressure from the load above from cracking the stone*" (Leatherbarrow, 2021: 36-9), a legacy of the block's natural arrangement in a quarry face. While it is acknowledged that "*the placement of stone in construction recalls the stone's origins in cutting and anticipates its aging in weathering*" (Leatherbarrow, 2021: 36-9), the implication is that a contemporary architect, potentially freed from using stone in a load-bearing capacity, can alter the way an individual block will weather and adapt over time to its surroundings by specifying counterintuitive orientations. The organic, incidental narrative of a building could theoretically be predicted and fine-tuned at the time of its construction to a high degree of detail (Figures 27-29).

Figures 27. Sketch models of benches to be incorporated into a South-facing façade, with the unconventional orientation of stonework allowing weathering and erosion to be predicted and directed. This analysis of architecture's capacity to embody and play back the narratives of those involved in a building's construction, use and adaptation raises a question: how can architecture be built with the capacity to record our own histories?



Figures 28. Illustrated here are initial designs for a south-facing façade in Nottingham's Lace Market, designed to reference historic features of the site as well as to have the potential to record a story of its own.

Figure 29. Site axonometric sketch: Potential exists to embody applied and incidental narrativity at County House, Nottingham.

None of the above is to say that novel materials need be disregarded in 'intelligent' narrative design. Weathering steel, as the name implies, is specifically designed to change in tone and texture as it ages. In one of the few architectural examples given sufficient time to embody 'incidental' narrativity, Eero Saarinen's 1964 John Deere World Headquarters manifests the action of rainwater upon its surface, highlighting details of shelter and exposure. Here, programmatic adaptability and rejection of the Corbusian concept of material purity, its "*volume and colour, as absolute, without the possibility of mistake*" (Mostafavi and Leatherbarrow, 1993: 69), has seen Saarinen's work survive in continual use as a record of its time. 'Harder' materials, less receptive to receiving incidental narrativity, may provide relief from the aging that surrounds them, or direct imprints to be made on other building elements. Considered material usage can allow "*a domicile for the touch of our bodies, memories and dreams*" (Pallasmaa, 2009: 102), altering the sounds, textures, smells and appearances of spaces through time by providing the conditions in which phenomenological temporal links can develop. Rich in applied narrativity, the Museum of Scotland has been subject to a financial battle regarding its poor ability to last through time, largely "*blamed on Benson & Forsyth's adherence to the purist modernist doctrine that all visible walls should be sheer and uncompromised by copings*" (Spring, 2007). Resultant water damage causes conservation issues and raises maintenance costs, while the untreated 'natural' sandstone flooring, recording human activity through "*ingrained dirt and abrasion from visitors' shoes*" (Spring, 2007), has proved problematic, resulting in water damage to exhibits during necessary cleaning. Though this may have been acceptable in other areas of the building, it is clear that the programmatic aspects of a space must be considered.

Designs which are readily adaptable will be most likely to survive. Logic dictates that historic buildings still in meaningful use are, "*by definition, survivors, and one important reason for survival is the fact that… [structures] assembled from small components of long-available materials… and with relatively short-span[s]… have proved to be adaptable and resilient. Modern long-span buildings, rigidly structured in non-traditional materials, have shown themselves to be rather less so*" (Earl, 2003: 92). It would, however, be a fallacy of survival bias to suggest that this provides a guarantee of a building's future persistence: statistically, many more short-span buildings have been destroyed over time, while long-span structures have had relatively little time to prove their worth in a consumer society with an age-based assessment of a building's significance, making the adaptation of 20th Century buildings less likely. An appropriate exercise may involve testing different functions against the essentials of a building's plan, without damaging the identity of the building's 'type' (Rossi, 1982).

Building for the long-term and accepting future adaptation is surely a more economically and environmentally sustainable model of building than the design of structures of limited use and lifespan. The conventional contemporary lifespan of a modern building of around sixty years, symptomatic of a society without respect for their position in future history and accustomed to replaceability, could be vastly extended: through early investment against the cost pressure that "*means that buildings are constructed so as to only fulfil their current purpose*" (Piffaretti, 2007); as well as designing to avoid or allow the replacement of "*modern building materials like insulation products [or plastic adhesives with unpredictable lifespans, which] don't last as long as wood and stone*" (Piffaretti, 2007). The principles of designing for adaptable structural systems that can accept the damage of history as a means to 'gather narrative' can also be applied to building services, with simple, passive strategies based on solar and climatical constants seeming preferable to 'high-tech' systems, which rapidly

become obsolete (and may prove impossible to alter without the destruction of a building's fabric). In this way, a building not only increases its efficiency but becomes attuned to the narratives of its site, linked to the movements of the sun and weather systems, as well as Leatherbarrow's times of the 'body' and of the 'world'. Designing around other relative constants, such as human proportions, desires and actions, will aid in increasing a building's potential for 'narrative mass', the peak of 'story-ness' that it can embody. Where these constants are concerned, even in the adaptation of old buildings, "*temporary arrangements [should be] avoided wherever possible and preference given to good permanent solutions that will serve for the long term*" (Hunt and Boyd, 2017: 136) so as to nurture the potential for human 'dwelling' to be recorded.

DESIGNING FOR NARRATIVITY

The principles of designing for applied and incidental narrativity outlined above formed the framework around which 'Nottingham: City of Literature', a hypothetical new museum and library in Britain's East Midlands, was conceived. A site consisting of two empty plots adjacent to a derelict Georgian mansion (County House) was selected, providing opportunities to develop narrative ideas in new structures, allowing a new applied narrative to be started almost from scratch and to enable the testing of directed weathering and decay. In existing buildings, the creative challenge was that of curating and rationalizing the layers of accumulated alterations and adaptations to form a usable building, without obliterating the history that made County House worth saving. The key to this form of design is to understand that this is not the end of the building's adaptation through time: with good fortune, County House will continue to cycle through time and adaption, gaining more successive layers of applied and incidental narrativity in the future, among which will be its 21st Century adaptations.

As an initial design exercise, attention was given to a small area of the southern façade of the new western wing, closely following Leatherbarrow's ideas of material 'qualification' and 'pre-qualification'. Taking into account the sun-facing orientation of this elevation, a sketch design was developed that incorporated deep timber bays, intended to grey and warp in direct sunlight but to remain relatively pristine in deeper recesses, mounted above stone benches with blocks arranged to weather and erode slowly due to the continuing patterns of human use. Drainage channels were directed to weather in specific areas, while an arched entranceway evoked the forces created by the timber supports fitted to the building between 1931 and 2015 (Figures 27-29).

Over the course of several months, these design sketches developed into a coherent set of drawings for a functional building, but still one based on the cyclical model of applied and incidental narrativity (Figures 30-34). The new museum wing became more civic in character, partially in reference to the severe classicism of neighbouring public buildings but largely to develop an applied narrative of this being, at least in its initial form, a socially prominent building for the city. Importantly, while the new structures clearly follow a language of the 21st Century, speaking of increasing environmental awareness and improved accessibility around the ancient structure and new museum wing (an applied narrative of the building's time of construction), low-tech solutions are used wherever practicable. Rather than relying on complex mechanical systems that will likely become outdated within a relatively short period, passive ventilation, shading and drainage systems route the building within the unique conditions of its site while also prolonging the usable lifespan of the building through making it suitable for future adaptation, a key feature for the potential

gathering of narrativity over time. Internally, structural beams are fitted to the new hall that could potentially be used to add a new floor within the double-height space. While currently in use as a grand exhibition hall, it is pragmatic to envisage a time when different uses may be applied to the space even when these run against the wishes of the original designer, for no building can ever remain entirely unchanged. In another exercise in architectural narrativity, in their final design form the new buildings were largely constructed of architectural salvage, most notably from the nearby Broadmarsh Centre (currently undergoing partial demolition and the total removal of brickwork). This reuse speaks of the sustainable concerns of the current time, as well as allowing the new library to gather the stories of the surrounding city's past, both through its architecture and through its housing of literature. The weathering gathered previously and the building's reconstruction with brickwork panels are both clearly legible, adding other layers of storytelling and recording through time to the design.

Within the existing building the simplification and alteration of contorted circulation routes inevitably resulted in some history being lost, but where this has occurred traces remain to ensure the timeline of County House can be read: a redundant 19th Century staircase is moved from the centre of the old house to the new building, but marks on the walls where it was previously fitted are legible to those who seek it. Wherever possible, damage and decay through time are respected as part of the building's incidental history. Rather than trying to repair or replace collapsed floors, voids through missing floors allow for dynamic double height galleries, spanned by blue-painted timber walkways supported by circular brass columns; a reoccurring design language, denoting 21st Century alterations, that will itself weather through a long-time span. The dimension of time has also been addressed for short-term changes: planting will eventually cover the building's walls, deliberately powdery render will flake off the walls of the inner courtyard revealing the reused brick below, and the sand excavated from caves beneath the site that paves the courtyards will be rearranged day by day as footprints are made and remade.

Figures 30. County House, High Pavement, Nottingham, elevation. The new museum structure repairs the line that was broken in 1931 with the demolition of the home of Henry Kirke-White, while remaining in scale with surrounding ancient structures. The South facade features large sash windows, allowing access to small balconies and mirroring the 1833 ballroom, along with shutters to minimise unwanted solar gains. Guttering directs water to weather in desired paths, creating a design routed specifically in its site.

Figure 31. County House, High Pavement, Nottingham, façade. The southern façade onto High Pavement is designed to accommodate future weathering, with projecting drainage directing staining, encouraging visitors to sit and erode the in-built benches, shutters providing shading to the south-facing glass, provision for planting and wall ties denoting the story of how the brick panels of the nearby Broadmarsh Centre were salvaged and used to construct this new form. The façade is also clearly civic, mediating between the severe National Justice Museum in its restrained detailing and proportions, as well as the Nottingham Contemporary with its vertical brick ribs covering panel joints.

Figure 32. County House's original entrance chamber retains as much of the existing fabric as possible but balances this with the need to make repairs and to rationalize the internal layout. Floor tiles, where damaged, are swapped with travertine replacements formed using crushed brick from nearby demolition works, while traces remain of the timber Victorian staircase, removed and fitted elsewhere. New doors in the place of windows are picked out in brass, as are structural interventions.

Figure 33. County House, model of café. Where areas of structural damage are severe, it would be against the principles of incidental narrativity to inconspicuously restore these spaces. Instead, stabilization works will take place, denoted using brass columns, while the removal of rotten floorboards allows lighting, signage and museum displays to be hung through the remaining joists. Changing levels within the building are resolved by building up the floor height in new timber walkways, with lower levels becoming display areas.

Figure 34. County House, rear courtyard. Buildings are adapted, rather than replaced, wherever possible. A portico fitted to the North of County House provides a secondary entrance from this space, also creating a focal point in an outdoor cinema. This is constructed of the same materials as internal interventions, creating a legible language of 21st Century alteration. The 1931 East wing is extended upwards using concrete cast using fragments of its 1949 appendage.

BUILDING NARRATIVITY: CONCLUSION

"Time is the dimension in which buildings actually come to life: how their shadows and steel engage the days and seasons of the world, how they guide the movements of people and things, and how they project the past into the future, the once-was into the could-be" (Leatherbarrow, 2021: 3).

Despite the best efforts of architects throughout history to build for eternity, forming fitting reminders of their age and world, their narratives and technologies, time waits for no man. Attaching to this storytelling, however, an understanding of the mechanics through which buildings evolve, weather, decay and adapt, and embracing this nature rather than fighting it, prompts an investigation into an intriguing methodology on how we can build for the future. Good design, "*seen as just one phase in a long timeline spanning decades, even centuries*" (McCloud in Hunt and Boyd, 2017: v), will likely eventually become the only tangible reminders of our existences, communicated to future generations in a considered narrative-rich architecture.

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In this research, the necessary permissions were obtained from the relevant participants (individuals, institutions, and organizations) during the survey and in-depth interviews.

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Images

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