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Projective Fiction in the Citiverse: AI-Generated Speculation and Curated Immersion as Instruments of Urban Imagination

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Abstract

The Citiverse promises to merge physical and virtual urban space, yet citizens already inhabit a pervasive immersive medium: the dispersed, screen-bound attention of the smartphone. This paper introduces Projective Fiction, a design-theoretical and practice-based framework in which speculative imagery generated by artificial intelligence (AI) and curated mixed-reality staging act as instruments of urban imagination rather than previews of construction. Building on Cedric Price's emancipation of architecture from the imperative of realisation, it argues that the speculative image constitutes a distinct way of knowing the possible city. The framework is examined through a practice-based case study: Guerilla Domus, an installation and public performance in the Johanniskirche in Schwäbisch Gmünd (Germany), opened on 18 September 2026. Visitors were invited to surrender their smartphones at a coffin at the west portal, then encountered two backlit AI-generated allegories of the Johannisplatz, a mixed-reality Pietà staged over the real square via HoloLens, and a live transnational link to Molfetta (Italy). The paper's central contribution is the paradox of the second immersion: curated immersion in urban digital layers presupposes a deliberate exit from the first, dispersed immersion, an exit that must be designed as a threshold. Observations from the opening, where guests readily donated old devices but most kept the phone in use and re-mediated the event through it, inform four design principles for civic

immersive technologies: threshold, shared view, anchoring in place, and declared fiction. Projective Fiction is positioned as a humanistic counter-model within the Citiverse that expands rather than colonises urban imagination.

Keywords

Citiverse · Projective fiction · Mixed reality · Generative AI · Urban digital twin · Immersion · Speculative design · Civic engagement

1 Introduction

The Citiverse is emerging as the convergence of urban digital twins, extended reality (XR) and artificial intelligence (AI) into a shared layer that spans physical and virtual city space [1–3]. Its promise is participatory. Citizens are no longer meant to be mere data sources of a centrally steered smart city; they are to become active co-inhabitants of an integrated urban model in which they contribute and engage directly [2].

This promise rests on an unexamined premise: that citizens are not yet immersed. They are. The smartphone has become the most widespread immersive medium of the contemporary city. It does not enclose the eyes like a headset, but it absorbs attention continuously and pulls the gaze away from the street, the square and the person opposite [4–6]. A Citiverse application therefore never introduces immersion into a public that is free of it. It adds a second immersion on top of a first. Whether the second can serve civic purposes without addressing the first is the question this paper takes up. It does so without arguing against technology. Its premise is that the aim is not a turn away from technology but a return to the human: technology should extend human experience, not replace it.

The paper approaches that question from architecture and image theory rather than from systems engineering. It introduces Projective Fiction: a framework in which speculative images, increasingly produced with generative AI, are treated as autonomous instruments of knowledge about the possible city rather than as previews of construction. Much current work on urban digital twins pursues descriptive or predictive aims: the twin mirrors the city as it is, or simulates how it will behave [3, 7]. Projective Fiction proposes a third, projective mode. Its digital layer

neither mirrors nor optimises. It stages what could be imagined, anchors that imagination in a real place, and makes it collectively available there.

The framework is examined through a practice-based single case: Guerilla Domus, an installation and public performance in the Johanniskirche in Schwäbisch Gmünd, Germany, shown from 18 September to 31 October 2026. The project combined AI-generated allegories of the adjacent Johannisplatz, a threshold ritual in which visitors were invited to deposit their smartphones in a coffin, a mixed-reality staging of a Pietà above the real square, and a live transnational link to Molfetta in southern Italy. The author conceived, produced and performed the work. The paper treats it as the first of a planned series of case studies.

Three research questions (RQ1 to RQ3) guide the analysis:

1. Can AI-generated speculative imagery act as an epistemic instrument for urban imagination when it is anchored in a real public space?
2. What conditions does curated immersion require in a public already absorbed by dispersed, device-based immersion?
3. Which design principles follow for immersive Citiverse applications that aim at civic engagement?

The contribution is threefold. First, the paper articulates Projective Fiction as a design-theoretical position within the Citiverse discourse. Second, it introduces the paradox of the second immersion as a concept for analysing how citizens engage with immersive urban technologies. Third, it derives four design principles (threshold, shared view, anchoring in place, declared fiction) from a documented public deployment.

2 Background

2.1 From smart city to Citiverse

The smart city paradigm framed the city as a system to be measured and steered in real time. Kitchin showed that this framing privileges operational control and tends to reduce urban life to what sensors can capture [7]. Urban digital twins extended the paradigm by coupling data streams with three-dimensional city models. Batty

cautioned early that a city cannot be duplicated in full: every twin remains an abstraction, and its purpose decides what it leaves out [3].

The Citiverse adds immersion and participation to this lineage. Standardisation work at the International Telecommunication Union (ITU) describes it as a unified, interoperable environment that integrates digital twins with metaverse technologies across urban domains [2]. Its stated difference from the smart city lies in the role of the citizen, who is expected to contribute directly within the shared virtual layer instead of being served by a centrally controlled system [2]. A recent ITU taxonomy lists virtual urban placemaking among the planning applications of the Citiverse [1].

Participation, however, has a long and ambivalent history in planning. Arnstein's ladder distinguished genuine citizen power from forms of involvement that merely inform or placate [8]. Immersive technologies do not escape this distinction. An immersive twin can host deliberation, but it can equally become a more persuasive medium for presenting decisions already taken. Which of the two it becomes depends less on rendering quality than on how the experience positions the citizen.

2.2 The unbuilt as knowledge

Architecture has a long tradition of works that matter without being built. Cedric Price's Fun Palace, developed from 1961 with the theatre director Joan Littlewood, was never realised, yet it reshaped thinking about indeterminate, user-driven architecture [9, 10]. Price treated architecture as a means of enabling possibilities rather than producing objects, and he openly questioned whether building was always the right answer to a spatial problem [10]. Robin Evans demonstrated that the architectural drawing is no neutral translation of a finished idea into matter: it generates properties of its own that the building may never possess [11].

Michelangelo's facade for San Lorenzo in Florence offers an earlier precedent. Developed from 1516 and cancelled in 1520, it survives in drawings and a wooden model, and it remains one of the most intensively studied projects of the Renaissance [12]. Hans Hollein's 1968 manifesto declaring that everything is architecture extended the discipline further, to media and environments beyond the building [13]. Together these positions establish that the unbuilt project is not a failed building. It is a form of architectural knowledge in its own right.

2.3 Speculation, fiction and generative AI

Speculative design reframed the designed artefact as a prompt for debate about possible futures rather than as a product [14]. Design fiction, in Bleecker's formulation, uses prototypes and narratives to make futures tangible enough to be discussed [15]. Both traditions refuse the realisation imperative, but they rarely address a specific, inhabited place. Their fictions tend to be set in an unnamed near future, somewhere.

Generative AI has intensified this field. Pierpaoli and Gonzalez Meza argue that AI-supported architectural speculation operates neither as normative utopia nor as dystopian warning alone; both modes become diagnostic instruments that expose the limits of the present [16]. In their reading, AI acts less as a production tool than as an amplifier of speculative imagination. Work in transition design has shown how speculative scenarios can be anchored in a concrete city and its cultural specifics, as in Iwabuchi and Mizuno's study of Kyoto in 2050 [17].

Methodologically, such work belongs to research through design, in which making is itself a mode of inquiry [18], and to the tradition of reflective practice that treats the practitioner's reflection in action as a source of knowledge [19].

2.4 Immersion and dispersed attention

Milgram and Kishino placed mixed reality on a continuum between the real and the fully virtual environment [20]. Slater and Wilbur distinguished immersion, a property of the technical system, from presence, the subjective sense of being there [21]. Both frameworks model immersion as something a system produces in a user who is otherwise unimmersed.

Ubiquitous computing complicates this assumption. Weiser envisioned computers that recede into the background of everyday life [22]. The smartphone realised a different version of that vision: a device that is always present but never recedes, and that keeps part of its user's attention permanently elsewhere. Turkle described the resulting condition as being alone together [4]. Crary analysed the colonisation of attention by continuous, round-the-clock media [5]. Haidt links the shift to a phone-based childhood with rising anxiety and depression among adolescents, a thesis that

remains debated [6]. In participatory art, Bishop showed that collective presence is never a given and that its staging always carries social and political choices [23].

These strands converge on one point. Immersion in the city is not an absence waiting to be filled by the Citiverse. It is a contested resource that is already claimed.

3 Framework: Projective Fiction and the paradox of the second immersion

3.1 Projective Fiction

Projective Fiction denotes a practice in which speculative images of a real place are produced, often with generative AI, and then projected back onto that place as a shared experience. The term carries two meanings of projection. The image projects forward, towards a possible condition of the city. It is also projected onto the city, physically or through mixed reality, so that fiction and site meet in the same field of view.

Three properties distinguish Projective Fiction from architectural visualisation and from generic speculative design:

1. **Emancipation from realisation.** The image does not promise a building. It is complete as an image, in the sense in which Price's unbuilt projects and Michelangelo's San Lorenzo model are complete as architecture [9, 12]. Its value lies in what it makes thinkable, not in what it makes buildable.
2. **Anchoring in place.** The fiction is tied to a recognisable, inhabited site: a square, a facade, a street that viewers know from daily life. Unlike speculative scenarios set in an unnamed future [14, 15], it addresses people where they stand.
3. **Publicness.** The fiction is experienced collectively and in situ, not consumed privately on a screen. The site becomes the venue of its own reimagination.

Generative AI plays a specific role within this framework. It lowers the cost of producing images of high atmospheric precision, which allows the designer to iterate on the emotional and social condition of a place rather than on its geometry. Following Pierpaoli and Gonzalez Meza [16], AI serves here as an amplifier of the

designer's imagination. Authorship, selection and the decision to stop iterating remain with the designer.

Table 1 positions this projective mode against the two dominant modes of the urban digital twin.

Table 1 Three modes of the urban digital twin

	Descriptive twin	Predictive twin	Projective twin
Guiding question	What is?	What will happen if?	What could be imagined?
Relation to the city	Mirror	Simulation	Fiction anchored in place
Typical content	Geometry, sensor data, assets	Scenarios, flows, risks	Speculative images, staged overlays
Role of the citizen	Data source, viewer	Stakeholder in decisions	Co-present participant in imagination
Success criterion	Accuracy	Predictive validity	Shared imagination and debate
Typical risk	Surveillance, reduction	Technocratic closure	Aestheticisation, manipulation

3.2 The paradox of the second immersion

The second concept concerns the condition under which Projective Fiction, and any civic Citiverse application, is received. Two forms of immersion can be distinguished.

The first immersion is dispersed. It is the continuous, individual, platform-curated absorption by the smartphone. It accompanies citizens through the square without belonging to it. It is rarely experienced as immersion at all, because it has become the normal state of urban attention [4, 5].

The second immersion is curated. It is designed for a specific place and time, it has a beginning and an end, and it addresses its participants as a temporary collective.

Headset-based experiences, projection, mixed reality and staged spatial installations belong to this category.

The paradox is this: the Citiverse seeks to win citizens' attention for the shared city through the same class of devices that withdrew this attention from the city in the first place. A curated immersion delivered through personal devices risks being absorbed into the logic of the first, as one more feed among many. Conversely, a curated immersion that demands full attention must first displace the first immersion, which cannot be switched off by decree.

From this follows the working hypothesis of the paper: the second immersion can function as a civic experience only if the first is explicitly suspended at a designed threshold. A corollary is that the first immersion will tend to reassert itself by re-mediating the second. Participants record the curated experience on their own devices and feed it back into the dispersed stream. The paradox cannot be dissolved. It can only be staged and made visible. This is not an argument against immersive technology, on which the case itself relied. It calls for a conscious, measured use, in which the temporary separation from the device becomes a symbolic ritual that opens room for direct perception, encounter and self-reflection. This stance was the conceptual starting point of the work, formulated before the opening, not a conclusion drawn from visitor reactions.

4 Methodology

4.1 Research design

The study follows a research-through-design approach [18], in which the design, production and public staging of a work constitute the inquiry. It is structured as a single instrumental case study [24]: the case is examined not for its own sake but to test and refine the framework introduced above. The author acted as designer, producer and performer. Insights therefore also derive from reflection in action during production and from reflection on action afterwards [19].

4.2 Data sources

The analysis draws on seven sources:

1. **Design records:** prompt iterations and image versions of the two central AI-generated images, produced during March 2026, after which they were frozen and no longer altered. The exhibition concept as a whole, including production, was developed between March and early September 2026.
2. **Spatial capture:** a point cloud of the tower recorded on 23 July 2026 with an iPhone 17 Pro and processed in Vectorworks Cloud Services, a photograph of the Johannisplatz taken from the top of the tower, and a second point cloud of the nave and the square recorded with Vectorworks Nomad and a Gaussian splat of the west end recorded with Scaniverse, both on 13 November 2026, after the exhibition had closed but with the light panels still in place.
3. **Production documents:** the run of show for the opening, the seating plan and the technical set-up for mixed reality and streaming.
4. **Audiovisual documentation:** video of the opening by a commissioned videographer and the recording of the mixed-reality conducting performance, both publicly accessible (see Data availability).
5. **Field notes:** the author's notes during the exhibition period and a written reflection after the opening.
6. **Public reception:** regional and Italian press reports and broadcast coverage, used as external accounts of the event [25–32].
7. **Counts:** attendance at the opening as reported by the press, and the number of smartphones donated and deposited, as counted by the author.

No questionnaires or structured interviews were conducted at the opening. Claims about audience reception are therefore limited to observable behaviour, documented statements and external press accounts.

4.3 Analysis

The material was analysed interpretively along the three research questions. Observations from the author's notes were cross-checked against the video documentation and against independent press accounts wherever possible. Statements reported in Section 6 are attributed to their source. Where the author's own perception is the only source, this is stated.

4.4 Tools and use of generative AI in the work

The two central images were produced during March 2026 with Google's generative image models Nano Banana 2 and Nano Banana Pro, in many iterations. A three-dimensional Pietà was derived from an openly licensed 3D scan of Michelangelo's Pietà from the Scan the World project, available on Wikimedia Commons, staged in Vectorworks and Enscape, exported as FBX and deployed on a Microsoft HoloLens 2 in collaboration with a colleague from the HFT doctoral programme HIRE. The conducting performance used a Meta Quest 3S running a drawing application developed at HFT Stuttgart by Alexander Baur. The final images were upscaled to approximately 8,000 pixels for fabric printing.

In preparing this manuscript, the author used an AI language assistant (Claude, Anthropic) for structuring and drafting text. All content was reviewed, revised and verified by the author, who takes full responsibility for it.

4.5 Positionality

The author is both the researcher and the creator of the case. This dual role provides privileged access to design decisions, but it creates an obvious risk of confirmation bias. The paper addresses this risk in three ways: it separates design intentions from observed outcomes, it relies on external accounts for claims about public reception, and it reports failures and unintended effects alongside successes.

5 Case study: Guerilla Domus, Schwäbisch Gmünd

5.1 Site and context

Schwäbisch Gmünd is a mid-sized town east of Stuttgart. The Johanniskirche, a late Romanesque church from the thirteenth century, stands on the Johannisplatz in the historic centre. Across the square lies the Prediger, a baroque former Dominican convent that today houses the municipal museum and a cultural centre. The square is a daily crossing point and event space, and the place where the town's historic fabric is experienced most densely.

The project drew on two anchors. The first is local. The painter Jörg Ratgeb, born in Schwäbisch Gmünd around 1480 and executed in 1526 for his part in the Peasants' War, gave the project its notion of a guerilla image: art that takes a public position

against the dominant order of its time. The second anchor is transnational. The author's family originates from Molfetta in Apulia, whose Holy Week processions carry sculpted figures of the grieving Madonna through the streets. The Pietà, or Vesperbild, emerged as a devotional image type in German-speaking lands before it reached Michelangelo's Rome. The project used this lineage as a bridge between the two towns. The idea of showing the work in the Johanniskirche came from the Gmünd sculptor Franz Huber, to whom the author presented the images on 27 March 2026, one week before Good Friday.

5.2 The images

The work began as two AI-generated images of the Prediger and the Johannisplatz, one by day and one by night. Neither proposes a building. The choice of the Prediger was itself critical: its historicist painted render simulates sculpted stone, and in the author's words, graphics is not architecture [26]. The images re-clad its facade in marble, an echo of Michelangelo's unbuilt marble facade for San Lorenzo [12]. They show the square filled with people whose faces are lit by their phones, each absorbed in a separate screen. In a side street, a monk prays wearing a virtual reality (VR) headset. Small personal markers, including the author's studio sign and a self-portrait, are hidden in the scenes. The visual logic is driven by light: the cold glow of the display set against the warm light of human presence.

The images were developed through many prompt iterations. They began with the facade and only later extended to the square. The decisive turn came from everyday observation of people crossing the town with their eyes fixed on their phones. From that point the images stopped exploring atmosphere and began to formulate a critique. They were completed in March 2026 and deliberately not altered afterwards. They were first released on social media in the night of Good Friday 2026, at 3 a.m., as simultaneous posts in eight languages (German, Italian, Turkish, Portuguese, Chinese, Hindi, French and Spanish), narrated by an AI clone of the author's voice. In the hours that followed, the author ran 20 kilometres and discarded his own smartphone, filming the act from a first-person perspective in a single take. He posted the video, spent three days offline and only slowly resumed answering messages on Easter Sunday; in his own framing, the smartphone rose again on the

third day. The move into physical space followed because, in the author's words, the work was meant to produce more than a quick like [31].

For the exhibition, both images were upscaled, printed on fabric and stretched over wooden frames built by a local carpenter. LED backlighting turned them into two light panels of roughly 1.8 by 1.0 metres, suspended on steel cables in the nave. Their reverse sides were hand-spattered in liturgical violet and gold with the schizzato technique of Apulian ceramics, a reference to medieval altar panels: machine in front, hand behind (Fig. 1).



Fig. 1 The light panel *Der Prediger (Nacht)* in the nave of the Johanniskirche. **a** Front view between the columns of the west gallery. **b** Oblique view showing the edge hand-spattered in liturgical violet and gold. Photos: author

5.3 The threshold

A coffin, lent by a local joinery, was placed at the closed west portal (Fig. 2c). Guests were invited to deposit old smartphones permanently, as a donation to the charity missio Aachen, which refurbishes usable devices, recycles the others for their raw materials and uses the proceeds for projects against modern slavery, and their current phones for the duration of the evening. For a current phone, guests received a Neapolitan playing card as claim token and a hand-painted candle, made by a local social initiative, as a sign of real light instead of display light. They then entered through a side portal and were seated facing west, reversing the church's liturgical orientation towards the altar [25]. Twelve of the donated devices were later cast in soap and wax as reliquaries named after the twelve apostles. Each resembles a candle, and only against the light does the phone appear inside it as a shadow [32].

5.4 Performance and portal

Once the guests were seated, the programme began with a performance by the author in a self-designed white chef's jacket, white gloves and a white VR headset. He had placed his own smartphone in the coffin as the first device of the evening; it returned to him, as it were, in the form of the headset. He opened the headset menu with the pinch gesture, which coincides with a familiar Italian hand gesture, and then conducted Vivaldi's "Winter" played by organ and violin, later joined by a DJ. Inside the headset, his conducting movements were drawn as lines in space. A live cast of this view to the audience proved unreliable in rehearsal, so the drawing was recorded and shown later in the evening.

At the end of the piece, at dusk, the author opened the west portal. Through it, guests looked over the coffin onto the real Johannisplatz and the Prediger, while the two light panels glowed to the left and right. Reality occupied the centre and its two fictions flanked it: the nave had become a triptych (Fig. 2).

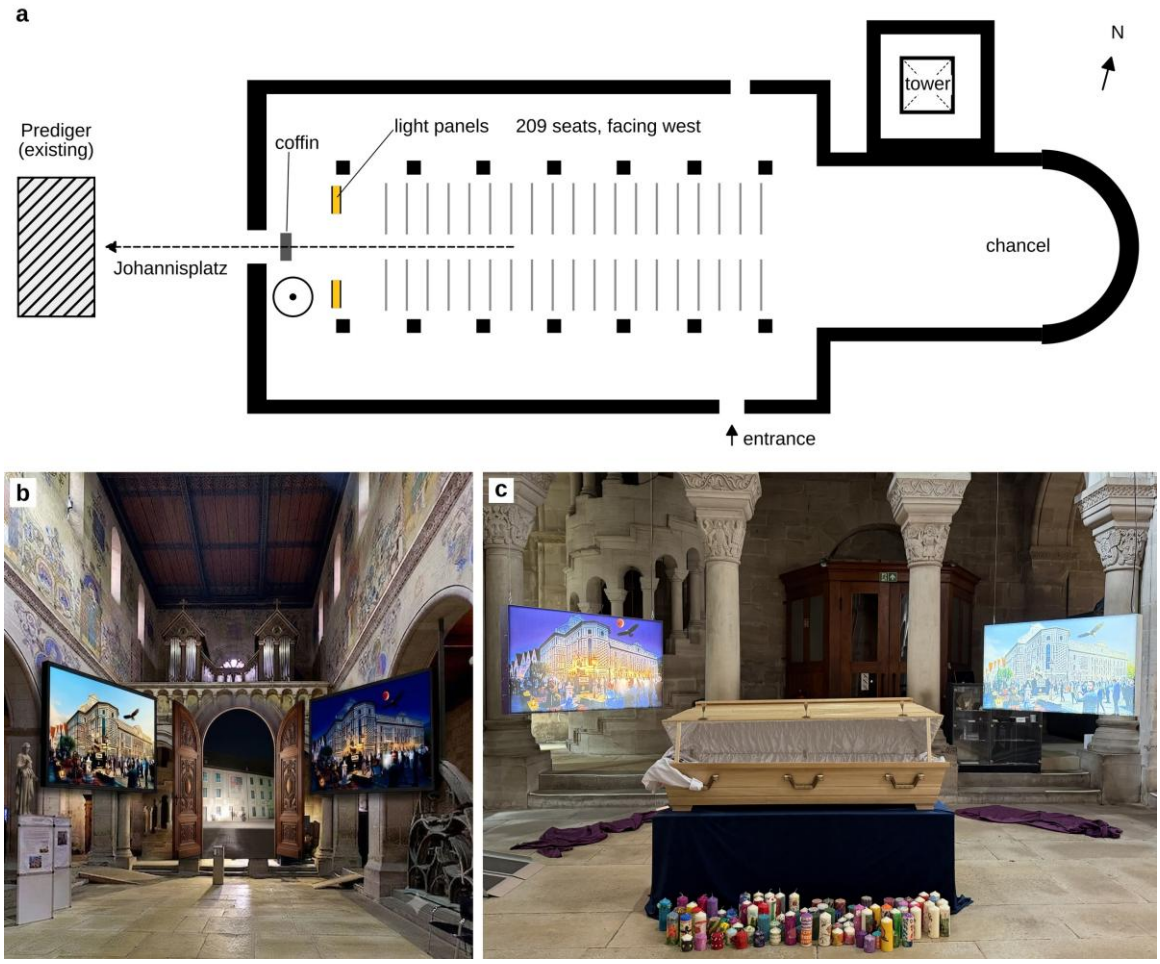


Fig. 2 Spatial dramaturgy of the opening. **a** Simplified plan of the Johanniskirche, redrawn after Strobel R. Die Kunstdenkmäler der Stadt Schwäbisch Gmünd, vol. 2. Munich: Deutscher Kunstverlag; 1995, p. 135, fig. 163, showing the two light panels (yellow) and the coffin at the west portal, the seating facing west and the existing Prediger beyond the portal; the dashed arrow marks the view through the opened portal. **b** Planning visualisation of the opened west portal flanked by the two light panels. **c** The realised installation at the closed west portal, with the coffin for the smartphones and the candles given in exchange. Drawing, visualisation and photo: author

5.5 Transnational link and mixed-reality layer

After a greeting by the town's first deputy mayor, a live video link connected the church with Molfetta. A city councillor of Molfetta and a local tradition association addressed the audience from the screen, and the Italian Cultural Institute in Stuttgart contributed a video greeting. The link closed with a cue from Molfetta inviting the audience to open their eyes and see the Madonna.

With this cue, the mixed-reality layer was activated. A Pietà, derived from an openly licensed 3D scan of Michelangelo's Pietà in St Peter's Basilica and rendered as a deliberately dissolved model, was carried above the real square by four bearers, as in the Holy Week processions of southern Italy. The choice of Michelangelo's version closes the circle drawn in Section 5.1: a devotional image type that emerged north of the Alps returned to Gmünd in the form of its most famous Italian realisation. The bearers were kept low in detail, and light sources were placed so that the face of Christ formed the brightest point of the scene. The figure was viewed through a HoloLens, and the wearer's view was projected live onto a screen inside the church, so that the entire audience shared it (Fig. 3). An image of this moment was published only three days later, mainly on social media, in reference to the Resurrection on the third day.



Fig. 3 The mixed-reality Pietà. **a** Staging of the deliberately dissolved model, derived from a 3D scan of Michelangelo's Pietà, with four bearers and a light source in Vectorworks. **b** The author wearing the HoloLens 2 on the Johannisplatz in front of the Prediger. **c** The HoloLens view projected in the nave beside one of the light panels. Image a: author, source model: Scan the World, "Pietà (Michelangelo)", Wikimedia Commons, licensed under CC BY-SA 4.0, modified; b: Juan Sardi Barzallo; c: still from the video documentation of the opening

5.6 The point cloud as spatial protocol

A point cloud of the church and the square, recorded after the exhibition with the light panels still hanging, documents the spatial configuration of the threshold in a single dataset: the square, the portal between the two panels and the nave behind it. Unlike a photograph, it records the installation as measurable space rather than as a view, and its dissolved, granular surface echoes the deliberately dissolved Pietà (Fig. 4). Together with an earlier scan of the tower and a photograph of the square from

above, it is part of the material for an immersive version for Apple Vision Pro, developed with XR HUB Bavaria, in which visitors would walk through a virtual night world of the square derived from the AI image and 360-degree photography. This version was not shown during the exhibition and remains in development.



Fig. 4 Spatial capture of the Johanniskirche and the Johannisplatz with the two light panels still in place, 13 November 2026. **a** Point cloud recorded with Vectorworks Nomad (about 2.4 million points), bird's-eye view from the square through the opened west portal into the nave, upper parts removed. **b** Gaussian splat recorded with Scaniverse, view from the nave towards the west gallery, the portal and the two light panels. Scans: author

Table 2 summarises the stations of the opening and the mode of immersion each one addressed.

Table 2 Stations of the opening on 18 September 2026

Station	Medium	Mode of immersion
Arrival at the west portal	Coffin, deposit of phones, candle	Exit from the first immersion
Seating facing west	Reversed liturgical axis	Collective attention to one shared focus

Station	Medium	Mode of immersion
Conducting performance	Organ, violin, DJ, VR headset	Second immersion, worn by one, recorded for all
Portal opening	Real square between two light panels	Reality framed by fiction
Greetings and live link	Video link to Molfetta, video greeting	Transnational co-presence
Mixed-reality Pietà	HoloLens view projected on a screen	Second immersion, shared view
Reception	Italian food and wine, phones returned	Re-entry into the first immersion

5.7 Continuation after the exhibition

The work did not end with the exhibition. Eight of the twelve soap reliquaries were offered in a benefit bidding process that closed at the finissage on 31 October 2026. Most of the proceeds go to the Johanniskirche, while all further donated devices go to the missio campaign, for which the church was registered as a public collection point [32]. The reliquaries were blessed by the parish priest on All Saints' Day, 1 November 2026, and are now being handed to their new owners. One remains with the parish priest and one with the author [32]. The twelve blocks range from clear to opaque, and one of them, Matthew, exists only as an image of the author's own phone, the first device laid in the coffin. In the author's framing, two relics set out for the two centres of belief of our time: Peter, a black iPhone 3GS, for the Vatican on All Saints' Day, and Thomas for Cupertino.

Thomas is to leave on 22 November 2026 by sea freight for Apple's headquarters in Cupertino. Its box carries an Apple AirTag, so that the journey is publicly traceable. It also contains a printed copy of Pope Leo XIV's encyclical Magnifica humanitas on the human person in the age of artificial intelligence [33], the missio receipt for the recycled devices and a handwritten letter by the author. The letter acknowledges the creative possibilities that Apple devices have opened and names functions such as focus modes and sleep schedules as essential for protecting users from excessive

use. The author also carried the project into national discussion through a published letter to the editor of DIE ZEIT [34]. In October 2026 he played the Good Friday film on a display iPhone in an Apple Store, returning the work to the commercial space of the device. The exhibition closed on 31 October without ceremony, speeches or audience. The relics lay on blue velvet where the coffin had stood, the centre left empty as in Leonardo's Last Supper, so that the altar remained visible through the gap.

6 Observations

The following observations are drawn from the opening on 18 September 2026 and the exhibition period. Each is attributed to its source.

6.1 Old devices were surrendered, current ones were kept

Attendance at the opening exceeded one hundred guests according to the regional press [25]; the author counted about 150 visitors. In total, about 64 old smartphones were donated to the coffin. Current phones, by contrast, were deposited for the evening by only ten guests; together with the author's own device, the first to be placed in the coffin, this made eleven. A figure of around 150 that later circulated in the press refers to visitors, not to deposited devices. No guest was obliged to take part, and the deposit worked as an offered social contract rather than a rule.

The coffin caused a stir, above all in the press, and many guests were initially taken aback by it. Those who deposited a device did so willingly and accepted the candle in exchange, trading artificial light for real light. The asymmetry is the central empirical finding: guests readily let go of devices that belonged to their past, but rarely of the one that connected them to the present.

6.2 The first immersion reasserted itself

The most instructive observation was unplanned. The regional review of the opening reported that, while the author pleaded for genuine encounter between people, countless screens lit up in the nave, recording the spectacle for the internet [25]. The reviewer himself described this as a paradox of the present, mirrored in the audience [25]. Since most guests had kept their devices, they re-mediated the curated experience into the dispersed stream almost as it happened. The same report

concluded that no algorithm can replace real encounter, even if a VR headset is needed as a reminder of it [25].

This is the corollary formulated in Section 3.2. The threshold did not abolish the first immersion; it made its return visible as a contrast. Within the logic of the work, this irony was not a failure but its most legible result. Media attention followed the same pattern. Regional and national broadcast coverage focused on the phone coffin as a digital detox action [27, 28], that is, on the threshold rather than on the AI images or the mixed-reality layer.

The author answered this dynamic with a counter-move of his own. The image of the mixed-reality Pietà was withheld from publication for three days and released only afterwards, in reference to the Resurrection. Delay became a means of protecting the curated moment from immediate absorption into the feed.

6.3 Shared view outperformed individual immersion

Two head-mounted devices were used during the opening, and each was worn by a single person. Their civic value depended entirely on making the view shared. The HoloLens view of the Pietà reached the audience only because it was projected, live and without interruption, onto a screen in the nave. The conducting performance in the Quest headset could not be cast live reliably and was shown as a recording. Technically, the mixed-reality layer was the most fragile element of the evening. Dramaturgically, its effect depended less on the fidelity of the overlay than on the spoken cue from Molfetta and on the collective act of looking at one screen.

6.4 Reality became the centrepiece

The opening of the west portal required no technology beyond a door and two light panels. The nave was completely dark when the portal opened, and the last daylight of dusk entered the church. Through the portal, guests saw the real Prediger as the central panel of a tripartite image, flanked by its abstractions by day and by night in the two light panels, in the manner of a church triptych (video documentation). The regional review described the same moment as the real square merging with a virtual staging [25]. The fictions framed reality instead of replacing it, which made this the clearest spatial statement of the framework on the evening. After the opening,

the light panels remained in the nave for six weeks and continued to frame visitors' view of the church interior.

6.5 Unscripted contributions and institutional resonance

Several significant moments were not scripted. During the open-microphone segment, a child from the audience, the author's nine-year-old daughter, spoke unprompted about a spark of the divine present in every person. The parish dean expressed astonishment at a dynamic the church had never seen before [25]. Institutional actors on both sides of the link took part: the town's first deputy mayor, a city councillor of Molfetta and the Italian Cultural Institute in Stuttgart. According to the press, the deputy mayor placed the author among Gmünd artists who have engaged with the town's history [25]. Italian local media reported on the opening and the live link [30] and covered the project under the theme of learning to disconnect [29]. The Dicastery for Culture and Education of the Holy See acknowledged the project in writing as an artistic treatment of the relationship between the person and technology (written communication to the author, 2026). Two museums follow the project: the Staatsgalerie Stuttgart documents it within its work on the reception of Jörg Ratgeb, and the Museum im Prediger, housed in the very building the images transform, observes its further development (personal communications, 2026).

7 Discussion

7.1 The speculative image as urban knowledge (RQ1)

The two images of Guerilla Domus did not propose any intervention in the Johannisplatz. They made a condition of the square visible: a public space in which people are physically together and attentionally apart. In this sense they worked as the diagnostic instruments described by Pierpaoli and Gonzalez Meza [16], with one decisive difference. Their fiction was set not in an unnamed future but on a square every local visitor crosses. Recognition of the site turned the allegory into a statement about the viewers' own town.

This answers the first research question with a qualification. AI-generated imagery can act as an epistemic instrument for urban imagination, but its effect is not located in the image alone. It arises in the encounter between image and site: when the portal opened, the real square became legible through the fictions beside it. This is

what the projective mode adds to the descriptive and predictive modes in Table 1. It does not improve the model of the city. It changes how citizens see the city that the model represents.

7.2 The paradox of the second immersion (RQ2)

The case supports the working hypothesis, with nuance. The curated experience required an exit from the first immersion, and that exit had to be designed: a coffin, an exchange, a reversed seating orientation. Without it, the mixed-reality layer would have competed with the phones in the audience's hands. Yet the exit could only be offered, not enforced, and it was taken up selectively: about 64 old devices were donated, but only ten guests gave up the phone in use. This corresponds to what Rosa describes as the uncontrollability of resonance: genuine encounter can be invited, but it cannot be produced on demand [35]. The first immersion returned at the very moment the work spoke against it, and the press recorded this return [25].

For the Citiverse, this has a methodological consequence. Participation in immersive urban applications is often measured through sessions, dwell time or interactions. These are metrics of attention capture, inherited from the first immersion. A civic Citiverse would need different indicators: whether citizens looked up from their devices, whether they shared a view with others, whether they discussed what they saw. In the case, the most meaningful moments, the portal opening and the shared screen, were precisely those in which individual devices mattered least.

The continuation of the work stages the paradox once more. The reliquary sent to Cupertino travels with an AirTag, so that anyone can follow its route through the same location network that keeps devices permanently connected. The work does not escape the first immersion. It uses its infrastructure to make the act of withdrawal visible. The author's own performance had anticipated this: the smartphone he surrendered first returned to him as a headset.

7.3 Design principles for a civic Citiverse (RQ3)

Four design principles follow from the case. They are formulated as hypotheses for further testing rather than as validated rules (Table 3).

Table 3 Design principles for civic immersive urban technologies derived from the case

Principle	Description	Evidence in the case	Implication for Citiverse applications
Threshold	Entry into a curated immersion is marked by an explicit, voluntary exit from the dispersed one	Coffin, phone deposit, candle, reversed seating	Design onboarding as a ritual of attention, not as a log-in
Shared view	Head-mounted experiences are made visible to those not wearing a device	HoloLens view projected in the nave; recorded Quest drawing	Pair individual devices with public screens or in-situ projection
Anchoring in place	Fictions refer to a real, recognisable site and are experienced there	AI images of the Johannisplatz; portal opening onto the real square	Stage speculative layers on site, not only in remote virtual twins
Declared fiction	Speculative content is presented as fiction, not as forecast or plan	Allegorical images, wall text presenting the work as a case study of Projective Fiction, named authorship	Label AI-generated scenarios clearly to protect trust in planning information

The principle of declared fiction deserves emphasis. Generative AI makes speculative imagery cheap and photorealistic. In a planning context, such images can easily be mistaken for proposals or forecasts, which would erode trust in the information on which civic decisions rest. Projective Fiction derives its legitimacy from the opposite move. It declares the fiction openly and thereby frees citizens to engage with it as a question rather than as an announcement.

The principles complement current research on participatory urban digital twins. The Herrenberg twin, for example, was opened to citizens in virtual reality as part of a

participatory planning process [36]. The Dublin Docklands twin collects citizen feedback through an open online model [37], which places participation in the individual, device-based mode of the first immersion. Critical studies point to what such twins leave out: they rest on a limited set of quantifiable variables [38], their development is shaped by particular interests and privileged access [39], and immersive twins and metaverses can multiply urban experiences to the point of social division [40]. Projective Fiction responds to the last point in particular. A shared, place-bound and declared fiction gives citizens one common image to argue about, rather than many private ones.

Transferred to an ordinary planning process, such as a public consultation on the redesign of the Johannisplatz, the principles would translate into concrete settings. The consultation would open with a threshold: a short, device-free moment marked by a simple ritual rather than a log-in. Head-mounted views of design variants would be projected for everyone present. The variants would be staged on the square itself, at the time of day they address. And speculative scenarios would be labelled as such and kept visibly apart from planned measures. Whether such settings improve the quality of deliberation is an empirical question for the next case studies.

7.4 A humanistic counter-model

Read against the Citiverse discourse, the case proposes a counter-model rather than an application. Counter-model does not mean opposition to technology: the work relied on generative AI, mixed reality and live streaming, and its continuation openly acknowledges the creative possibilities of the very devices it questions. What it opposes is unmeasured use. The worry that a new medium weakens a human faculty is old: in Plato's Phaedrus, Socrates says this of writing [41]. The question has never been whether to use a medium, but how measuredly. Current frameworks emphasise interoperability, data integration and use cases across urban domains [1, 2]. These are necessary. Yet the case indicates that the scarce resource of the Citiverse is not data but attention, and that attention in public space is already claimed by commercial platforms [5]. A Citiverse that merely adds another layer of screens risks colonising urban imagination with the aesthetics and metrics of those platforms. Institutional voices beyond urban research articulate a similar concern: Pope Leo XIV's first encyclical addresses the protection of the human person in the

age of artificial intelligence and describes the present as a choice between building a new Tower of Babel and a city that humanity shares with God [33].

Projective Fiction proposes a different use of the same technologies: brief, place-bound, shared moments in which citizens look at their city together and ask what it could be. In Arnstein's terms [8], such moments do not yet confer power. They do, however, restore a precondition of participation: a public that is present to itself.

8 Limitations and further research

The study has five limitations. First, it rests on a single case in a specific cultural and religious setting; a church interior lends threshold rituals a gravity that a municipal planning workshop lacks. Second, the author is the creator of the work, and despite the measures described in Section 4.5, interpretive bias cannot be excluded. Third, no structured audience data were collected, so statements about reception rely on press accounts and documented behaviour. Fourth, the mixed-reality components were technically fragile: the conducting performance had to be shown as a recording, which shows that the shared-view principle depends on robust casting infrastructure. Fifth, the immersive Vision Pro version, which would allow visitors to walk through the projective twin, was not shown during the exhibition and could not be evaluated.

Further research will address these limitations in three directions. First, subsequent case studies will transfer the framework to non-sacred settings. One candidate is a proposal for the adaptive reuse of a derelict factory in Cabeço Verde, Barreiro (Portugal), where speculative images are used in dialogue with the municipality. A second is a travelling presentation of the work at the Museo Diocesano in Molfetta. Both are under way, with open outcomes. In addition, the project has qualified for an exhibition of the European Cultural Centre at Palazzo Mora in Venice, held parallel to the 2028 Biennale; whether it will be shown there remains open. Second, future deployments will include short structured questionnaires and observation protocols at the threshold and after the shared-view moments, in order to test the principles in Table 3. Third, networked multi-user XR applications, such as the one being developed by Alexander Baur at HFT Stuttgart, offer a route to shared views that does not depend on projecting a single wearer's perspective.

9 Conclusion

The Citiverse will not be entered by a public that is waiting for it. It will be entered by a public already immersed in the dispersed attention of the smartphone. This paper has argued that this condition is the decisive design problem of civic immersive technologies, and it has named it the paradox of the second immersion.

Projective Fiction responds with a projective mode of the digital twin: AI-generated speculative images anchored in a real place, declared as fiction and experienced together on site. The case of Guerilla Domus in Schwäbisch Gmünd shows three things. Such a mode can make a familiar square newly legible. A designed threshold can open a curated immersion, though guests rarely give up the device they are using. And the first immersion will nonetheless return and must be anticipated. The four principles derived from the case, threshold, shared view, anchoring in place and declared fiction, offer a starting point for Citiverse applications that aim to expand rather than colonise urban imagination.

The most effective moment of the evening was also the least technological: a door opening onto a real square, framed by two fictions. For a field driven by technical capability, this may be the most useful finding. The Citiverse succeeds where it helps citizens see their city, not where it replaces it. The aim is not a retreat from technology but a return to the human.

Declarations

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Competing interests. The author is the creator and performer of the artwork analysed in this study and works as an artist under the name 2N2L. Works discussed in the case study may be exhibited or offered for sale in the future. The author declares no other competing interests.

Ethics approval and consent to participate. The study involved no experiments on human participants, and no personal data were collected from visitors. Observations refer to a public cultural event and to published press reports. Participation in the

smartphone deposit was voluntary; donated devices were passed to the charity missio Aachen for refurbishment or recycling. Statements by identifiable persons are taken from published sources. The statement by the author's minor daughter is reported with the consent of the author as her legal guardian.

Consent for publication. Not applicable. Photographs were selected so that no visitors are identifiable.

Data availability. The full film of the opening, the Good Friday film and further documentation of the work are publicly available at https://guerilladomus.art. The point cloud of the Johannisplatz and the image files are available from the corresponding author on reasonable request.

Use of generative AI. Generative AI tools were part of the artistic method, as described in Section 4.4. An AI language assistant was used for structuring and drafting the manuscript; see Section 4.4.

Author contributions. M.I. developed the framework, designed, produced and performed the case study, analysed the material and wrote the manuscript.

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