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Hard as Rock and Light as Air: Stucco Ceilings in Roman Domestic Space

Abstract: This paper explores Roman ceilings, one facet of the stuccoed interior, in an effort to reintegrate these surfaces within their domestic assemblages. While stucco can conceal and imitate structure, this essay attempts a more capacious and nuanced account of stucco as a highly versatile surface medium. I examine stucco's medial operations in fashion-forward Augustan-era houses, specifically the vaulted ceilings at the Villa della Farnesina in Rome and the Villa of Livia at Prima Porta. These ceilings show Roman artisans using stucco in a manner that is specific to the material; far from neutral, stucco possesses certain material and functional advantages that directly inform its use. The case studies are chosen to demonstrate a growing awareness of and interest in those properties among artisans. The contrast between stucco's material strength and light visual affordances produces hitherto unexplored aesthetic, spatial and atmospheric effects in Roman domestic space.

Stucco is a Roman medium¹ which protected all types of architecture and generated diverse forms of decoration. Despite stucco's prevalence and artistic range, studies of Roman art often take it for granted as the camouflaging medium par excellence, able to obscure underlying architecture so as to make something else appear². In this tradition, stucco is reduced to a merely (self) effacing medium, covering core construction and deflecting attention away from its own materiality in the service of imitative visual effects. Thus, stuccoed surfaces are interpreted as vernacular alternatives, even reliable skeuomorphs³, to more costly stone building materials and techniques.

This essay attempts a more capacious and nuanced account of stucco as a highly versatile surface medium. I explore the ceilings of Roman houses, one facet of the stuccoed interior, in an effort to reintegrate these real surfaces with their domestic assemblages. Ceilings have much to contribute to our understanding of the role of surface treatments in Roman interior schemes. They remain underexamined, in part because they so rarely survive, but also because of disciplinary biases towards fresco that have traditionally focused on formalist dating typologies (the Four Styles) and figural representation⁴. However, when taken seriously, stucco ceilings prompt a dynamic investigation of interior assemblages along two spatial axes: on/behind (examining the plastered matter applied to architectural structures), and above/below (analysing the ceiling treatments floating above walls and floors that make up domestic contexts).

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¹ Medium refers to an art historical/architectural category, based on material and the method by which information is stored and transmitted; henceforth used to describe Roman stucco. See *infra* n. 6. 7.

² This manifests clearly in the study of the 'Masonry Style'/First Pompeian Style, which has concentrated on plastered surfaces' ability to emulate stone masonry and extend the wall, often as a cost-effective alternative to stone. For critical discussion and bibliography, see Bruno 1969; Ling 1972; Rosenberg 2010.

³ A form which emulates another material to evoke the original of the same 'function'. Adapted from Knappett 2020, 109 f., citing McCullough 2014; see Conneller 2013. For arguments against skeuomorphic relations in favour of transmateriality, see the contribution by Engels, this volume.

⁴ Mau 1882; Ling 1991; Strocka 2007. On the limitations of the Four Styles, see Platt – Squire 2017, 10 f. 21–25. For a history of Roman ceiling decoration and the fragmentary conditions of Roman ceilings which preclude studies of workshops like those of wall paintings and mosaics, see Lipps 2018.

Along these axes, stucco's structural integrity and physical boundedness to architecture affords it practical functions that permit both playful destabilisation of its assumed 'camouflaging' role, and inventive visual experiences. In order to explore such dynamics, my approach employs several conceptual apparatuses, including materiality – how the material affordances of the medium directly inform the ways in which people use and experience it – and the historicity of media⁵. I therefore pay closer attention to stucco's varied functions or what it *does* in domestic assemblages, rather than reconstructing any singular 'nature' of the material⁶. Following media philosopher Sybille Krämer's nuanced use of diaphanous, self-effacing media 'which enable something to be visualised, while simultaneously remaining invisible', I probe how artisans both integrate ceilings within domestic spaces in order to conceal architectural structure, downplaying their materiality, *and* manage to transcend these effacing functions⁷. This approach illuminates the processes through which stucco emerged as a multifaceted, multimodal medium in the 1st century B.C. I focus on ceilings' medial operations in fashion-forward Augustan-era houses, specifically the stuccoed vaults at the Villa Farnesina in Rome and the Villa of Livia at Prima Porta. These ceilings show Roman artisans using stucco in a manner that is specific to the material; far from neutral, stucco demonstrably possesses certain material and functional advantages that directly inform its use. The case studies evidence a growing awareness of and interest in those properties among artisans, developed out of plastering techniques established in the Late Republic. Stucco's colour, relief and design help heighten the tensions between matter and form, decoration and experience in each case. I argue that Augustan stuccoists exploited their medium's material strength and light visual properties so as to generate dynamic visual and atmospheric effects within intimate elite spaces.

Roman Approaches to Stucco

Roman stucco is composite matter (usually made of slow-setting lime plaster) applied to mural surfaces, and, as such, offers a plethora of useful properties⁸. Given the correct recipe, it forms a wet glue⁹. This wet state creates a plastic medium – malleable enough to be moulded, stamped and impressed. It can take on the form of other materials, and even absorb them within its matrix. It also hardens to an extremely dense solid substance, thereby functioning as a protective agent. In

⁵ For materiality, see Haug – Hielscher's introduction to this volume. On the concept of affordances, see Gibson 1977, clarified in Gibson 1979; for archaeological applications, see Knappett 2005, 47–58; Hodder 2012, 48–54; for the historical relevance of materiality and artefact categories, see Van Oyen 2016. For media thinking applied to antiquity, see Jones 2019, 131–178; Michelakis 2020; and for media phenomena crucial to antiquity, such as doors, see Siegert 2015.

⁶ Horn 2007. Horn (2007, 8) writes about how objects and phenomena 'become media' in historically specific situations: 'Media are not only the conditions of possibility for events – be they the transfer of a message, the emergence of a visual object, or the re-presentation of things past – but are in themselves events: assemblages or constellations of certain technologies, fields of knowledge, and social institutions.'

⁷ Krämer (2015, esp. 30–34) borrows from the Aristotelian concept of 'diaphanous media' for her 'messenger model' of communication, whereby the messenger (medium) operates through the illusion of its transparency/neutrality. However, the medium is never totally transparent or neutral; it always bears traces of its mediation and, in Sybille Krämer's formulation, becomes visible as a medium when it breaks down. Platt (2020) helpfully places an Aristotelian understanding of a 'medium' as a 'diaphanous substance, an unmarked *metaxu* (or 'in-between') which has the capacity to transmit sense data without being perceived itself,' alongside Media Theory's sensitivity to the invisibility of all media.

⁸ 'Stucco' can imply a chemical differentiation as well, distinguishing lime plaster from calcined gypsum or plaster of Paris. Because neither sense delimits hard and fast boundaries, I follow and slightly modify Roger Ling's definition of Roman stucco being a hard slow-setting plaster based *largely* on lime and *usually* employed for architectural work.

⁹ Vitruvius. *De arch.* 7, 2, 2.

the Roman context, stucco was employed for its plasticity and replicability, as well as its accumulative and transformative properties. As a protective and decorative agent, stucco tends to be used to frame and support wall painting, interior spatial units and exterior structures.

As for other forms of surface treatment and relief art, Roman authors did not have a consistent terminology for stucco, but referred to it in a variety of ways, for example as *opus tectorium*, *opus albarium* or simply *albarium*. This wide semantic range covers the most common forms of plastering; *opus tectorium* includes enhancements to and protections for architectural structures and interior walls, while *opus albarium* includes white reliefs¹⁰.

When Vitruvius discusses plasterwork in relation to vaulted ceilings in Book 7, he describes *opus tectorium* as a structural component of the wall (*paries*) itself and the surface for colours and paintings¹¹. In his view, stucco is both structural and the vehicle for other media. Proper lime slaking, mixing of the correct recipes and layering of plasters using increasingly fine grits were essential steps to achieve *opus tectorium*'s desired solidity and lustre¹². This solidity formed by the marriage of wall and properly worked plaster is inseparable from the resulting effects. The appropriate plaster relies on the formula's constituent parts: a combination of marble chips mixed into the final layer, colours added when the plaster is still wet (*udo tectorio*) and the polishing process¹³. From Vitruvius' perspective, plaster is marked out as a medium *supplemental* to the wall standing behind (one that is to be added to it in an intricate series of steps). But this additive process is in itself inseparable from the building of structural walls and ceilings; though sequentially applied after a wall or ceiling is erected, Roman plastering could be conceived as *integral* to mural construction. The suitable application of stucco marks out this duality of integrity and supplementarity in a visual sense: only when walls and ceilings were properly completed – coloured, shining, smooth and/or reflective – can the plaster 'on top' no longer be distinguished from the wall 'behind'¹⁴.

Stucco's plastic and protective affordances made it an effective medium for creating both new spatial zones and new modes of decoration. We can trace these reciprocal relationships between structure and surface in the co-development of vaulted spaces and coffered stucco ceilings in Late Republican and Early Imperial Italy. Here, the axis of analysis shifts from on/behind to above/below.

Late Republican Stucco Ceilings

Let us begin with the so-called coffered style of stucco ceilings and its relationship to images. The shift from flat, often wooden, coffering to curved ceilings has a fragmentary history, but several Late Republican monuments attest to the innovative ways in which craftsmen incorporated stucco

¹⁰ Wadsworth 1924, 14. In Plin. HN 36, 183, Pliny the Elder describes stucco reliefs as *sigilla aedificiorum*, but this is a rare case.

¹¹ Vitruvius. De arch. 7, 3, 6f.: *Ita cum tribus coriis harenae et item marmoris solidati parietes fuerint, neque rimas, neque aliud vitium in se recipere poterunt. Sed et liaculorum subactionibus fundata soliditate marmorisque candore firmo levigata, coloribus cum politionibus inductis nitidos expriment splendores.*

¹² Vitruvius. De arch. 7, 3, 7–9, esp. 7, 3, 8: *Itaque tectoria, quae recte sunt facta, neque vetustatibus fiunt horrida neque, cum extergentur, remittunt colores, nisi si parum diligenter et in arido fuerint inducti. Cum ergo itaque in parietibus tectoria facta fuerint, uti supra scriptum est, et firmitatem et splendorem et ad vetustatem permanentem virtutem poterunt habere.* While Vitruvius recommends seven coats of plaster for walls, he suggests three for ceilings in Vitruvius. De arch. 7, 3, 3.

¹³ Vitruvius. De arch. 7, 3, 7.

¹⁴ See Platt 2009, 50–57. 62 on Vitruvius' biases towards structural appropriateness (*decor*) and against *monstra* in his treatise, whereby he maintains a separation of frame and ornament; for a discussion of Immanuel Kant's *parergon* in relation to Roman art, with bibliography, see Platt – Squire 2017, 46–59; Squire 2018.

Fig. 1: Rome, House of the Griffins, room (3), stucco vaulting with alternating rhomboid and square panels, which feature incised lines at the corner of each square panel.

to explore the decorative surface potential of concrete vaulting, a relatively new technology¹⁵. The malleability of lime plaster rendered it suitable for the decoration of curved ceiling surfaces. Plasterers could mould and model coffer bands more efficiently than stone carvers.

Consider, for example, the Casa dei Grifi on the Palatine, in which stucco vaulting and lunette decoration contribute to one of the earliest surviving Second Style (and late Masonry Style) programmes in Rome¹⁶. Within a stuccoed lunette in room (3), griffins stand in high relief on either side of an acanthus stem, from which flowering tendrils encircle the animals. On the opposite lunette, plants fill the entire field save for two pigeons resting on tendrils¹⁷. In the same room, the concrete vault was stuccoed with panels within a broad band, alternating between squares and (elongated) rhomboids set in rectangular frames, and running parallel to the wall's cornice line (Fig. 1). Two other surviving stuccoed vaults in the complex preserve simple coffering, with white square coffers of flat frames featuring a central groove enhanced with red paint and diagonal lines at the corners.

The Casa dei Grifi provides evidence of experimentation with stucco and reveals the material's emerging functions in the spatial delimitation of room surfaces. The stucco ceilings, with their panels and coffers, reveal a skeuomorphic relationship to wooden ceilings – evidenced by the incised diagonals at corners, which seem to simulate the material traces of mitred carpentry joints¹⁸. The artisans' interest in transferring the flat ceiling of monumental buildings, or even fancy Greek houses¹⁹, to the vault was made manifest materially through the moulded plaster bands. Finally,

¹⁵ Ling 1972, 24–57; Mielsch 1975, 12–24. For the development of surviving Late Republican ceiling decoration in Rome and central Italy, see Lipps 2018, 109–142; for relative chronology, see Lipps 2018, 169 f.; for the development of concrete vaulting technology, see Lancaster 2005, 22–48.

¹⁶ Rizzo 1936; Pappalardo 2009, 29–31. The Casa dei Grifi is the oldest Republican era house published on the Palatine, excavated by Giacomo Boni in 1912 under the Domus Flavia. It was constructed out of *opus incertum*, which was rebuilt with a masonry style similar to *opus reticulatum*, and decorated over, helping to date the structure to the period between the end of the 2nd century B.C. and the beginning of the 1st century B.C. For the ceilings, see Lipps 2018, 125.

¹⁷ Ling 1972, 23. While they are no longer visible, Ling says that the plaster ghosts of animals (surviving only from the scratches of their application) indicate that two peacocks stood heraldically in the neighbouring room.

¹⁸ Ling 1972, 48; Lipps 2018, 122–127.

¹⁹ Vitruvius, *De arch.* 6, 7, 3.

Fig. 2: Pompeii, Casa del Criptoportico (I 6,2-4), north wing of the *cryptoporticus* showing central stucco medallion.

the strategic use of colour helps to mark these experiments visually and spatially; by leaving the projecting stucco details white, accented only with red grooves, the differences between media on the walls, the lunette and the geometric floor mosaics are emphasised.

Thus, an interesting contradiction arises between the idea of skeuomorphic imitation and the decision to leave the stucco visible and entirely recognisable as stucco. The ceiling stuccowork here does not operate strictly in the service of mimesis – there is a self-referential quality about it that playfully and deliberately undermines its mimetic potential. Rather than effacement, stucco introduces its potential hypermediacy, rendering visible the signs of its own mediation²⁰.

Built in the 1st century B.C. (roughly 40–30 B.C.) – the end of the Second Style’s heyday – the Casa del Criptoportico (I 6,2-4) in Pompeii exemplifies the expanding uses of stucco in coffered ceilings²¹. The eponymous *cryptoporticus* employs a wide array of centrally planned geometric panels, framing pictorial fields with a great variety of motifs, including hybrid creatures and vessels (Fig. 2). These repetitive geometric fields create a dazzling white foil to the colourful paintings on the walls below. The murals are brightly painted in an alternating scheme of herms, friezes and garlands with a Trojan War cycle framed in a panelled frieze in the upper zone. In their current fragmentary state, the surviving stucco panels seem disconnected, floating above the polychrome walls. But in antiquity, the bands of white stucco coffers would have extended down the vaulted ceiling to the cornice level of the frescoed walls below, resonating with the white vertical bands painted between the regular fields on the mural hall (Fig. 2). These white zones create repetitive geometric fields throughout the entire space, painted and in plastered relief and exhibiting a composition that experiments with pattern, texture, figure and light.

Light is especially crucial in a semi-subterranean space. The stucco’s colour and layered depth could catch light from the five windows on the south wall of the northern wing and reflect it onto

²⁰ To use Jay Bolter and Richard Grusin’s terminology of remediation, oscillating between immediacy (the total effacement of a medium) and hypermediacy (the marking out of mediation) to analyse strategies of Roman decoration (see below): see Bolter – Grusin 1999.

²¹ Lipps 2018, 127 f., with bibliography. Stucco ceilings are preserved in the north and west wings of the *cryptoporticus*, an adjoining *cubiculum* to the north and *oecus* in the east.

its murals below²². The single angled light source would also have thrown the stucco patterns into higher relief. The stuccowork meaningfully engages the space's visual programme by exploiting its spatial zoning – the vaulted ceiling enhances the visibility of the sunken, semi-subterranean rooms through its patterned coffer-work. In this sense the stucco acts as a medium integrated as part of the building's infrastructure. It relays light from one zone of the wall to another, between 'above' and 'below'. Rather than calling attention to its own operations, as in the case at the Casa dei Grifi, it fulfils a more self-effacing role.

The Weightless Spaces of the Villa della Farnesina

These interests in stretching the boundaries of coffering and expanding the pictorial potentials of stucco ceilings find their fantastical realisation in the Villa della Farnesina in Rome, designed during the beginning of Augustus' reign²³. The mural surface strategies employed here reveal the ambiguity between stucco's boundedness to vaulted architecture, referencing the underlying architectural structure, and its simultaneous transcendence of this relationship through the use of decorative relief panels.

While previously praised as both the birthplace and pinnacle of sophisticated Roman stucco relief decoration, the stucco vaults are in fact part of a rich tradition of Italy and the Hellenistic world, as demonstrated by the previous examples²⁴. The Villa della Farnesina also underscores the fragility of the genealogical record of stucco ceilings in the Roman world – the salvage excavations were the result of a chance discovery during the 1879 embankment project of the Tiber River. The excavations preserved only the southern sections – the mosaics, paintings and stuccoes of which are now displayed in the Museo Nazionale Romano at the Palazzo Massimo²⁵.

The villa's assemblages are exceptional, both in preservation and execution. In three small rooms, *cubicula* (B), (D) and (E), stuccoed vaults supported by the richly painted walls are preserved (Figs. 3–6)²⁶. Based on careful contextual analysis of the decorative assemblages of *cubicula* (B) and (D), Stéphanie Wyler has shown how the painting programme 'succeeds in combining architecture, sculpture and painting to replicate pictorially a proper art gallery', layering the 'referential language' of Hellenic artistic styles and integrating the 'familiar otherness' of Dionysiac imagery²⁷. She has argued that the artisans created a 'politically correct' *pinacotheca*, parading eclectic exoticism through appropriating, referencing and accumulating a variety of artistic styles and cultural images²⁸. This argument is based largely on iconography and mimesis; the frescoes emulate a Greek

22 Consider Roman *candor* as in Vitruvius, *De arch.* 7, 3, 4.

23 For an introduction, see Bragantini – de Vos 1982; Sanzi Di Mino et al. 1998; Wyler 2006, 216; Mols – Moormann 2008. Dated to the 30s–20s B.C. based on architectural and stylistic analysis. The owner was long assumed to be Agrippa; Hendrik Gerard Beyen's hypothesis was based on chronological, topographical, iconographical evidence, though no definitive proof: see La Rocca 2008. The design of the villa is unique, even avant-garde, which fits well with the new expressions of Roman art within it.

24 Supra 15; cf. Wadsworth 1924.

25 Wadsworth 1924, 23. Thousands of fragmentary reliefs were found in the debris and 'set in beds of plaster of the same dimensions as the original vaults'; through reconstruction by archaeologists, plaster mediates and re-presents the stucco programme of the *cubicula*.

26 Mielsch 1975, 20–24, 111–114; Bragantini – de Vos 1982, 61–65, 137–139, 193 f. 291–295. Barrel vaulted ceiling areas are approximately 3.42 m x 2.6 m for *cubicula* (B) and (D) and 3.57 m x 2.58 m for *cubiculum* (E). The wall paintings are traditionally placed between the Second and Third Styles by formalist analysis: see La Rocca 2008.

27 Wyler 2006, 217, 220. In the Roman context, in addition to being the god of altered states and carnivalesque revelry, Dionysus was considered 'Greek' and thus a familiar cultural 'other'. On the transferability of media in Roman wall painting, see Jones 2019, 137–178.

28 Wyler 2006, 217, 227. This process of accumulation/replication was inventive rather than solely derivative; through the models and techniques of Hellenistic art (i.e., a 'reconstructed orientalism'), artists contributed to a distinctly

Fig. 3: Rome, Villa della Farnesina, *cubiculum* (B), stucco vault.

Fig. 4: Rome, Villa della Farnesina, *cubiculum* (D), stucco vault.

Fig. 5: Rome, Villa della Farnesina, *cubiculum* (E), stucco vault.

Fig. 6: Rome, Villa della Farnesina, *cubiculum* (D), wall paintings and stuccoes.

Fig. 7: Rome, Villa della Farnesina, *cubiculum* (D), detail of stucco sacral-Idyllic panel.

picture gallery with painted *pinakes* and framing devices that conjure up Hellenistic references, concentrating on Dionysiac and Egyptianising themes. The stuccowork contributes to the thematisation of ‘Greekness’ and the luxurious otherworldly: depicting sacral-Idyllic landscapes²⁹, Dionysiac rituals and even the god himself, shown in an archaising profile bust in *cubiculum* (B), the images are all located in worlds ‘somewhere else’ (Fig. 7)³⁰. These images create a ‘familiar alterity’: a mass of visual and cultural imports confidently collected and cohesively displayed within the Roman *domus*³¹. In this Early Imperial context, such elaborate picture-gallery ensembles blur the familiar and foreign; referential Bacchic/Egyptianising images were integrated within the residential sphere, yet they could evoke the unfamiliar or exotic (on the margins of empire or beyond)³². In the following discussion I build on Wyler’s argument to show how the stucco ceilings also contribute to iconographic themes such as domesticated otherworldliness *spatially*, creating an airy atmosphere above the painted walls and viewers below through the unique surfacing properties of stucco.

The same artisans surely executed the three stuccoed vaults of *cubacula* (B), (D) and (E), which are materially and technically very similar, though each vault has its own decorative programme with subtly varied figural and compositional elements (Figs. 3–5). The stuccoes are a light cream colour without any trace of polychromy, and have a smooth, close-grained texture³³. Though showing affinities to the compartmentalised formulae of Roman stucco traditions, the compartments no longer create recognisable quotations of wood or stone coffers, but fluidly adapt their slender interlocking rectangular compartments, framed by delicate stamped mouldings, to the curvilinear vault form³⁴. The resulting effects differ in each room, where the ceiling compositions

Roman development of Hellenistic art. Textual accounts of this process are very concerned with the private appropriation of public art. For an exploration of the Roman enthusiasm for fictive murals of Greek artworks, as observed on the Palatine, see Bergmann 1995, 102–108; Jones 2019, 93–126.

²⁹ These echo the landscapes in found in *pinakes* on the murals: see Ling 1977. For monochrome ‘grisaille’ wall painting scenes interpreted as relief, see Moormann 1988, 36–39.

³⁰ Wyler 2006, 224, including the rustic outdoors and Dionysiac drunkenness.

³¹ Wyler 2006, 223; also Barrett 2017, 325.

³² See esp. Barrett 2019. In *cubiculum* (B), for example, images of Isis and Ammon are painted directly onto a red background, seemingly integrated as *monstra* or decorative statues, rather than framed as panel paintings. Such appropriations were enabled by Rome’s conquests and, thus, participated in developing the *decorum* of lavish display within the new imperial context.

³³ Wadsworth 1924, 23.

³⁴ Ling links this trend to the introduction of differently shaped coffers like diamonds in the Casa del Criptoportico, suggesting medial transference between Italian *opus reticulatum* wall-facing, Ling 1972, 52; cf. Mielsch (1975, 21), who

contrast their correspondingly decentralised (or emblemless) floor mosaics below. For example, in *cubiculum* (E), the complex interlocking frames on the ceiling juxtapose the bichrome mosaic pavement beneath, with its geometrised rosettes and squares composed on a (more straightforward) grid³⁵. While the regular geometry of the bichrome floor heightens the intricacy of the ceiling design, both bichrome/monochrome palettes highlight the exuberant chromatic effects of the wall paintings above and below.

On the ceiling, the stucco panels contain delicate and shallow pictorial reliefs, featuring figures that were modelled by hand³⁶. In addition to the peopled ‘landscape’ and narrative scenes alluding to the Dionysiac mysteries (Fig. 6), fantastical candelabra, plants and floating figures such as victories, cupids and griffins fill the narrow framing fields³⁷. The vegetation in particular, though shared across the three vaults, evinces an interest in variety and playfulness; tendril ends are left unfinished and some compositions are ‘architecturally impossible’. This detailing of the framing flora and fauna anticipates one of the most celebrated monuments of the early principate, the Ara Pacis Augustae, and its inclusion of *minutiae*, like the tiny animals lurking in the spindly depths of its vegetal frieze³⁸.

Thus, this picture-panelling mode of the Villa della Farnesina’s *cubicula* demonstrates an innovative adaptation of the coffer-style vault to create intimate enclosures where the imagination is given free reign. However, the inclusion of relief sculpture above the fictive architecture of a ‘Greek’ picture gallery prompts further exploration of surface and colour, how they operate, and their impact in the rooms. Indeed, the vaults’ complex relief sculpture resists placement in any one category of artistic media. As Christopher Lakey has commented with regard to the medieval period, relief is both painting and sculpture, ‘material and virtual space’, which ‘requires observers to complete two-dimensional forms in three dimensions’³⁹. The plastered relief sculpture on the ceiling presents varied media and experiential effects, going beyond the fictive/non-fictive boundaries of the painted surfaces below, which Nathaniel Jones has sophisticatedly argued are rife with remediations⁴⁰. While the stuccoed relief does cite diverse artistic styles (as is evident in the sacral-idyllic scenes and archaising profile busts), it does so within a different visual/material logic to wall painting: the stucco produces all images and spaces using the same palette, framing devices and relief technique (and to quite different ends). What happens to the overall decorative assemblage when stuccoed relief interrupts or converges *above* painted remediated depictions? The reliefs’ assertion of their own surface, I argue, further destabilises those of the murals below. The ceiling surface is subtly within our realm, real in its almost three-dimensional claims, yet simultaneously creates a light, diaphanous visual effect, unlike the spatial and architectural claims of the painted picture galleries below⁴¹.

describes the composition as ‘rechtwinklige Felderdecke’; see Lipps 2018, 171–186, for a survey of Late Republican/Early Imperial ceiling aesthetics, esp. 173–175, on the importance of variation.

³⁵ See watercolour by Domenico Marchetti in Sanzi Di Mino et al. 1998, 79 Fig. 113.

³⁶ While the frames were stamped, the figures show scoring marks typical of Roman relief stucco. See Ling 1976.

³⁷ Wadsworth 1924, 23 f.; Mielsch 1975, 20–26. 111–114.

³⁸ See Castriota 1995; Platt 2017, 81 f. For the Augustan structuring principle of ordered disorder, see Kellum 1994, 217; Barham 2018. For the concepts of *monstra* and the role of vegetal motifs/organicism as organisational in Augustan art, see Platt 2009.

³⁹ Lakey 2018, 1 f.

⁴⁰ Jones 2019, 137 f., employing Jay Bolter and Richard Grusin’s terminology (supra n. 20). Cf. Barham (2021), arguing convincingly for the interest in varied colour effects in both representational and formal modes of decoration in *cubiculum* B, likewise focuses mainly on wall painting. The ways in which the medium of stucco introduces broad white colour fields, undulating with light and dark shadowy surface on the Farnesina ceilings (below), complement such an analysis of mural and floor materiality and abstraction.

⁴¹ Consider too, that these shallow reliefs were not capturing and shifting natural light, as they were in the Casa del Criptoportico, but rather due to a lack of windows, are probably brightening these small intimate spaces by reflecting lamp light or diffused natural light from elsewhere in the villa: see Vitruvius, *De arch.* 7, 3, 4. For literary sources on the valued relation between ceiling surfaces and lustre, see Lipps 2018, 171–173.

Fig. 8: Rome, Villa della Farnesina, *cubiculum* (D), standing nude figure (representing Zeus).

Within these assemblages of the Farnesina villa, such disparities between reality and representation, then, hinge on the textures and chromatic efficacies of the walls and ceilings. The gauzy stucco relief panels introduce a monochrome palette, a lightness, clearly juxtaposed with the brightly painted walls below (Fig. 6). In the mural programmes, white pigments are used in culturally-encoded ways – in *cubiculum* (B) for example, the female musicians make a double quotation, resonating for modern viewers with surviving classical Greek white-ground *lekythoi*, and presumably evoking Greek panel paintings for ancient viewers⁴². As Jones has elucidated with regard to Roman wall painting, white's 'dual sense' generates both atmosphere and solidity: white can indicate spatial regression (like the white paint used above the architectural fiction in *cubiculum* (D) of the villa (Fig. 6), but can also represent the solidity of stone architecture and panelling⁴³. As in the case of the Farnesina fresco paintings, white can represent literal surfaces, such as prepared wood panels or painted marble, like the rare surviving examples from Herculaneum⁴⁴. The distinctions between representations of literal white surfaces and dematerialising atmospheric effects are already called into question in *cubiculum* (D), which for example includes a standing nude figure (representing Zeus) on the left wall of its antechamber executed almost entirely in line against a white background (Fig. 8)⁴⁵. Is this a transparent figure emphasising the artist's use of line, set against a marble slab or a panel painting? Does it float against a fictional ground or the smoothed (painted) surface of the plaster wall itself? These citational and representational slippages between specific cultural media

⁴² Wyler 2006, 217; Platt 2009, 41 f. 47 f.

⁴³ Jones 2019, 142 f. 154. Jones' analysis of the medial spectrum between opacity (hypermediacy) and transparency (immediacy) of Roman wall paintings inform my interpretation of stucco ceiling reliefs (see below).

⁴⁴ Jones (2019, 143) cites the prepared wooden boards mentioned in the Delian inventories. Pausanias (7, 22, 6) says Nikias painted on a white marble tombstone in Achaia; cf. the white-ground panels at Boscoreale in Jones 2018, 17.

⁴⁵ See the stucco reliefs of nude male athletes from Castellammare di Stabia and the Stabian baths in Pompeii, which formally resemble the Farnesina Zeus but mediate through relief sculpture rather than line: Mielsch 1975, 129 f. (K34 5–6, Pls. 30, 1–2); 143 (K 54a III.V, Pl. 50, 1).

and visual imaginaries revolve around the opacity and transparency of colour, namely white⁴⁶, and these are the very slippages that the stuccoists exploited to create an otherworldly atmosphere on the vaults.

Thus, a paradox exists within the visual environment of the Farnesina *cubicula* – stucco is actually quite solid, hardening to a rock-like consistency when dry. And yet these ceiling stuccoes have an *airy* effect, contrasting with the painted architectural solidity of the walls below. In addition to their creamy colour, the stuccoes' shallow relief generate a soft contrast between lights and darks. This is partly owed to the slender, attenuated proportions of the figures and architecture depicted. But it also owes a great deal to the expansive empty 'grounds' found within each framed panel. For example, within the sacral-idyllic scenes, figures and architectural elements recede in order to depict space. They are also held within a matrix of white ground, which also represents the air/space surrounding them, albeit in a gauzy, unstable fashion (Fig. 7). However, framing figures like the victories project solely from their empty grounds. Their bodies are fused physically (with scoring marks) to this 'virtual' space, blurring into the movement (or air) of the background. Grounds are both representations of spatial regressions (a matrix through which figures and architecture recede in 'landscape' scenes) and ambiguous empty zones held within each interlocking frame (white space). These grounds are crucial for the ceiling's operations, then, since they literally represent *space/air*. In this way the stucco ceilings both lighten the small rooms with their creamy colour, and produce a weightless, atmospheric visual effect. All in all, by combining slender figures, shallow relief and creamy white grounds engendering space/air, the artisans crafted a light, dreamy zone above their viewers' heads⁴⁷.

Within the inventive frame of the panelled vaults in the Farnesina *cubicula*, amidst the most fashionable expressions of learnedness and connoisseurship, stucco's plasticity is on display. It absorbs and morphs Hellenising motifs and styles, fervidly amassing and homogenising materials as well as cultural and religious allusions, and projecting them *out from* and *as* a real surface. Its monochrome matter unites and 'domesticates' them, as it were, within a single light-cream palette. This white monochrome is, in one sense, architectural and solid. It is pressed upon and, thus, signals the softly curving architectonic structure of the ceiling. But through the movement of its modelled figures, and the expansive empty grounds of each relief panel, a sense of ambiguity also arises, effacing the underlying construction of the vault. What appears first as a solid and opaque *true* surface dissolves so that the viewer sees the varied (transparent) picture scenes projecting from it, creating an uncertain (diaphanous) space⁴⁸. These applied architectural *ornamenta*, capping the make-believe 'Greek' picture gallery below, generate the least stable *imagines* of the room. Floating above the viewer, and outside of the trompe l'oeil architectural fictions of the walls, the white reliefs generate an interstitial ceiling by means of the material solidity and visual ethereality of their medium.

Establishing Hard Boundaries in Livia's Garden Room

I conclude this discussion of ceiling picture-panelling with another touchstone mural programme from Augustus' reign: the garden room *triclinium* in Livia's villa at Prima Porta, which offered

⁴⁶ See e.g., Mandel 2010; Barry 2011.

⁴⁷ This could of course affect viewers' emotional state or mood. See Lipps 2018, 176, for ancient literary evidence on the 'atmospheres' of domestic spaces.

⁴⁸ Jones 2018, 137 f. 140–143. I borrow Jones' language (inspired by Louis Marin's formulation) to describe this tension between opacity and transparency, which he uses exclusively to describe the operations of Roman paintings, as well as Krämer's use of 'diaphanous' media: see Krämer 2015, 6.

Fig. 9: Rome, Villa of Livia at Prima Porta, Garden Room (*triclinium*), the long east wall.

diners a fantasy space in which they could ruminate on the complex relationship between *ars* and *natura*⁴⁹.

Livia's Garden room presents one of the most famous examples of illusionism in Roman wall painting and references Augustan mythology through botanical specimens (Fig. 9)⁵⁰. The *triclinium* and its paintings create impossible vistas, immersing the viewer in a pavilion which activates synesthetic allusions to the sounds of birds with their fleeting movements, the scent and feel of the cultivated plants and the taste of locally grown fruit⁵¹. However, this is no fictive gazebo from which the lucky spectators may gaze – despite the craggy grotto-like overhang above the painted garden scenes⁵², no architectural supports are depicted to uphold the grotto, revealing the *triclinium*'s enclosure as a make-believe fantasy. This lack of structure signals the impossibility of such a privileged space of viewing and immersion. But look up! See the fragmentary painted stucco panels that emerge from the cavernous overhang of Livia's garden room. Here, rectangular frames in relief appear along the upper wall. White stucco figures project from painted red and blue backgrounds. In antiquity, a painted stucco cornice with a white waterleaf pattern on a blue background marked the transition of the murals to the ceiling vault⁵³. This three-dimensional architectural element interrupts the unsupported grotto-like illusion of the garden paintings, shifting the viewer's attention to another make-believe picture field above.

The plastered panels rest above the (now dilapidated) stucco cornice⁵⁴. Framed by an egg and dart moulding, they alternate between white relief scenes against white grounds, and white-winged Victories poised on candelabra against blue grounds within a narrow red frame. One relief panel that is still legible suggests a banqueting scene, where a recumbent male holds a lyre, another figure rests between his legs with pipes and a boy stands off to the side (Fig. 10). Though fragmentary, these relief pictures beg the question: what are these panels? Does this marked material shift to the stuccoed vault represent a coffered stone roof? Are stucco panels now presented as the expected medium of vaults, an integral mode of surfacing in the 1st century B.C.? No matter what the answers are, the illusion of an unsupported pavilion comes crashing down. The stucco panels, so often cropped from both visual reproductions and analyses of Livia's garden room, announce their own artifice and surface quality. The stuccoes' materiality, expressed through their projecting reliefs and

⁴⁹ Gabriel 1955; Calci – Messineo 1984; Kellum 1994; Kuttner 1999; Settis – Donati 2008; Zarmakoupi 2008. For the dynamics of nature and design performed in other Roman media, namely cameo stones, see the contribution by Lang, this volume.

⁵⁰ Kellum 1994.

⁵¹ See Caneva – Bohuny 2003.

⁵² See Gabriel 1955, 7 f., for arguments as to whether this painted upper zone represents a grotto's stalactites or the thatched roof of an *incannuciata*.

⁵³ Wadsworth 1924, 35.

⁵⁴ Mielsch 1975, 114.

Fig. 10: Rome, Villa of Livia at Prima Porta, Garden Room (*triclinium*), stucco with banqueting scene.

colour, draw attention to the ceiling's lithic *weight* – in contrast to the diaphanous weightlessness of the Farnesina vaults – and the fact that it cannot be supported by the expansive outdoor scenes of the walls below it. This juxtaposition throws other aesthetic effects into high relief.

In concordance with the wall paintings, the stuccoes help to evoke the theme of liminality in the room in three ways: mimetically, materially and rhythmically. Mimetically, boundaries are pictured through the wall's celebrated illusionistic representations: white (stone) and ochre (wicker) painted fences in the garden scene separate the cultivated from the wild, and the rocky overhang represented on the upper wall marks the transition from the floral plant world to the grotto outcrop above. *Limina* are activated materially with the onset of the plaster panels above the paintings. Finally, boundaries are generated rhythmically through the replication of banded colour fields, conjured by the visual similarities between the bands of the black dado on the lowest register of the wall below the ochre trellis and white balustrade, all of which echo the banded stucco panel frames above (especially with their gemlike quality of figural whitework emerging from red and blue colour arenas)⁵⁵. These strategies are enhanced by motion – both visual and physical – in the space, relying on human bodies to 'take in' the immersive environment around and above them⁵⁶. Thus, through these visual and material strategies, the assembled mural programme *thematizes* boundaries and framing, and in doing so, the room's decoration prompts its viewers to reflect upon the relationship between *ars* and *natura*. These stucco panels are therefore an integral component in distorting this immersive fantasy and in doing so draw out the tension between mimesis and materiality in Livia's garden room. At least momentarily, the stuccoes bring the viewer's attention to the room's skilful artifice as well as its close relationship to realistic *natura*⁵⁷. They employ a similar vogueish panelled-picture mode to the one explored in the Villa Farnesina, in a similarly close-textured stucco⁵⁸. But this time the artists exploit polychromy and projecting relief fields in order to heighten the contrast between the walls and the ceiling.

⁵⁵ See Ling 1976, 45, for the development of gemlike stucco treatments, which he relates to craft experiments interested in the effects of metopes and gems.

⁵⁶ We must not forget, however, the viewers' stillness while dining, too; reclining might have allowed viewers to parse the images within the stucco frames, which include banqueting scenes, in addition to taking in their surface, colour and materiality.

⁵⁷ On Roman artisans at once purposefully engineering an illusion and rendering it transparent in mosaics, see Molholt 2008, 15, quoted in Crowley 2020, 218.

⁵⁸ Wadsworth 1924, 35.

In both case studies artisans expand stucco's previous architectural resonances to coffered ceilings, in order to open up new possibilities of pictorial space. In doing so, the stuccowork transcends strictly imitative and self-effacing qualities. At the Farnesina this results in ethereal vaulted spaces of three-dimensional (cultural) accumulation. By crafting surface relationships between floor, mural and ceiling, the artisans enabled stucco's other-worldly atmospheric effects to coalesce above the viewer. The assemblages in Livia's garden room thematise unstable boundaries, made manifest between whimsical frescoed surface treatments and solid, three-dimensional stuccoed surface treatments, which transport the viewer between *ars* and *natura*.

Conclusion

By exploring decorative stuccowork applied to ceiling surfaces, this paper has attempted to tease out how artisans exploited stucco's sturdy material and light visual affordances in order to generate exciting aesthetic, spatial and atmospheric effects in elite Augustan homes. These properties hold important implications for Roman surfacing techniques. First, stucco helps to highlight the intimately entangled concepts of surface and structure in Roman culture and *decor*. As a ubiquitous and understudied cultural technique, stucco offers a wide functional and aesthetic continuum, from the engrained practices of 'finishing' interior walls and protecting exterior architectural features to creating sophisticated zones of decoration. Finally, by challenging the boundaries between the *on* and *behind*, and the *above* and *below* of interior decoration, stucco heightens the drama of – and even sometimes undoes – painted mural fantasies, while also highlighting the immersive materiality of surface assemblages.

These conclusions reveal stucco as a dynamic vehicle for varied modes of communication. As a self-effacing medium, stucco could act as an emulative and pictorial mode of decoration for vaulted spaces. Stucco does this, but simultaneously summons the viewer to see its *hypermediacy* – affirming its own surface – as a medium full of potential, generating novel atmospheric effects. Augustan plasterers invite us to notice stucco in many surprising ways that were related to the architectural, formal and stylistic innovations of the period, helping to account for its persistent inventive use in elite houses. Taking stucco seriously as a multi-dimensional medium propels viewers into new realms of experience and facture, transcending the dyad of reality and representation in domestic space.

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