Place is the Principle of Generation — Peter Carl

The topic of narrative and architecture offers the opportunity to reframe the hoary generalisations of time and space. The medieval English philosopher and friar Roger Bacon asserted that 'place is the principle of generation',[1] thereby fusing the two dimensions. Pursuing this insight enables us to suspend the convention that the past-present-future[2] of narrative prevails in a boundless, temporally neutral space; and it encourages consideration of a more concrete milieu of communicating embodied conditions. This milieu is the reality we take for granted, which Dermot Moran argues is 'the central and most cunning feature ... of the everyday world'.[3]

Since Bacon's time, literature, drama and film have discovered non-sequential, fragmented modes of narration. Painting, sculpture and architecture too have cultivated the disposition of fragments, spatial superimposition and purely formal motifs such as solid/void. More recently, we have been exposed to the enigmatic outputs of large language models and visual generation programs, whereby the massive accumulation of data must be translated into an immense multi-dimensional vector space to give a computable simulation of contexts, or reality.[4] Such simulations produce their effects by replicating patterns in language, without having to take account of the experiences and histories by which the languages emerged. Despite Wittgenstein's assertion that 'our language can be regarded like an ancient city',[5] it is not yet possible to enter human characteristics into a computational regime and expect it to discover a city as a congenial disposition of many humans. For the most part, digital practice in architecture has concentrated on design, seen as the manipulation of forms and typically relying upon the Renaissance format of plan, section/ elevation and perspective. The remarkable persistence of this format (it is the standard CAD 4-screen layout), with its concern to arrange for visual contemplation the useful and poetic coordination of materials in light, evidently responds to something essential within Moran's taken-for-granted everyday world.

Locus, theatre and scene construction

We may begin with the discovery of how to effectively depict architecture as the conditions for praxis during the renewal of Hellenistic perspective at the time of Giotto.[6] The latent theatricality of the scheme, at least for the noble classes, is fully developed by the following century. By 'theatricality' I mean the cultivation of a praxis that, in language, gesture, dress, furnishings and architecture, depends upon the communication between religious rite, public celebration and drama. This communication preserves

orientation to the ceremonial time-out-of-time[7] whereby historical events are made to resonate with the fundamental conditions and favoured memories of a culture.[8]
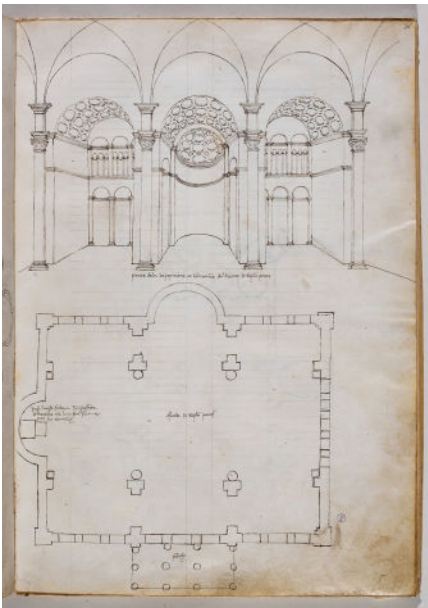
A succinct example from the Italian Renaissance is offered by Ghirlandaio's fresco, conventionally titled *Confirmation of the Franciscan Rule* and part of the Franciscan cycle for the Sassetti Chapel in Santa Trinita, Florence, executed between 1483 and 1485 (Fig.1).[9] We are presented with a composite setting, which structures its pictorial and analogical depth in layers. In the foreground reception ceremony on the *piano nobile* of a palazzo, Lorenzo de' Medici and Francesco Sassetti, Medici banker and patron of the chapel, greet the poet and humanist Poliziano, who ascends the stair, leading Lorenzo's three sons, his pupils.[10] A Franciscan friar in grey-blue habit in the next layer leans across the stair-balustrade to look at Poliziano; but he is also taking part in the eponymous Confirmation, a rite that was actually celebrated in San Giovanni in Laterano, in Rome, two centuries earlier.[11] The hand of Pope Honorius III raised in benediction rhymes with Lorenzo's outstretched hand of approbation, enhanced by the diagonal alignment of Poliziano and Francis, ostensibly reconciling humanist with religious commitments. In place of the actual Early Christian architecture of San Giovanni in Laterano, Ghirlandaio has substituted the central nave of the fourth-century Roman 'Temple of Peace',[12] which is organised to frame the composite scene like the architecture of a *scenae frons* (Fig.2). In the background and aligned with the central bay of the basilica is the central bay of the 14th-century Loggia dei Lanzi, echoing the tripartite *scenae frons* (and displaying two of Agnolo Gaddi's trefoils, Temperance and Justice), which, with Arnolfo di Cambio's Palazzo Vecchio to the left, framed the Piazza Signoria, the primary site of civic ceremony of the (then) Florentine Republic.[13]

Ghirlandaio's image combines several kinds of theatricality. First, it is part of a fresco cycle ornamenting a chapel, instituting a reciprocity between the actual room for devotion and the pictorial room of the fresco. Secondly, it draws upon contemporary Florentine civic ceremony (and the chapel commemorates the Sassetti family). Thirdly, it depicts the Catholic rite of Confirmation of the Order of St Francis (to whom the chapel is dedicated). Fourthly, it recalls Late Roman representation, in two ways: as a matter of perspective structured by the *scenae frons* (*scenographia*), and as a matter of architectural iconography (whereby ancient Rome and contemporary Florence are brought together in a trans-historical time of correspondences and references, often recalled in the literature and ceremony of the city). The marble-tiled floor in the foreground appears to be continuous with the Piazza, maintaining a common ground or stage of a single pictorial room, properly scaled from front to back, endowing the several settings with a coherent realism.

Ghirlandaio deploys perspectival rigour and familiar fragments to fuse rite, ceremony and drama, and three historical periods, in a solemn 'room', which exists only in a mythic imagination. He might have agreed with the importance Alberti accorded to *istoria*;[14] but the expectation of narrative was anyway intrinsic to the late medieval *locus*, which comprised place, an opportunity, a state, a situation or an occasion.[15] For Roger Bacon the term *locus* also contained an important epistemological component, providing the basis for comparison and perspective, and therefore for a secure communication between material and spiritual realms.[16]

The significance of place to this combination of imagination, theatricality and epistemology was addressed by the neuroscientists Demis Hassabis, Dharshan Kumaran and Eleanor A. Maguire in a famous paper of 2007, in which they concluded that 'scene construction constitutes a common

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process underlying episodic memory'.[17] Episodic memory is central to our daily experiences as well as to our capacity to imagine the future. It is generally recognised as a [re]constructive process (i.e. not like a download from digital storage), involving retrieval of semantic information with a temporal sense or narrative structure in a coherent spatial context.[18]

According to Hassabis and his colleagues, scene construction involves 'the generation, maintenance and visualization of a complex spatial setting in which an event (real or imaginary) can be mentally experienced …. [Unlike] simple imagery (e.g. for faces or single objects) … it requires the binding of disparate (possibly multimodal) elements of a scene into a coherent whole'.[19] The origin or even nature of coherence are not obvious. It appears that coherence does not lie in the intrinsic properties or arrangement of a configuration, but that the 'semantic information' of a 'coherent spatial context' requires the 'temporal sense or narrative structure' of a situation in which one is involved. Except perhaps in laboratory conditions, one cannot separate spatial coherence from meaning and from narrative; they are mutually dependent aspects of one phenomenon.

Most of this research is directed towards the neurophysiology, largely derived from fMRI and PET scans of brains of people asked to recollect or anticipate. Neurobiological description is largely concerned with regions of the brain,[20] and it generally has the curious quality of flattening great differences of experience or judgement to the recurring analogies with circuits, dynamic parallel processing and computation, effectively creating a greater mystery.[21] Nonetheless, it is obvious from this research that scene construction relies upon the multiple brain regions used in an embodied life, and therefore that directions, distances, locations, positions (e.g. beside, behind), movements, etc., come already equipped with values and concerns,[22] most of which need to be stripped away to achieve the apodictic clarity of geometry. The noetic space of geometry is not the most primitive level of spatial understanding, but must be extracted from embodied place through the exercise of intellectual discipline.[23] What Hassabis, Kumaran and Maguire call 'scene construction' appears to operate at a very fundamental level, serving as the common basis of relational understanding, in praxis, in conceptual thinking and in poetics.[24] Accordingly, we can carry a great deal of complexity in our background apprehension, which also means that orientation depends upon creative interpretation.

The cognitive science and philosophic literature concerning perception tends to use single-event examples, such as the apprehension of an apple, a table, or another person, rather than considering the overlapping temporalities of life-processes. Accordingly, the constitutive role of ambiguity receives less attention than it might. We regularly situate ourselves among the relationships of place only approximately or even wrongly. Particularly when accommodating ourselves to a new situation, we rapidly cycle through hypotheses, drawing on a substratum of custom or habit, indicating that our reality is primarily an artefact of the individual and collective imagination. For example, a fundamental assumption of Western thinking, the autonomy of an integral body among other objects in a *locus*, is not found in animistic cultures like that of the Achuar of the Amazon Basin, who believe that, on death, one's lungs become butterflies, one's heart a grosbeak, one's liver an owl and one's shadow a brocket deer.[25] In witness testimony, in empirical science or in the assertions made by tyrannical regimes, etc., error is customarily seen as a defect and perhaps as an indication of delusion or de-situatedness (attracting the metaphor of being lost), if not downright evil. However, error is simply one end of the spectrum of partial, and certainly incomplete, understandings which always characterise our negotiations with the relatedness of place –

not least because most of a context prevails as a profound latency, beneath or behind immediate concerns. Indeed, the capacity to recognise nominal errors as potentially fruitful testifies to creative interpretation.

Drawing as a narrative of scene construction

Design is of course only one way of making place, which we do constantly, for example by simply taking up a position opposite someone for conversation. Design is a slow, deliberate version of scene construction, which depends upon our capacity to entertain a hypothetical narrative, removed from immediate practical concerns. Design is open to inspiration by pure form, by art, poetry or literature, by ideology or theory, by travel memories, by experience with previous designs, by accidents on site, and so forth (and equally open to distraction by personal anxieties, by a fly, by recalcitrant software, by regulations, by critical reviews, etc.). Often termed a 'solution', a design mostly prevails in a state of irresolution, a condition which intensifies our dependence upon, and affliction by, the ambiguity of our imaginations. Design evolves as its own narrative, comparable to myths of discovery and conflict.[26] Accordingly, the unresolved aspects of a design expose the designer to an unstable field of references and possibilities, despite such pretensions to originality and mastery as conveyed in the memorable pun coined by Federico Zuccaro: *disegno = segno di dio in noi* ('design = the sign of God in us').[27]

As a design matures, it acquires collaborators and processes that greatly expand the claim of the design upon the designer. Any praxis includes an important element of what Gadamer calls 'negative experience', whereby assumptions succumb to learning and self-discovery.[28]
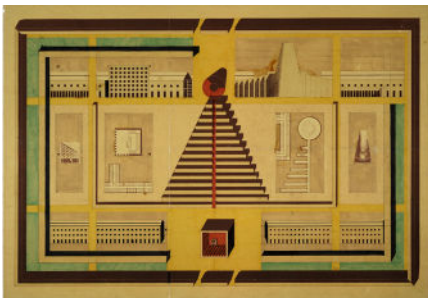

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A poignant example of an architect enmeshed in design as a vehicle of self-understanding is provided by Aldo Rossi's famous drawing for the San Cataldo Cemetery, Modena,[29] which haunts the reflections in his *Scientific Autobiography*[30] of seven years later (Fig.3). We may perhaps agree some basic attributes of this image. First, as a drawing, it intrinsically hesitates between the possible and the actual, between the orthographic representation and inhabitation. Secondly, Rossi reduces his typological monuments to austere signs, architectural ghosts (Lukács quotes Musil's comment that the typical is 'the ghostly aspect of reality'[31]), including the echo of the adjacent 19th-century cemetery. Thirdly, the ancestries recollected in the types resonate with the commemoration of the citizens interred in the cemetery. Fourthly, the specific monuments gathered in the great void are rendered to invoke the transitional dawn or evening of *pittura metafisica*, the anxiety of history (references to, for example, Christian transcendence are mostly implicit). Lastly, as a necropolis, San Cataldo is a ghost of the living city, endowed with the symmetries and ceremonial paths redolent of ideal cities (perhaps, as Plato had it, 'offered up in heaven'[32]). Ideal cities aspire to a species of deathless perfection, usually indebted to that of geometry.

In the *Scientific Autobiography*, Rossi seeks to correct appreciation of his austere geometric forms as indications of rationalism; or, conversely, he seeks to amplify the meaning of 'rational'.[33] Indeed the lyric or even elegiac mood of Rossi's text can be traced in its emphases – the words 'death' or 'dead' occur 35 times, 'beauty' or 'beautiful' 38 times, 'silence' 12 times, 'summer' 22 times, 'green' 32 times. We are encouraged to read the San Cataldo drawing in terms of the time-out-of-time[34] he regularly associates with summer holidays (often in Seville, where Federico García Lorca celebrated 'five o'clock … the mythical hour of Ignacio Sanchez Mejias'[35]) and with the theatre, a term which occurs 116 times. Moreover, the ground of the drawing of San Cataldo does not represent the lawn as built, but as an apparently sunlit hard surface as well as the plane of

projection for the drawing (it becomes the sky for elevations and sections). Similarly, the distribution of monuments has the character of a page from an architectural treatise more than the density and complexity of Como in Rossi's famous collaborative collage, *La città analoga* (1976).[36] A summary passage in the *Autobiography*, moving from analogy to disorder, invites us to consider the San Cataldo drawing within a cartographic imagination that includes the *Ascent of Mount Carmel* by John of the Cross (1578–79), the Sacri Monti (16th and 17th centuries), René Daumal's *Mount Analogue* (1952), and the maps of the 14th-century Opicinus de Canistris (which Rossi claimed to have discovered in Pavia, Opicinus' home town).[37] Where most of these are quite clear about their analogical implications, those of Opicinus are explicit about the difficulty of mapping reality.
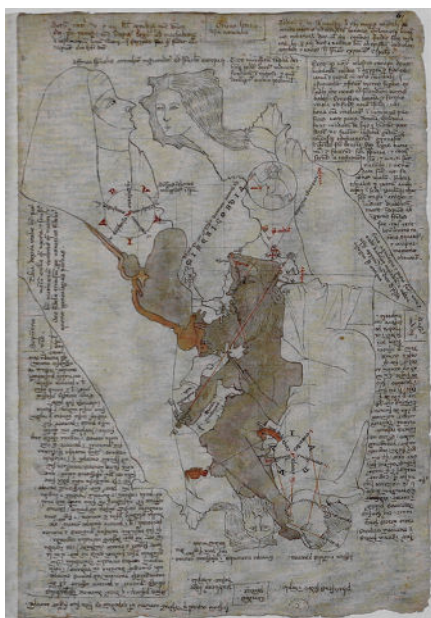
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In the top half (west is up) of the map by Opicinus reproduced here (Fig.4), a nun (*Africa Spiritualis*) confronts a young woman (*Europa Spiritualis*) across the Strait of Gibraltar. The Mediterranean is clear, perhaps conforming to a spiritual purity. On the woman's left breast is a rota with Christ exhibiting his wounds; from his right palm a diagonal line is labelled '*misericordia*', 'mercy'. On the nun's right breast is a rota with, in red, '*IANUA*' ('portal'), and five interior senses – 'meditation', 'contemplation', 'discretion' and 'degustation', which lead to 'comprehension of God'. In the bottom half (west is down), a monk (*Africa Naturalis*) confronts a young man (*Europa Naturalis*) across the Strait of Gibraltar. A rota on the monk's breast reads, again, '*IANUA*', but in black, with five senses that lead to 'consent to sin' – 'thinking', 'imagining', 'deciding', 'delighting in' – from which red lines run to the appropriate organs. The Mediterranean is dark, a malevolent bearded figure (called 'Lucifer' in other drawings), whose right hand fingers the crotch between the booted legs of Italy and Greece, and whose penis extends up the French coast to Iberia. The russet man-eating *tarasque* nibbles at Lucifer's scrotum or excrement, matched by a generic dragon rising from behind the monk's rota. 'Babylon' in black script intersects the red cross marking Jerusalem. A red diagonal line, touched by the stylus in Lucifer's left hand, connects the Venice of the top map (labelled 'hearing') with the Venice of the bottom map (labelled 'touch').

Of Opicinus' two styles of speculation – cosmo-geometric (the Palatinus manuscript[38]) and portolan-symbolic (the Vaticanus manuscript[39]) – Rossi obviously intends the latter, which comprises 21 versions of the same basic image.[40] This basic image is a portolan map of Europe, Africa and the Mediterranean, whose coastline profiles outline people who change character (and gender) with each iteration. This map can be doubled and/or mirrored, according to the topic Opicinus might be pursuing in any particular variant. The topics are generally structured as binaries which can be carried allegorically by Africa and Europe and draw medieval epistemology into a drama of self-understanding attempting to negotiate empirical actuality with theological reality, as in the folio sheet just described. The usual objects of piety – Christ, goodness, truth – confront the vagaries of human understanding on more or less equal terms, and Opicinus demonstrates a good knowledge of Christianity's prominent human defect, or sin, sexuality.[41] He manages to characterise human finitude as embeddedness in a profound milieu of references – both correspondences and conflicts – whose ultimate significance is always just out of reach. The fourfold stratification of Christian hermeneutics – according to John Cassian literal/historical, analogical, tropological and anagogical[42] – ensures Opicinus' characterisation of finitude, since the full meaning of reality would not be disclosed until the end of time. However, even within the substantial corpus of medieval symbolic diagrams,[43] Opicinus most unusually poses his questions as a matter of 'where', as a spatial hermeneutics concentrating on the hidden or implied readings: in cartography (the gap between location and meaning of, e.g., Jerusalem,

Venice, Avignon), in diagrams (pure relatedness, where fours can evoke the seasons, the cardinal points, the Tetramorph, the Christian Cross, etc.), and in illustrations of his culture's *dramatis personae* (the nuns, monks, nobles, Lucifer, etc.) embedded in the coastline profiles. All these are superimposed, replete with annotations, as if the composite would give a more complete answer or might even establish one's place in reality.

Rossi says of Opicinus' work that it 'demonstrates the different directions which art and science take at times'.[44] Of course the medieval connotations of *ars* (from *techne*, know-how) and *scientia* (in which physical phenomena revealed metaphysical and theological insights) have significantly transformed following the advents of experimental science in the 17th century and of Romanticism at the turn of the 18th and 19th centuries in Europe. The orchestration of fragments has been the customary approach to representation for well over a century and Opicinus' effort to situate himself within a multivalent topography of references is more familiar to present conventions than it was in his own time (he seems not to have attracted any followers). Evidently, Rossi imagines himself to be involved in a similar combination of empirical description and symbolic diagram. The *Scientific Autobiography* argues that architectural design – as the judicious distribution of typological monuments – has the character of discovering in reality a place evoking the time-out-of-time of theatre and San Cataldo embodies Rossi's attraction to Raymond Roussel's 'theatre ... surrounded by a capital city formed of innumerable huts'.[45]

Rossi invokes the potentially symbolic theatre because the referential milieu characteristic of the dense, but closed, world of pre-modern analogy is not available in the open field of fragments suspended between the Surrealist enigma (for René Daumal) and such abstractions as capitalism, urban geography, planning, typology, space (for Rossi). The modernist gain in representational freedom and scientific clarity has evacuated place of its depth, promoting remedial substitutes in the domain of the sublime, like Le Corbusier's *l'espace indicible*.[46] This gesture towards the sublime is not absent from Rossi's work, but we have returned to theatricality as a fundamental attribute of place. We may regard the ambiguous ground of Rossi's drawing as a species of stage hosting several plays, depending upon which actors are involved: Rossi himself; mourners; the ancestral type-ghosts; the fusion of orthographic projection (didactic treatise) and painting (meditative *objet d'art*); all set within the traditional affiliation of necropolis and an ideal or transcendent city.

Both Rossi's analytic-theatric drawing and the iconographic cartography of Opicinus support the assertion by Hassabis and his colleagues that scene construction, place, lies at the heart of relational thinking generally – in praxis, conceptual thinking and poetics. To be sure, the coherence of place is not restricted to the beautiful, the exalted, the holy or the geometrically precise, since place is equally capable of harbouring the ruined, the sordid, the dangerous and the desperate, not to mention the domain of the invisible, of hidden or implied meanings, often more true than the visible for medieval interpreters. Careful arrangement of architectural elements solicits terms like 'order' in the treatises, even if mess (or violence) is also a form of order, whose circumstances are never wholly mysterious (but are more generous, since much of order in architecture involves omission). The coherence arises from the search for orientation within contexts that immediately present themselves as the equivalent of the problematic, unresolved state of design, as we suggested earlier with regard to praxis, giving rise to the generative or creative narratives latent within scene construction.

On this account drawing serves as a theatre-within-the-theatre of scene construction. Like narrative, it is the opportunity and fate of a two-dimensional image to inhabit an as-if, could-be-otherwise realm, whether retrospective (archaeology) or prospective (design). Even within the parameters of symbolic cartography, it must be acknowledged that Opicinus' images are better regarded as concrete poetry than as theology expressed in spatial terms. The idiosyncrasies of Opicinus' works testify to the freedom granted by the two-dimensional object of contemplation, which will always lack the intensity of the spatially structured theology available within a decently ornamented church or temple. A Christian church, for example, is located somewhere, supported institutionally and hosts collective worship whose cycles recall origins, resonate with the seasons, and portend the descent of Heavenly Jerusalem at the eschaton (characteristic of the manner in which time-out-of-time comprises several temporalities at once).

The matrix of fragments

Sacred architecture aspires to a synthesis implicit in secular works. However, it is possible to identify in both a recurring structure, a gradation of embodiments from intimations of eternity to history – from the given, pre-articulated context, to architectural arrangement (attracting the paradigmatic *analogia* of geometry), to the ornamental mediation that appears on architecture, furniture and regalia (typically fusing rhythmic pattern with dying-reviving nature), to the recurring postures and gestures of the actors, to their speech, to their thoughts (most mobile and most subject to the vicissitudes of partial understanding). The typicality of situations promotes the cultivation of rite and ceremony, whose formalised re-enactment – theatre – attunes otherwise uncertain praxis towards the traditional, paradigmatic aspects of the architecture and context.

This schema of temporal resonances is most evident in pre-modern architecture where both theology and politics sought to preserve continuity with original conditions – home connoted dwelling with respect to sedimented tradition and its cosmological foundation. With the advent of a dominantly secular culture and the rejection of eternity, emphasis shifted to history and entire buildings became ornamental figures, mediating freedom of the individual directly with the vicissitudes of history via the composition of fragmentary references. Correlatively, the great generalisations of space and time gained prominence as the matrices of the referential fragments, which communicated with each other according to protocols that veered between systems and metaphors (and across a spectrum from fundamental physics to personal psychology).

Accordingly, what constituted a narrative unpeeled the Aristotelean beginning, middle and end, emphasising the middle in order to approach the aleatoric character of history (e.g. *Finnegans Wake*, the combinatorics of Beckett's 'Lessness' or of Oulipo and the *Nouveau Roman*[47]). Indeed, the fear that culture had succumbed to mere chance had already animated Mallarmé's *Un coup de dés* of 1897.[48] This poem invented the space of referential fragments floating like shipwreck flotsam in the great sea of the white page (*les blancs*), subsequently transforming into a constellation in the night sky (reminding us of eternity). The poem's motif of disaster or crisis helped to validate revolutionary renewal as a way to give history a new shape or direction (or a name more profound than 'modern'). Even if the revolution eventually became another nostalgia, its identification with technological innovation ensured an even greater volatility of historical differentiation, and with that the dominance of chance over eternity.

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Artificial Intelligence image generators may have neutered Breton's 'objective chance', but Max Ernst exploited the principle before Breton's coinage of the term, and with an effect on spatial structure redolent of Mallarmé's *blancs*. For example, his *Invention – The Bird of Infinity* (1921) presents us with a room which could be of conventional size or a small chamber in a laboratory, depending upon which of the two hands one takes as a measure (Fig.5). Probably an incarnation of Ernst's Loplop, a chick has left a set of tracks that proceed vertically. This pattern is copied from a standard diagram of foot-markings for pedigree chicken breeders to record parentage (usually adding right or left marks to the beak), which Ernst has adapted to look like tracks. Through the rectangular window are thrust the thumb and forefinger of a large hand that operates the device for punching holes in the web of a chick's foot, showing how to achieve the pattern. It also shows how to open one's eyes, since each track also makes a face with open or closed eyes, and the column systematically records all possible combinations of paired face-tracks (except for double closed eyes). A smaller hand rises through a circular hole in the floor, holding again between thumb and forefinger six-petalled flowers on three branches like the chicken feet. The two perforations in the architecture, and their hands, exhibit opposite moods – where the large hand is savage (enhanced by the pointed blade Ernst has added to the hole-punching device), the other is smaller than the chick and seems to offer its twig apologetically or humorously. At the same time, the flowers lift the allegory beyond chicken husbandry.

The window wall and floor provide the bare minimum of scene construction, and they are arranged parallel to the image frame. If windows and eyes are an old *topos*, the chicken-face combinatorics suggest that the viewer penetrates the pictorial opening like the hands (optic-haptic), with 3D vision (two eyes), 2D vision (one eye), or dreaming (eyes closed). We trust the perspective illusion to create a place where fragments can be assembled to communicate with each other. Similarly, the Sassetti fresco contains many actors and artefacts which behave like signs or references disposed in a room that hosts a mythic ideal regarding the Florentine Renaissance. The elements of the Ernst collage directly confront the conventions of place and coherence by managing to implicate chicken genetics in perception through manipulations depicted with the magical or ritual qualities one might find in illustrations from anthropology, an alchemical treatise, a *grimoire*, or the Order of the Mass.

It is notable that Ghirlandaio and Rossi adhere to the conventions of their images and are therefore able to count on all the resonances and associations that accumulate around such conventions. Conversely, the images of Opicinus and Ernst place such emphasis upon the autonomy of the fragments that the viewer is forced to suspend assumptions. Casting place into uncertainty sacrifices richness but exposes the conditions for place, as well as the role of images in establishing those conditions. The narrative of composition arises from arranging elements to suggest a plot, as if the scattered people in the distant background of the Ghirlandaio fresco aspired to the ceremonial or ritual solidarity of the foreground figures. The tension between an aggregate of autonomous elements and their collaboration to make a theatre lies at the heart of the problem of coherence.

Conclusion: the deep past and orientation

This raises the question of how we register such phenomena. The dominance of optical criteria in the evaluation of architecture has helped to stimulate the subjectivist terminology of 'perception-of', when most of reality, including architecture, is inhabited in peripheral apprehension. Instead of 'perception-of' it would be more accurate to

speak of 'involvement-with', since any particular now of inhabitation is never simple, direct or certain, but always also caught up in analogies, possibilities, memory and anticipation (the basis for time-out-of-time). With intelligence comes ambiguity and, since the content is determinative, there cannot be such a thing as pre-reflective experience. Suppressing the anthropocentrism inherent in 'perception-of' acknowledges that human interactions with the claims and affordances of embodying contexts are among the myriad non-human interactions of similar kinds (including the molecular aspects of neurological processes).

Our involvements with people, things, nature, technology are not like the object-plus-thought (form-content or matter-mind) familiar from, for example, iconographic analysis. Instead, our involvements are intrinsically metaphoric.[49] Metaphoricity concerns the approximately similar, develops within cultural habituation and is more fundamental to intelligence than are disciplines that require special training, like geometry or logic (which latter is nonetheless the basis for computational theories of mentation[50]).[51] Scene construction is basically the work of metaphor in spatial terms. The ability to find apt metaphors has been taken as a mark of genius from Aristotle to Kant[52] and this attests to the significance of the search for orientation within the play of possible relationships, even if the usual fascination with intellection has obscured the metaphoric interpretation that always characterises orientation.

In other words, we do not inhabit either being, space or time as such; rather the wonder is that these terms have survived so long as generalisations in the singular. At one extreme, the 't' of scientific calculation acquires a direction when entropy is relevant but is otherwise neutral duration. At the other extreme, Mesoamerican studies have discovered a processual order which stands over against the logos-articulated ontology of Western tradition.[53] This processual order is wholly immanent, taking place in a reality that manifests itself as constant change or metamorphosis within situated events according to analogy, rite and narration instead of theology, philosophy or theory; and it does not separate *physis* from *logos* (or matter from mind), favouring a non-hierarchical multiplicity of meanings. Full of portents is the complex weave (both verb and noun) of temporal cycles (at least ten) embodied in event-place-symbols. We are familiar with the modalities of process from the writings of, for example, Heraclitus, Aristotle, Nietzsche, Whitehead, Derrida and Deleuze, and processes fundamentally characterise the manner in which life conducts itself (not only for humans). When temporality is understood in terms of its content rather than simply in terms of past-present-future, it is obvious that we are involved in a manifold of temporalities. These temporalities have different embodiments – different rates or durations, different moods (e.g. peaceful, violent), different levels of significance, different characters (e.g. the temporality of a flea versus that of a brick), different places of occurrence. In other words, we find ourselves implicated in a deep structure of processes with the following three properties:

> a) Prior to involvement, place is a mere aggregate of elements in a condition of latency. With involvement is created the combination of spatial coherence, meaning and narrative comprising the scene construction of episodic memory. Once constituted, place conforms to the gradation of embodiments, where volatile thoughts and speech move in respect of the more enduring background elements, such as furniture and a room. This gradation has the effect of endowing place with a temporal direction, whereby the background elements seem older than the artefacts or people with which there is direct involvement. For example, a table, even if brand new, is ontologically

older than the things placed upon it (and of these things, the text one is reading is more volatile than whatever else is on the table, even if first spoken or written in the fourth century BCE). Accordingly, we may speak of place as constituting a temporal depth.

b) The constitutive process of place is common-to-all but embodied in the particular situations of groups or individuals. This is the basis for the movement from the local attributes of a typical situation to drama, ceremony and rite, where references to conditions original or foundational for all participants become credible.

c) We participate in, or 'inhabit', this deep and extensive structure of myriad temporalities mostly in peripheral experience, in what Husserl called 'the natural attitude'. With respect to the overall order, one is less the dramatic hero than part of everyone else's background.

This much characterises Bacon's fusion of place and generation. Our narratives are embedded in the deep and extensive matrix of metaphoric embodiments.[54] The processes of the given reality are always already intelligent and resist attempts by simulation to bring everything to a single level of representation – a city, or nature, is its own 'computer'. Decisive, however, is the claim upon place – or upon embodiment generally – of the past. Except in the most general terms – e.g., the present as against the Middle Ages – there is no present, only orientation's ever-moving frontier between the inherited conditions and partially understood hypotheses and judgements. The richly sedimented past provides the context for any freedom or future and, as a matter of content, it resonates with the typical, customary or institutional horizons of a culture.[55] This is the domain qualified by architecture, which is ontologically older than whatever takes place in its presence. Moreover, Roger Bacon's generative place no more than alludes to an originary something-from-nothing, since, as a principle, it incorporates its own absorption into the processes of origination.

1   *'Locus est principium generationis'*, Roger Bacon, *Opus Majus*, ed. John Henry Bridges (Oxford: Clarendon Press, 1897–1900 [from 1267]), vol.I, part IV, ch.4, 138, and vol.I, 'Geographia', 301, both times referring to Porphyry, who obviously had in mind Plato's *chora* (*Timaeus* 52a–b).

2   Paul Ricoeur takes the threefold present from Augustine's *Confessions*, Book 11, as the point of departure for his *Time and Narrative* (Chicago: University of Chicago Press, 1984). Ricoeur's fruitful convergence of architecture and narrative through a notion of dwelling exhibiting the mimetic stages of prefiguration, configuration and refiguration overlaps topics addressed here, but takes up the phenomenon when fully constituted, whereas I am concerned with the constitution itself. See 'Architecture and narrativity', trans. Eileen Brennan, Robbie Carney and Samuel Lelièvre, *Études Ricoeuriennes/Ricoeur Studies*, vol.7 (2) (2016), 31–42, and online at https://ricoeur.pitt.edu/ojs/ricoeur/issue/view/15 [accessed 24 January 2025].

3   Dermot Moran, 'The phenomenology of joint agency: the implicit structures of the shared life-world', *Phenomenology and the Cognitive Sciences*, vol.23 (2024), 497–524.

4   Very clear presentation, with references, of Generative Pre-trained Transformer (GPT) AI can be found at Grant Sanderson's 3Blue1Brown site: https://www.youtube.com/watch?v=wjZofJXOv4M [accessed 24 January 2025]. The strategy arises because the operation is conceived from the top down, from patterns within written language (all of which require validation by humans at great cost), rather than built up from collective life-praxis, with its embodying conditions, frustrations, hopes, fears, etc.

5   Ludwig Wittgenstein, *Philosophical Investigations* (London: Blackwell Publishing, 2001), section 18.

6   Dalibor Vesely, *Architecture in the Age of Divided Representation* (Cambridge, MA, and London: MIT Press, 2004), ch.3.

7   Hans Georg Gadamer, *Truth and Method*, trans. W. Glen-Doepel (London: Sheed and Ward, 1979), First Part.II.1, and *The Relevance of the Beautiful* (Cambridge: Cambridge University Press, 1986), chs 1, 10. Other examples appear in Alessandro Falassi, ed., *Time Out of Time: Essays on the Festival* (Albuquerque: University of New Mexico Press, 1967). The important element of recurrence is only distantly related to habitual behaviour, like teeth-brushing, which is not 'ritual'. The sameness of the rite, ceremony or performance, even if interpreted differently in each particular enactment, preserves origins against the flux of history. For a rich interpretation of the potential dialogue between rite (in this case a *caboclo*) and philosophy, see Tao Dufour, *Husserl and Spatiality* (London: Routledge, 2022).

8   Two works filling out the details as they pertain to the Italian Renaissance, from a vast literature: the useful survey of Lauro Martinez, *Power and Imagination: City-States in Renaissance Italy* (Baltimore: Johns Hopkins University Press, 1979); and, for Florence, Richard Trexler, *Public Life in Renaissance Florence* (Ithaca: Cornell University Press, 1980).

9   Scholarship on the Chapel dates back to Aby Warburg in 1902, but the most comprehensive treatment of the cycle is Eve Borsook and Johannes Offerhaus, *Francesco Sassetti and Ghirlandaio at Santa Trinita, Florence: History and Legend in a Renaissance Chapel* (Doornspijk: Davaco, 1981). To this needs to be added E.H. Gombrich's vivid account of the historical background (contrasting dramatically with the air of peaceful repose of the frescoes), 'The Sassetti Chapel revisited: Santa Trinita and Lorenzo de' Medici', *I Tatti Studies in the Italian Renaissance*, vol.7 (1997), 11–35; and Marilyn Aronberg Lavin, 'Patterns of Narrative Disposition as Personal Expression: The Sassetti Chapel' (2015), published online as an update to pages 203–07 of her book *The Place of Narrative: Mural Decoration in Italian Churches, 431–1600*, 2nd ed. (Chicago: Chicago University Press, 1994) at: https://www.academia.edu/12547648/Patterns_of_Narrative_Disposition_as_Personal_Expression_The_Sassetti_Chapel [accessed 24 January 2025].

10 Visitors to the chapel familiar with the Palazzo Medici might have recognised the proximity of San Giovanni in Laterano to the foreground stair as a reference to the main stair of the Palazzo, which originally ascended parallel to, and arrived beside, the chapel frescoed by Benozzo Gozzoli in 1459 (depicting the Medici and other luminaries among the procession of the Magi). This chapel could be used for several purposes, on the evidence of letters written before Gozzoli commenced work. See Rab Hatfield, 'Some unknown descriptions of the Medici Palace in 1459', *The Art Bulletin*, vol.52, no.3 (September 1970), 232–49.

11 Confirmed by the Bull *Solet annuere* in 1223.

12 As it was then known, confusing the Basilica of Maxentius/Constantine with the 71 CE Templum Pacis in the Forum of Vespasian slightly to the west. The Basilica is in fact roughly contemporary with the edifice that became the original church of San Giovanni in Laterano.

13 This central alignment coincides with the centre-line of the Chapel, implying a virtual building perpendicular to the picture plane with the same structure as a three-aisled church, but with the civic focus of the Loggia instead of an apse and altar. The careful coordination of horizons in the background of the fresco has the effect of confronting the enthroned pope with the façade of the Palazzo Vecchio. The Loggia dei Lanzi acquired its name, and its collection of violent sculptures, two centuries after its original foundation in the 14th century. Loggie in medieval Italian communes were the site of civic performance for public witnessing of deeds, contracts, treaties, justice, etc., requiring substantial rhetorical skills. The loggie hosted an 'elocutionary theatre' in the long struggle between popular and aristocratic government: see Kim Sexton, 'Political portico: exhibiting self-rule in early communal Italy', *The Art Bulletin*, vol.97, no.3 (September 2015), 258–78.

14 The Latin edition of *De pictura* appeared in 1435, the Italian *Della pittura* a year later, about 50 years before the fresco was executed. See Anthony Grafton, '*Historia* and *Istoria*, Alberti's terminology in context', *I Tatti Studies in the Italian Renaissance*, vol.8 (1999), 37–68.

15 Terry Comito, *The Idea of the Garden in the Renaissance* (New Brunswick: Rutgers University Press, 1979), 51. Comito also assembles a group of ancient and medieval references to the cosmic or temple-like attributes latent in the term *locus*: *ibid.*, 27, and notes 11–13. In general, Edward Casey, *The Fate of Place: a Philosophical History* (Berkeley and Los Angeles: University of California Press, 1997).

16 Timothy Johnson, 'Place, analogy, and transcendence: Bonaventure and Bacon on the Franciscan relation to the world', in Gert Melville *et al.*, *Innovationen durch Deuten und Gestalten. Kloster im Mittelalter zwischen Jenseits und Welt* (Regensburg, 2014), 83–96. Roger Bacon, *Perspectiva*, ed. David C. Lindberg (Clarendon Press: Oxford, 1996).

17 Demis Hassabis, Dharshan Kumaran and Eleanor A. Maguire, 'Using imagination to understand the neural basis of episodic memory', *Journal of Neuroscience*, 27 (52) (December 2007), 14365–74. At the time Hassabis was pursuing his PhD under Maguire's supervision at UCL.

18 *Ibid.*, 14365. See also Hassabis and Maguire, 'The construction system of the brain', *Phil. Trans. R. Soc.* B 364 (2009), 1263–71, and Schacter, Hassabis *et al.*, 'The future of memory: remembering, imagining and the brain', *Neuron*, 76 (4) (November 2012), 1–32, with substantial bibliography to that date.

19 *Ibid.*, 1. On the distinction between object-visual and spatial-visual intelligence, see Olesya Blazhenkova, Maria Kozhevnikov, 'Visual-object ability: a new dimension of non-verbal intelligence', *Cognition*, 117 (2010), 276–301.

20 Our present understanding of brain functions acquires appropriate humility by acknowledging how many laboratories, researchers and years (about 30) were required to achieve an accurate description of the fruit fly larva's central nervous system. This is tiny – a tenth of a millimetre in two directions, a quarter of a millimetre in the third (the larva itself is only about 3mm long) – but it supports a primitive social life as well as 'a rich repertoire of adaptive behaviors, including several modes of locomotion and many kinds of sequences of actions, and can form short- and long-term associative memories, and use these memories to guide value-computation and action-selection'. Michael Winding *et al.*, 'The connectome of an insect brain', *Science*, vol.379, no.6636, 10 March (2023) (quotation taken from the preprint with copious diagrams at https://www.biorxiv.org/content/10.1101/2022.11.28.516756v1 [accessed 24 January 2025]).

21 See, for example, the attempts to link aesthetic phenomena to brain regions, such as Barbara Maria Stafford, *Echo Objects: the Cognitive Work of Images* (Chicago: Chicago University Press, 2007), or Harry Mallgrave, *The Architect's Brain: Neuroscience, Creativity and Architecture* (Chichester: Wiley-Blackwell, 2010), both inspired by the work of V.S. Ramachandran.

22 Not mentioned in the so-called 'cognitive map' for which John O'Keefe, May-Britt Moser and Edvard I. Moser received the 2014 Nobel Prize in Physiology or Medicine, although the firing cycles must correspond to judgements as to a better or best direction even in so limited a life as a maze. See Francesca Sargolini *et al.*, 'Conjunctive representation of position, direction, and velocity in entorhinal cortex', *Science*, vol.312, no.5774 (2006), 758–62. For a rat, as for humans, 'orientation', 'direction', etc., are embedded in the claims and affordances of the context (culture). For the purposes of this essay, the Hassabis research is more fruitful, although both point to the importance of relational evaluation in cognition.

23 Plato famously required geometry to be understood mentally, drawings being always only approximate (e.g. *Seventh Letter*, 342c), although evidently using diagrams in, for example, *Meno*. Still impressive is the imagination required for Archytas (a member of the Platonic Academy) to double the cube, in which a cone (from a rotated triangle) and a torus (from a rotated semicircle) intersect on the curved surface of a half-cylinder to find the two mean proportions: Ivor Thomas, trans., *Greek Mathematical Works I Thales to Euclid* (Cambridge, MA: Loeb, 1939), 284–89.

24 Inspired by the work of Jeff Malpas, Andrew Benjamin has been developing the notion of 'relationality' which intersects the argument

here; see most recently, with references to his earlier publications, his 'Architecture as the housing of life: Notes on Heidegger and Agamben', *Khorein: Journal for Architecture and Philosophy*, vol.1, no.2 (2023), 47–70.

25 Philippe Descola, *In the Society of Nature* (Cambridge: Cambridge University Press, 1996), 92.

26 In the West, generally derived from figures like Orpheus, Daedalus, Prometheus, Hephaistos or Brahma in India, etc. Ernst Kris, Otto Kurtz, *Legend, Myth and Magic in the Image of the Artist* (New Haven: Yale University Press, 1979 [updated and slightly revised from Vienna, 1934]).

27 Book II, ch.XVI (on the etymology of '*disegno*') of *L'Idea de' pittori, scultori ed architetti* (Rome, 1607), p.164 of the 1768 edition.

28 On praxis, Gadamer, *op. cit.*, Second Part. II.2, and chs 4–6 of his *Reason in the Age of Science*, trans. Frederick G. Lawrence (Cambridge, MA: MIT Press, 1981), 69–138. That a city is a receptacle for such learning, and itself 'learns', see Colin McFarlane, *Learning the City: Knowledge and Translocal Assemblage* (Chichester: Wiley-Blackwell, 2011).

29 Of the several studies of San Cataldo, start with Diane Ghirardo, 'The Blue of Aldo Rossi's Sky', *AA Files*, 70 (2015), 159–72, with references to, and acerbic critiques of, previous interpretations.

30 Aldo Rossi, *Scientific Autobiography*, trans. L. Venuti (Cambridge, MA: MIT Press, 1981). On its composition, Maura Lucking, '"*Alcuni dei miei progetti*": Aldo Rossi and the editorial impulse', *Getty Research Journal*, vol.11 (2019), 133–59.

31 Georg Lukács, 'The ideology of modernism', *Realism in Our Time*, trans. J. and N. Mander (New York: Harper and Rowe, 1962), 25. The remark turns on the status of the individual with respect to an everyday reality (i.e. the typical) that is either boring, empty of significance, or, as in Joyce, deeply revealing (see also Walter Benjamin's 'profane illuminations'), and the turn in modernist literature to psychopathological states (e.g. Kafka) as possibly indicative of the true nature of reality – which, of course, Lukács attributes to capitalism ('ideology'). The typical situation, rather than typology, is the fundamental basis for understanding or interpretation (including design) for Dalibor Vesely (*op. cit.*, ch.2 and *passim*; and *The Latent World of Architecture* [London: Routledge, 2023], ch.1 and *passim*).

32 Plato, *Republic*, 592b.

33 Rossi, *op. cit.*, 81; 'life itself an exalted rationalism', 47.

34 Ghirardo, *op. cit.*, 170, gives the full text of Rossi's quotation from Augustine's Confessions concerning the peace of the seventh day (truncated in the English version of *Scientific Autobiography*), which conforms to time-out-of-time.

35 Rossi, *op. cit.*, 21; Part 1 of Federico García Lorca's *Elegy for Ignacio Sanchez Mejias* (1935) repeats 'five in the afternoon' (when the bullfighter died) 29 times. It is possible the shadows in the drawing of San Cataldo conform to a high summer 5:00pm.

36 With Eraldo Consolascio, Bruno Reichlin and Fabio Reinhart, exhibited at the Venice Biennale with Rossi's text, *La città analoga: tavola*, which provoked a debate with Tafuri in *Lotus International*, 13 (December 1976), 4–13, 'Ceci n'est pas une ville', discussed by Pierluigi Nicolin in 'Tafuri and "The Analogous City"', *ANY: Architecture New York*, 25/26 (2000), 16–20.

37 *Ibid.*, 81ff. Earlier references to the *Ascent of Mount Carmel* are found on p.50, and to the Sacri Monti, 2, 5, 38, 57. Ghirardo, *op. cit.*, rightly groups these under 'pilgrimage', along with the Goose Game.

38 Palatinus: MSS Pal.lat.1993, beautifully digitised at https://digi.vatlib.it/view/MSS_Pal.lat.1993 [accessed 24 January 2025]. For the designations and publishing history of these manuscripts (Palatinus in 1936, Vaticanus in 1953), see Richard G. Salomon, 'A Newly Discovered Manuscript of Opicinus de Canistris: A Preliminary Report', *Journal of the Warburg and Courtauld Institutes*, vol.16, no.1/2 (1953), 45–57.

39 Vaticanus: MSS Vat.lat.6435, https://digi.vatlib.it/view/MSS_Vat.lat.6435 [accessed 24 January 2025].

40 Comparable to the multiple versions of the San Cataldo drawing. Ghirardo, *op. cit.*, publishes several variants. See also Jesse Reiser's amusing account of choosing colours for these drawings at https://drawingmatter.org/jesse-reiser-on-aldo-rossi/ [Accessed 24 January 2025] (which resonates with the anecdote of the contrasting colours Sirena [acid green] and Rosanna [rose] in Rossi, *op. cit.*, 25–26).

41 Here agreeing with the analyses of Karl Whittington, 'Experimenting with Opicinus de Canistris (1296–*ca*.1354)', Gesta , vol.51, no.2 (September 2012), 147–73, with good bibliography, to which can be added Sarah Griffin, 'Opicinus de Canistris (1296–c.1352) and Diagrams of Time in the Late Middle Ages': https://www.youtube.com/watch?v=vNLFedEtpU8 [accessed 24 January 2025]. When producing his drawings, Opicinus was a priest with a position in the Apostolic Penitentiary in the papal court at Avignon. The Penitentiary was a branch of the Curia, with the remit to consider absolutions, dispensations and indulgences with respect to serious sins against the Church; and this legal context must have contributed to his thinking as much as, for example, the *sic et non* of medieval dialectic.

42 John Cassian, *Collationes* (or *Collationes patrum in scetica eremo*) VIII, *c*.420 CE.

43 Antecedents for Opicinus' visual and spatial hermeneutics include Hugh of St Victor (*The Mystic Ark*), Richard of St Victor (*Commentary on Ezekiel*), Hildegard of Bingen (*Scivias, Liber divinorum operum*), Bonaventure (*Itinerarium Mentis in Deum*), Dante (*Divina Comedia*), Roger Bacon (*Opus Maius*, of which Part V is the *Perspectiva*), John Pechem (*Perspetiva Cummunis*), and Witelo (*Perspectiva*).

44 Rossi, *op. cit.*, 81.

45 *Ibid.*, 29, 41, reading the disposition of tombs in the light of Rossi's cabanas as 'innumerable huts'.

46 'I am not conscious of the miracle of faith, but I often live that of *l'espace indicible*, the consummation of plastic emotion.' Le Corbusier, 'Ineffable space', in *The New World of Space* (New York: Reynal and Hitchcock; Boston, Institute of Contemporary Art, 1948), 8 (italics in original); and *The Modulor*, trans. P. de Francia and A. Bostock (Cambridge, MA., MIT Press, 1956), 32.

47 The influence of Structuralism is evident in Roland Barthes' writings of the period, but also in the thinking of Rowe (beyond *bricolage*) and indeed in typological design generally.

48 Stéphane Mallarmé, *Un coup de dés jamais n'abolira le hazard* ('A throw of the dice will never abolish chance'), first published in the journal *Cosmopolis*, and in book form only posthumously, 15 years later, in Brussels.

49 George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980) and *Philosophy in the Flesh* (New York: Basic Books, 1999).

50 Matti Tedre and Peter J. Denning , 'The long quest for computational thinking', *Proceedings of the 16th Koli Calling Conference on Computing Education Research* (Koli, Finland, 2016), 120–29.

51 On metaphor as origin of logic see Paul Ricoeur, *The Rule of Metaphor*, trans. R. Czerny (London: Routledge Kegan Paul, 1978), 22, 27; and of metaphor, poetics, and ontology, see ch.8.5. See also George Lakoff, Rafael Nuñez, *Where Mathematics Comes From* (New York, Basic Books, 2000). GPT AI attempts to simulate this metaphoric involvement with vector clusters.

52 *Poetics* 1459a 7; Immanuel Kant, *Critique of Judgement* (1790), Book II.49 (various translations). Discussion of metaphor is dominated by its role in language, although Kant considers visual imagery. Fundamental to European Baroque *concettismo*, whose basis was metaphor both visual and verbal, was Emanuele Tesauro, *Il cannochiale aristotelico* ('The Aristotelian Telescope') (Turin: Bartolomeo Zavatta, 1654, 1670) in which he not only absorbed the insights and instruments (such as the telescope) of the new science into the Aristotelian poetic and rhetorical tradition, but also attributed the creation of what he deemed the world-as-poem to the *ingegno* (wit, the capacity to find metaphors) of God. Compare Mallgrave, *op. cit.*, ch.8. A useful survey of contemporary understandings of metaphor with bibliography is Sheldon Sacks, ed., *On Metaphor* (Chicago: Chicago University Press, 1976); on cross-cultural interpretation, Marilyn Strathern, *Partial Connections* (Tucson: Altimira Press, 2004). The issue is commonality within difference (Aristotle, Rhetoric 1412a 5, *Poetics* 1459a 7–8); and note that Latin *translatio* 'translates' Greek *metaphora*.

53 Isabel Laak, *Aztec Religion and the Art of Writing* (Leiden: Brill, 2010), who follows the more detailed exposition of James Maffie, *Aztec Philosophy: Understanding a World in Motion* (Boulder: University Press of Colorado, 2014), who was in turn inspired by David Hall and Roger Ames, *Anticipating China* (Albany: SUNY Press, 1995). The cultural or ethnic valences of the wider debate surrounding this material are irrelevant for our interests here, if not in fact simply wrong. More significantly, this mode of temporality can be reconciled with the argument of Eugen Fink, *Play as Symbol of the World*, trans. Ian Alexander Moore and Christopher Turner (Bloomington and Indianapolis: Indiana University Press, 2016).

54 To the foundational inspiration of Husserl on the work of Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge, 1962, orig. Paris, 1945) and Dominique Ségard, ed., *Nature: Course Notes from the Collège de France*, trans. Robert Vallier (Evanston: Northwestern University Press, 2003, orig. Paris, 1995) needs to be added the considerable body of research now collected under the awkward rubric 4E Cognition – Albert Newen, Leon De Bruin, Shaun Gallagher, eds., *The Oxford Handbook of 4E Cognition* (Oxford: Oxford University Press, 2019). Omitted from this research is the phenomenon of strata of dependent embodiments. See also Dermot Moran, 'Edmund Husserl's phenomenology of habituality and habitus', *Journal of the British Society for Phenomenology*, vol.42, no.1 (January 2011), 53–75, and his 'Between vision and touch: from Husserl to Merleau-Ponty', in Richard Kearney and Brian Treanor, eds, *Carnal Hermeneutics* (New York: Fordham University Press, 2015), 214–34.

55 By which most ancient cosmologies carry an ethical valence, which, for example, prompted the Vitruvian preoccupation with decorum.
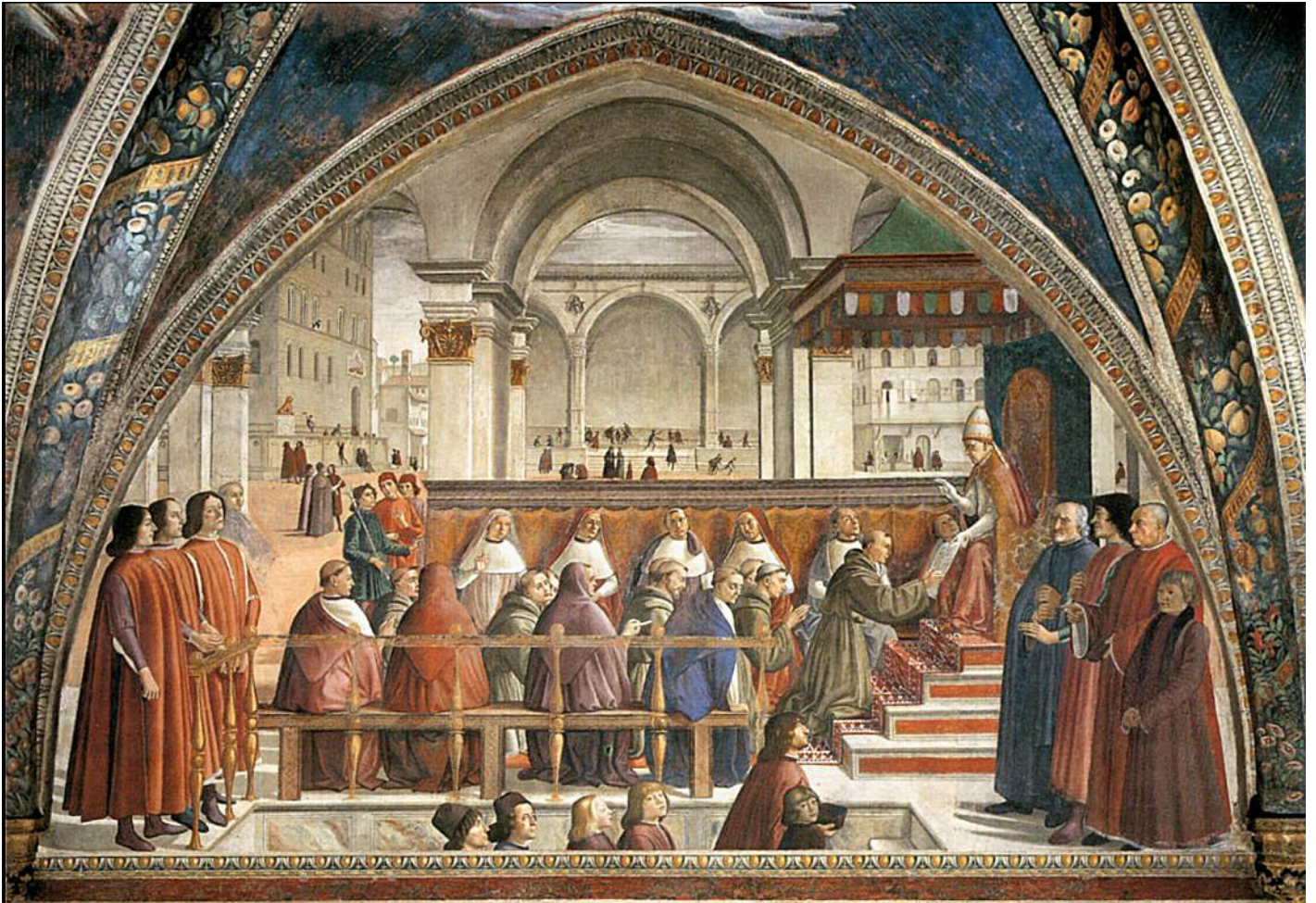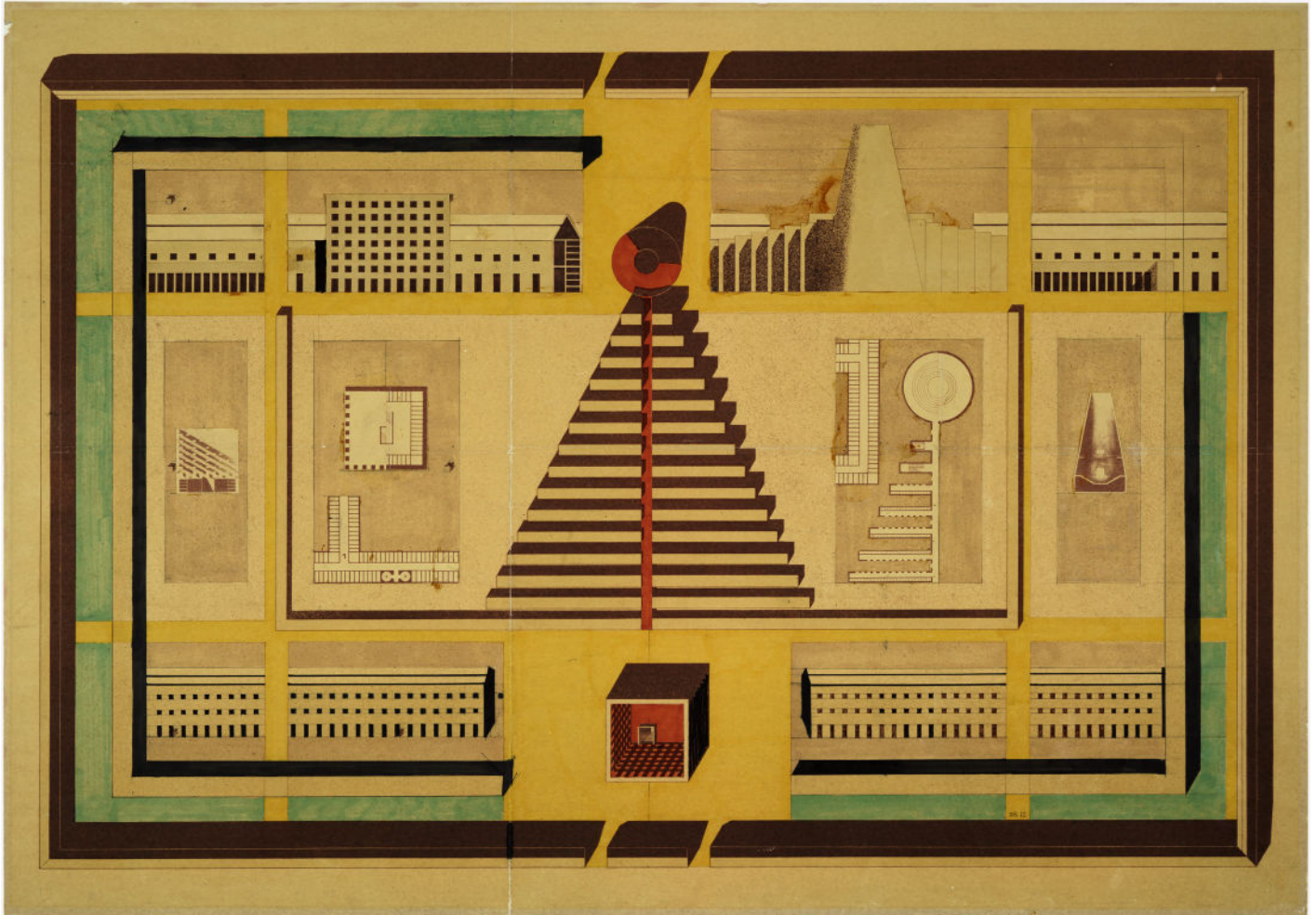
Domenico Ghirlandaio, *Confirmation of the Franciscan Rule*, 1483–1485. Fresco, Sassetti Chapel, Santa Trinita, Florence. Public domain, via Wikimedia Commons, https://en.m.wikipedia.org/wiki/File:Cappella_Sassetti_Confirmation_of_the_Franciscan_Rule_2.jpg [accessed 24.01.25].

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parte dela copoxitióne et hōnamēti del dtento di teplū pacis

Inqi luogho fedeuor hugistate
dimaremo ork lacastor fuo e
pier fuj cermetij

fonde di teplū pacis

potinga

Francesco di Giorgio Martini, Plan and sectional perspective of Basilica of Constantine, from *Trattato di architettura civile e militare*, c.1482–1486. Su concessione del MiC-Musei Reali, Torino.

The Cemetery of San Cataldo rendered as 'The Goose Game', a chase game like Snakes and Ladders, where the special cells promoting or reversing one's progress carry names pertinent to the Cemetery's arrangement of typological monuments: 'the bridge', 'the well', 'the labyrinth', 'the skeleton', 'the house' or 'hotel'. Aldo Rossi, *Il gioco dell'oca*, 1972. Ink and wash. MAXXI Museo nazionale delle arti del XXI secolo, Roma. Collezione MAXXI Architettura. Archivio Aldo Rossi. © Eredi Aldo Rossi.

Opicinus de Canistris, f.61r, MSS Vat.lat.6435. Ink and wash on vellum. Public domain/Alamy.

Max Ernst, *L'Invention ou l'Oiseau de l'infini* (*Invention or The Bird of Infinity*), 1921. Collage and gouache.
Published as an untinted line drawing in Paul Eluard, *Répétitions* (Paris, 1922), opposite the poem 'L'Invention',
p.10. © ADAGP, Paris and DACS, London 2025.