RESEARCH ARTICLE

Resilient Matters: The Cathedral of Syracuse as an Architectural Palimpsest

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While every material artifact engages with time on various levels, palimpsests stitch together layers from several periods simultaneously. By physically expressing the passage of time, architectural palimpsests explicitly raise questions about the historicity of buildings. These questions concern cultural heritage studies and architectural historiography, and reverberate in renovation projects and design commissions. As yet, in architecture there is no theory that covers in a consistent manner the way palimpsests express historicity. This article approaches the diachronic essence of the architectural palimpsest, starting from the original use of the term ‘palimpsest’ in paleography. It distinguishes a set of features by which to explore buildings that can be labelled as palimpsests. By discussing the Cathedral of Syracuse through this lens, the article illustrates its various palimpsestic features and shows how an architectural palimpsest can embody resilience.

Introduction

It can be argued that architecture, more than any other cultural manifestation, is a visual expression of changing historical circumstances, economic and social conditions, and ideas and values. Buildings generally have long life-spans during which they adjust to changing surroundings and demands as well as to physical wear and tear. Their capacity to survive is not the result of being impervious to developments around them. On the contrary, buildings are well equipped to cope with the progression of time through material transformations. While the ability to adapt to changing circumstances may seem at odds with the idea of a building’s physical durability, it is in fact indispensable for architectural resilience.

Buildings that physically show different stages and layers resulting from adaptations are often characterized as ‘architectural palimpsests’ (Allford 2014: 16). Yet in the context of architecture, the exact meaning of this evocative term, which has been borrowed from the field of paleography, remains elusive. At present, there is no system or theory in architecture that covers in a consistent manner the expression of historicity as seen in palimpsests. What is more, the challenges and consequences of reusing existing buildings have not been adequately addressed. The architectural adoption of the term ‘palimpsest’ coincides with fairly recent developments in cultural heritage studies. The booming practice of adaptive reuse of a wide variety of buildings has given rise to discussions that encompass practical challenges, ethical issues and other relevant heritage considerations (González-Longo 2012: 68–70; Aksamija et al. 2017: 16; Provoost 1995).

This article explores the particular qualities of the architectural palimpsest starting from the original use of the term palimpsest in paleography. Taking a closer look at the composition of the manuscript known as the Archimedes Palimpsest (Figure 1a, 1b), the discussion distinguishes a set of relevant features that enable us to assess the strength of analogies between the paleographic and the architectural palimpsest. By discussing the Cathedral of Syracuse through this lens, the article calls attention to the structure’s various palimpsestic features (Figure 2). Examining them to see whether they adhere to the original term or have taken on a different shape in architecture leads to a more precise understanding of the architectural palimpsest, its constituents and the added value of this concept for unravelling the dynamics of historicity in buildings.

The Palimpsest in Paleography

The word palimpsest is derived from ancient Greek: πάλιν ψηφότος, meaning ‘shaved off again’ or ‘scraped clean again’. In ancient Greece and Rome, the term referred to a document written on a wax tablet or other surface from which previous writing had been removed. It is most frequently used in the field of paleography, in reference to parchment manuscripts composed of folios of vellum, or animal hide, that have been washed or scraped clean of old text in preparation for new content. Sometimes, however, traces of the earlier text remain visible, when the ink or pigment of the older text survives or when an imprint of the stylus or another instrument is still discernible. Thus, a palimpsest is created (often unknowingly) when the old text remains partly visible underneath and through the new layer. Many paleographic palimpsests survive from the Middle Ages. Famous paleographic palimpsests include the Codex Ephraemi Rescriptus and the Archimedes Palimpsest.
In comparing the composition of the architectural and the paleographic palimpsest, a set of features discernable in the Archimedes Palimpsest provides a constructive starting point. Within this unique manuscript, a series of 10th-century texts copied from the Greek mathematician Archimedes were reused in the 13th century to create a codex of Christian liturgical texts. Research on the manuscript has revealed that the older portions of text incorporate ‘Stomachion’, ‘The Method of Mechanical Theorems’ and a Greek version of ‘On Floating Bodies’ (Netz, Noel 2008: 15 ff.).

The Archimedes Palimpsest consists of multiple components. To begin, the physical aspect of the manuscript’s surface functions as carrier, which needs to be sturdy and reusable. In the Archimedes Palimpsest, as in most paleographic examples, this is parchment. Parchment is a particularly suitable media for a palimpsest because its physical thickness allows for scratching or scraping and reuse. Depending on the thickness, this process may be repeated several times. Secondly, there is the material aspect of what is recorded on the surface — text or images rendered in chalk, ink, incisions or braille markings, which are visible or tangible and appear in two or more layers. In the Archimedes Palimpsest, both layers of recorded material are rendered in ink. A third component of the paleographic palimpsest lies within the text (or image), which carries content that transfers meaning. This immaterial aspect of the palimpsest ranges from literal meaning to symbolic meaning to subjective attribution of importance and issues of interpretation. The oldest layer of the Archimedes Palimpsest consists of the 10th-century rendering of three texts by Archimedes. Their importance lies in their scientific significance as well as their rarity; until the recovery of this palimpsest, ‘Stomachion’ and ‘The Method of Mechanical Theorems’ were believed to have been lost. The second, 13th-century layer is composed of Christian liturgical texts. At the time of its creation, the reuse of the old folios was seen to be justified. Nowadays, the liturgical texts are still of interest but considered less important because many copies survived. A fourth and final immaterial component of the palimpsest may be identified in the carrier itself, which also transfers meaning through its connotations of value and durability. Parchment is valuable and exudes luxury, especially when compared to the use of cheaply produced and widely available paper in later periods.

Both form and meaning of a palimpsest are therefore layered, and they reinforce and interact with each other. Nevertheless, the decisive reason for the creation of paleographic palimpsests appears to have often been economic. In the Archimedes Palimpsest, for example, at the time of reuse the surface was considered more valuable than the

Figure 1: (a, b) The Archimedes Palimpsest, as seen by the naked eye and as seen through digital imaging. Various types of digital enhancement were used to extract maximum information. The lines from the prayer book can be seen running vertically in these images, while the lines from the Archimedes text are running horizontally. Anonymous owner. Photo courtesy of Walters Art Museum.
original writing on it. Whether the author of the added layer knew of or appreciated this content is a matter of interest to historians of science. In any case, in the 13th century it was justifiable to remove the existing text to prepare the carrier for reuse. In the case of Archimedes, as well as with many other palimpsests, the survival of the older text is often entirely accidental.

The Palimpsest in Architecture

From the 19th century onwards, the term palimpsest has also been used in other disciplines. Thomas de Quincey compared the human mind to a palimpsest in *Suspiria de Profundis* (1845):

> What else than a natural and mighty palimpsest is the human brain? Such a palimpsest is my brain; such a palimpsest, O reader! is yours. Everlasting layers of ideas, images, feelings, have fallen upon your brain softly as light. Each succession has seemed to bury all that went before. And yet in reality not one has been extinguished. (1998: 135)

A comparison between the workings of the human mind and the urban context in a way that strongly evokes the palimpsestic metaphor was made by Sigmund Freud, in a contemplation about Rome in ‘Civilization and its Discontents’ (1930):

> Let us make the fantastic supposition that Rome were ... a mental entity with just as long and varied a past history: that is, in which nothing once constructed had perished, and all the earlier stages of development had survived alongside the latest. This would mean that in Rome the palaces of the Caesars were still standing on the Palatine ... Where the Coliseum stands now, we could at the same time admire Nero’s Golden House; on the Piazza of the Pantheon we should find not only the Pantheon of today as bequeathed to us by Hadrian, but on the same site also Agrippa’s original edifice; indeed, the same ground would support the church of Santa Maria sopra Minerva and the old temple over which it was built. And the observer would need merely to shift the focus of his eyes, perhaps, or change his position, in order to call up a view of either the one or the other. (Freud 1985: 258)

This evocation of the architectural palimpsest inspires the imagination, but fails to provide a starting point for further examination (see Hollis (2009) and Sarah Newman’s essay in Aksamija et al. 2017: 89, 94). The embodiment of time in evolving palimpsests is a physical process, the result of adaptive reuse. This is not so much governed by universal patterns but by circumstances and contemporary beliefs about architecture and heritage (Provoost 1995: 9).

![Figure 2: Cathedral of Syracuse. Wikimedia Commons, photo by Sailko, 2009.](image-url)
Contemporary historiography and criticism of architecture have created a misleading division between the design of architecture ex novo and its conservation after construction (González-Longo 2012: 68). In fact, buildings are not static. If they were, their longevity would imply an immutability that would place them at risk of becoming obsolete. On the contrary, when buildings are allowed to stay ‘in sync’ with the changes in the world around them, their durability is reinforced, contributing to their resilience. In this view, resilience is an essential characteristic of individual buildings, and their capacity to adjust to changing circumstances is the key to achieving resilience. In practice, this is the rule rather than the exception, which is why hybrid buildings exist in abundance (Burns 1995). The theoretical ideal of the immutable building, however, which has been advanced since the Renaissance and increasingly so in the modern period, has complicated our understanding of what is ‘original’ in the context of architecture and the built environment (Brand 1997: 2 and 54).

The 19th-century debate concerning conservation and preservation, led by John Ruskin and Eugène Emmanuel Viollet-le-Duc, shows an awareness of the dynamics of buildings, but as yet, there is no system or theory in architecture that covers in a consistent manner the diachronic nature of the palimpsest (Provoost 1995: 10; Brand 1997: 210). The challenge in developing such a theory, which addresses not just the history but the historicity of buildings lies in the inclusion of the factor ‘time’ in a dynamic way. Looking at buildings through the lens of the palimpsest involves including the interaction between layers and the various contemporary views they reflect about the status of the building, its conservation and its authors. In what follows, I will illustrate this approach through a discussion of the Cathedral of Syracuse. In an instance of serendipity, the first completed layer of the structure, the Athenaion, must have been well known by Archimedes, who lived and worked in Syracuse.

**Temple to Church: The Creation of an Architectural Palimpsest**

On the site of the building we now call the Cathedral of Syracuse, on the peninsula of Ortigia in Syracuse, a Greek temple was built around 500 BC in the Doric style (Figure 3). Over the course of its history, it underwent a series of changes, which transformed the structure both in its form and function. As originally built, the temple was of the hexastyle peripheral type, with six columns on the east and west, fourteen on the lateral sides, and a pronaos on the eastern side. The temple is indicated as an Athenaion because it is dedicated to Athena. Excavations revealed the temple’s altar outside the north-east wall. According to legend, the temple was founded by Gelon, the Greek king of Syracuse, after a battle near Himera (480 BC) where the Greeks defeated the Carthaginian army. The building was inseparably connected to this important victory in the collective memory of the Syracusans. Nevertheless, features of the temple suggest a more archaic date. Although the structure incorporates classical features such as the measurements of the columns, the height and angle of the capitals, which may be dated to c. 480–470 BC (Mertens 2006), the shallowness of the columns’ fluting should be dated earlier, perhaps to around 525 BC.

![Figure 3: Cathedral of Syracuse, façade and north wall. Wikimedia Commons, photo by Zde, 2012.](image-url)
The link between the temple and the battle of Himera established a connection between the materiality of the structure and its immaterial connotations even before the building itself became a palimpsest. Yet a building cannot be a palimpsest in its idea or concept alone. Layering in a palimpsest is the result of a physical process, which is visibly discernible and materially tangible.

In Roman times, the temple was mentioned by Cicero and Livy. There are no known physical alterations during the Roman period; it is assumed that the building fell into disuse (Agnello 1952: 38). Although Syracuse was Christianized at a very early stage, the Christians were originally reluctant to practice their faith in the pagan temples. It was not until the 3rd century that the dedication of old sites, such as the Athenaion, was changed and pagan temples were converted into Christian churches (Agnello 1952: 38). Only in the 7th century, during the Byzantine presence on Sicily, were physical alterations to the temple ordered by bishop Zosimo of Syracuse (Agnello 1952: 38–40). With these, the Athenaion was changed into a Greek Orthodox church.

The 7th-century Byzantine transformation of the structure consisted of three physical alterations. The peripteros was closed by inserting walls between the columns of the pteron (leaving the Doric columns in place), creating a closed outer church wall. The cella walls were opened up with large arches, connecting the spaces within and outside the cella. In effect, this created a three-nave structure, with the addition of three half-round apsides to the eastern ends of the three naves, the middle one (the bema) housing the altar, with a prothesis and diaconicon to the left and right (Figure 4). Finally, the orientation was modified. On the eastern side, the pronaos was closed off to accommodate the altar. A new entrance was created on the west side, in accordance with the conventional orientation for Christian churches. This illustrates that ‘layers’ in an architectural palimpsest, unlike in a paleographic one, can be added in multiple ways, sometimes causing a complicated ‘entanglement’.

In this period, similar physical adaptations were applied to many other comparable buildings, such as the hexastyle peripteral temple of Concord in Agrigento (Agnello 1952: 40; Esch 1969: 10). In addition to the economic and utilitarian considerations in reusing antique temples (Greenhalgh 2009), the standard practice was to continue the use of a site of local historical and ritual importance. This led to a veritable flood of palimpsests in the Mediterranean region.

In Syracuse, no conclusive documentation exists that sheds light on the motivations for preserving the temple in the Byzantine church. In this case, in addition to motivations of an economic, historical and ritual nature, the association to the victory of 480 BC remains an important factor. The identification with the Greek past remained strong during the Byzantine period, underscored by the use of Greek as its first language (Finley 1968: 47). This linked the Greek temple to the Greek Orthodox Church, spanning different religions but signalling cultural continuity.

As a palimpsest, the temple presented a series of parts from different periods that could be distinguished in their stylistic characteristics. But while a description of the individual layers in chronological, formal and stylistic terms addresses each layer separately, it does not reveal the catalysts behind the transformation. These are to be traced in changes in the ‘lifeworld’, a term used by Trachtenberg (2010) to indicate the context in which the building is conceived, built and exists. In this lifeworld, political, religious and cultural changes constantly generate different needs. Successive architects and building masters would respond to these changes by making adjustments. This practical reality has prevailed in almost every building project and continues throughout the whole lifespan or

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**Figure 4:** Cathedral of Syracuse, comparison of plans at three stages, left to right: The Athenaion (east entrance; top of image); the Byzantine church; present-day plan (west entrance; bottom of image). Source: www.galleriaroma.it (last accessed 28–01–12).
‘time of the building’, until Modernity (Burns 1995). The concept of the architectural palimpsest is unthinkable without this approach to the building process, although not every principle that governs Trachtenberg’s definition of ‘building-in-time’ is applicable. His principle of retrosynthesis, aimed at retroactively ensuring harmony and unity as a final result (Trachtenberg 2010: 141–143), is often absent in palimpsests. And when it is applied, it makes them very difficult to read.

**Erasure and Addition: Choices that Guide Change**

With respect to the removal of layers, the architectural palimpsest typically differs from its paleographic counterpart in a significant way. In a palimpsest of ancient writing, where the palimpsest exists primarily as a result of economic motives, someone intended to remove the original content of the carrier and its meaning, but has not succeeded in their complete removal. However, in architecture, carrier and content cannot always be clearly distinguished, and the removal of ‘content’ is not always sought or realized. On the contrary, the significance of the older layer is often part of the motivation for the preservation and reuse of the building. As a palimpsest, the Cathedral of Syracuse underwent not just additions and modifications, but it also endured deliberate destruction and erasure. In the 9th century, Sicily was conquered by the Arab Aghlabids from Ifriqiya (around Kairouan, in present-day Tunisia). Syracuse was one of the last cities on Sicily to come into Arab hands in 878. The event was recorded by the monk Theodosius, who was captured and exiled to Palermo.11 He describes the fall of Syracuse and the treasures of the cathedral being taken away. The Aghlabids were succeeded by the Fatimids around 909 (Egger 2004: 163; Smith 1968: 9).12 Very little is known of the Arab presence in Syracuse, which lasted until 1086, and likewise, there is no information about the cathedral and its use in this period (Smith 1968: 5–6).13 It is assumed it was turned into a mosque, like many churches were, perhaps even used as a Friday mosque (Peers 2010: 94) since no traces of a Friday mosque have been found in Syracuse. The mosaics in the apse suggest Arab workmanship, but no certain traces of use as a mosque remain, and no documents or other indications provide secondary information about the building during the Arab period. This is a gap, possibly in the material layers of the building (if traces of its use as a mosque were removed), and certainly in the fabric of memory.

The Norman Kingdom of Sicily of the 11th and 12th centuries was a multicultural society. The eclectic Siculo-Norman building style has led to the assumption that the Normans generally esteemed their predecessors on Sicily and their material culture. However, in Syracuse, the conspicuous absence of traces left by the Arab presence has led researchers to wonder whether the Normans suppressed and erased material traces (Peers 2010: 93–97, concurring with Amari 1933–1939). If the church in Syracuse was indeed used as a Friday mosque, perhaps with a minaret and decorations, these were apparently removed by the Normans. This raises questions about the presumed inclusivity of the Siculo-Norman society. In this particular case, such absence of material traces gives cause

![Figure 5: Cathedral of Syracuse, north wall (exterior) with integrated Greek columns. Photo by Jo’anne van Ooijen, 2011.](image-url)
to reassess the interpretation of available data. It also complicates our understanding of the building as palimpsest. In the analogy to paleography, the church is comparable to a reused parchment from which the previous writing was completely and successfully removed, resulting in an object that would not be characterized as a palimpsest.

While the Arabic history of the Syracuse temple remains opaque, the Normans’ additions to the building are more easily traced. They raised the walls of the central nave, formerly the cella, to add an extra level with windows. They also added rounded battlements on top of the outside northern wall (Figure 5). By now, the additions and alterations to the building had taken many shapes and directions. This is typical for architectural palimpsests. Some extend below ground level, incorporating caves, crypts or modern expansions (such as the Church of the Holy Sepulchre in Jerusalem, and many medieval churches). Some were expanded with additions to their ground plan or their elevation (the Mezquita in Cordoba). Some deliberately present a striking contrast (the Louvre in Paris, with its pyramid by I.M. Pei), while others have additions that are intended to blend in with the older layer (Trachtenberg’s ‘retrosynthesis’), stressing harmonization. Some have been absorbed in a new outer shell (the Tempio Malatestiano, Rimini), while others incorporate transformation to the interior (the British Museum, London). All of these examples are the result of different solutions to questions concerning design, authorship, originality, conservation and innovation."\14 The externalization of such choices is one of the most interesting aspects of the palimpsest and its capacity to reflect contemporary views on architecture and the appreciation of heritage. These are often time-bound and susceptible to change themselves. In modern cases there is usually some sort of documentation of the considerations made by patron and architect, sometimes in the context of a public debate. In prem­­modern cases, such documentation is rare.

**Juxtaposition of Layers and Accumulation of Meaning**

An example from the Early Modern period in which the views of the architect are well known is the Tempio Malatestiano in Rimini. The design of this structure, in fact a remodelling of the existing church of San Francesco, was overseen by Leon Battista Alberti.\15 In *De re aedificatoria* (ca. 1450, printed 1485), Alberti famously asserted that the design and building stages of architecture should be strictly separated, with a design first perfected and then executed with no further alterations. The architect appears here as the sole auctor, his design eternally preserved and unmodified. However, as scholars have often noted, this model was highly impractical, as such an ideal project could only exist in a time vacuum, and could only be realized on a completely clean slate from the start. Alberti’s ideal also stood in conflict with his actual practice in Rimini.\16 Alberti’s new façade literally envelopes the 13th-century San Francesco, the burial church of the commissioning Malatesta dynasty. Forced to work around this, Alberti’s addition is an attempt to apply his ideas about perfect design and the architect’s creativity while incorporating the existing structure.\17 The result expresses Alberti’s view on design, authorship and originality as well as his struggle to achieve it. It illustrates Michelle Provooost's point that the palimpsest can reflect beliefs (in this case the architect's) about architecture (1995: 38ff).

The meaning of the various physical layers in the church in Rimini is pulled together by the significance of the building as a whole for the Malatesta family. Similarly, in Syracuse, the various Christian layers of the building are linked by a legend about the apostolic foundation of the church. The walls of the central nave display a text along the inner sides of the north and south walls: ‘Ecclesia Syracusana, prima divi Petri filia et prima post Antiochenam Christo dicata’, which indicates that the church is ‘the first daughter of St. Peter after Antioch’, which means the second church founded by St. Peter, after that in Antioch. St. Peter spread the word of Christ to what is now Turkey and the Middle East. After he founded the church of Antioch, he sent an envoy back to the west who founded the church of Syracuse in St. Peter’s name around 40 AD. The legend of the apostolic foundation of the church of Syracuse is based on a Byzantine document, written in Greek and dating from the 7th or 8th century, now stored in the Vatican Archives. The envoy Marcian would become the first bishop of Syracuse. The foundation order by St. Peter is also mentioned in a letter by Pope Leo X dated 1517, which is the source for the text on the walls of the nave (Magnano 2010). Throughout its existence as a church, up to the present day, this legend confers authority, identity and a sense of self-worth upon the church and the city of Syracuse (Figure 6).\18

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**Figure 6:** Cathedral of Syracuse, north wall (interior) with integrated Greek columns. Photo by Jo’anne van Ooijen, 2011.
From the 14th to the 18th century, Sicily was ruled by Spanish dynasties: successively Aragon, Castile and a Spanish branch of the Bourbons. In 1542 and 1693, eastern Sicily was struck by earthquakes. The Cathedral of Syracuse sustained heavy damage, but was not totally destroyed. The central nave, apsis, outer walls and columns survived. The rest was rebuilt in the Baroque style. The alterations included chapels added to the south nave, carved columns, a wrought-iron gate and frescoes. The current façade, begun in 1728, was designed by Andrea Palma, a Palermo-born architect. The design is based on a triumphal arch, with a broken pediment and many columns, creating a play of light and dark to theatrical effect (Figures 7 and 8). The belfry is a typically Sicilian addition.

Although the Spanish introduced the Baroque style in Sicily, the question remains justified how ‘Spanish’ this building phase actually is. The Baroque was not exclusively a signature style of the Spanish. On the contrary, the Sicilians had developed their own version of Baroque (Blunt 1968: 9–10). In this light, adding the Baroque façade does not specifically underscore the Spanish presence on Syracuse’s landmark building but rather reflects contemporary taste and the expression of Sicily’s own architectural development.

Another transformation took place in 1911, when the post-Baroque additions and changes were undone during a restoration project by Paolo Orsi, who was also in charge of the excavations around the building. The removal of the post-Baroque layer takes away from the physical palimpsest. To include this layer in the whole, architectural historians must resort to other sources, such as prints, descriptions and photos. At the same time, the removal reveals ideas and considerations about restoration. In papyrographic examples like the Archimedes Palimpsest, the older layer consists of a rare text. At the time of its recovery, this is therefore considered as its more valuable layer. However, thanks to advances in modern technology, it is no longer necessary to destroy the newer layer to uncover the underlying one. To qualify an object as a palimpsest, the question concerning the rarity or value of each layer is not relevant, although the discovery of a previously unknown older layer always increases scholarly interest.

In architecture, buildings have often been restored to older versions at the cost of newer layers. Churches have been stripped of Baroque layers to restore them to their medieval appearance (San Lorenzo Maggiore, Naples) and medieval structures demolished to uncover Roman remains (much of the Roman Forum). Such choices reflect contemporary values and ideas about originality and the role of architecture. Modern technology helps fine-tune these interventions today. Considering the palimpsest as a diachronic artifact instead of a mere stack of layers can also contribute to a recalibration of architectural historians’ interest in such objects.

**The Diachronic Palimpsest**

The link with the victory of Gelon, which remained significant throughout the Greek and Byzantine eras, and the apostolic foundation throughout the Christian period both acted as unifying factors for the temple and church of Syracuse. These stories, immaterial layers that do not form part of the physical palimpsest but none-

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**Figure 7:** Façade of the Cathedral of Syracuse. Photo by Jo‘anne van Ooijen, 2011.

**Figure 8:** Façade of the Cathedral of Syracuse, detail of Solomonic columns. Photo by Jo‘anne van Ooijen.
although add to its integral meaning, stitch together the significance of the manifold physical transformations that have shaped this palimpsest. In *Anachronic Renaissance*, Alexander Nagel and Christopher Wood explain that ‘to tell a story from year to year, from event to event, was simply one way of organizing time… Artifacts and monuments configured time differently. They stitched through time, pulling two points on the chronological timeline together until they met’ (2010: 31–32). The physical transformations of a building are unified in an integral whole. The visual contrast between the layers only appears to be a clash when regarded from a stylistic viewpoint. In fact, they are interconnected in a logical way when seen as the diachronic result of the development of the building.

In the view of Nagel and Wood, the indication of an ‘anachronism’ in an artwork or building does not imply an incongruity. Instead, the ‘anachronism’ should be considered an integral part of the art or edifice itself (2010: 14). While this reasoning is valid, it is not ipso facto applicable to the palimpsest. Leaving aside the use of ‘retro styles’, a key characteristic of the palimpsest is that each of its layers is not anachronistic, but rather constructed in its own time. Only when considering the first layer of the building as the finished artifact to which later parts were added, causing a temporal disruption, would a plea for the acceptance of anachronisms be required. From the vantage of the palimpsest, however, each layer is a legitimate part of the whole, and all layers contribute on an equal footing. The architectural palimpsest is not an image or representation. Each layer presents itself, as constructed in its own time, dating from its own time. Approaching the building as a whole, the palimpsest can be considered as a diachronic artifact. This comparison can be extended to the connection between the artifact and its predecessors. While objects in the substitutional myth are linked to an original in the past or elsewhere by means of a chain of history or associations, leading to the qualification of the artifact as a substitution (Nagel and Wood 2010: 29ff.), the palimpsest in itself is this chain, made up of a string of originals that are interconnected by their presence in the same artifact.

Like text and images, artifacts are sources of information. Compared to text and images, architectural palimpsests are exceptionally rich primary sources. Other than the indirect and linear or two-dimensional representation offered by text and images, objects present information about themselves directly and in three dimensions (Wittman 2008: 2–8). Furthermore, while text and image as sources about buildings are often limited to presenting information dating prior to their creation, the building remains in constant interaction with its surroundings. Because of the gap between the direct experience of material artifacts and their representation in printed or otherwise transferred information, information unavoidably becomes lost through translation and mediation. While this applies to all buildings and artifacts, the palimpsest is particularly rich in information because of its capacity to deliver instantly a diachronic view of its development.

**Conclusion**

This article proposes to adopt the concept of the architectural palimpsest as a tool to analyze ‘layered’ buildings in a way that explicitly addresses their diachronic nature. To move beyond mere metaphorical use of the term, it is helpful to explore which palimpsest characteristics a building specifically possesses and to what extent there are analogies with the paleographic palimpsest. The comparison between the paleographic and architectural palimpsest can be guided by a set of questions that help to examine the layered composition of an individual building in more detail. Transformations can be qualified in terms such as material/immaterial, carrier/content, addition/destruction, continuity/antithesis, intentional/unintentional, etc. Also, each transformation can be examined in light of the building as a whole to see how it influenced not only its material presence but also its significance. In addition to a chronological and stylistic description, which covers the (surviving) layers as they present themselves, this approach places more focus on the pivot points between the layers. The choices and circumstances that contributed to subsequent transformations can inform us about the value that was attributed to the building, the meaning it had and contemporary ideas about architecture in general, such as views on conservation.

The dissimilarities between the paleographic and the architectural palimpsest also provide insights. In manuscripts the intention to rub out the content of the first layer usually signals its low valuation combined with the high economic value of the carrier. In buildings, these signals should not be assumed and should be considered carefully. Also, while the content of layers in manuscripts often remains separated, the significance of various layers in buildings often actively interacts, allowing layers to respond to each other.

The architectural palimpsest presents an opportunity to revise the study of the historicity of buildings. The absence of a comprehensive theory is not surprising considering the unique composition of each palimpsest as well as the unique narrative each one contains. This requires a case by case approach. Nonetheless, some general guiding principles can be outlined. It is essential to regard buildings first and foremost as material artifacts, because the true content lies not so much in the phrases in which it is described as in the architecture itself, as a physical intervention in the existing building (Prowoost: 1995: 9). Although art and architecture share similarities, buildings are governed by different paradigms and, more importantly, different practical demands than art. Adaptability is in the nature of buildings, and remaining ‘in sync’ with changing times is preconditional to the capacity to express historicity. Ultimately, it is this adaptability which ensures resilience.

The lens of the palimpsest promotes attention to the development of the integral building. The friction between contradictory stylistic elements can then be considered a relational issue rather than an aesthetic clash. This approach leads to a shift from regarding the building as a static object consisting of stacked layers to a dynamic artifact continually in the midst of a process. The capacity
of buildings to adapt does not harm their identity but reinforces it, because it is vital to their resilience. This flexibility allows them to continue to be actively involved in their lifeworld, to remain used, loved and valued. The diachronic development leads to an increase in richness and significance that is valuable to users, visitors and the surrounding community, as well as scholars (Watkin 2009: 6). Rather than ‘witnesses’, these buildings can be considered as material evidence of the passage of time, embodying the continuous interaction between world and buildings, expressed in both space and time.

Notes

1 Frequent reference to the palimpsest was made during recent Architecture biennales in Venice. See, for example, Allford (2014: 16): ‘Each [project] reflects the impact of its predecessors and .. retains fragments of the same .. the architecture of many hands and exists somewhere between architectural merzbau, palimpsest and collage. These .. show that there is another “Fundamental”: that of physical and cultural continuum’.  
2 The Codex Ephraemi Rescriptus is in the Bibliothèque nationale de France in Paris, Département des manuscrits, Grec 9, and is available online at http://beta.biblissima.fr/en/ark:/43093/mdata3ddf089e25b-8f375e93abb5960841abe1ac98511. The Archimedes Palimpsest is in a private collection. The results of the research project undertaken by the Walters Art Museum in Baltimore are published in part in Netz and Noel (2008) and also at www.archimedespalimpsest.org.  
3 For an extensive explanation on the production of paleographic palimpsests, see Netz and Noel (2008).  
4 In fact, an additional layer exists. In the 20th century, the manuscript was lost for a while, during which an unknown forger added religious images to a couple of pages, covering text, in an apparent attempt to drive up the value of the manuscript.  
5 An unfinished Ionic temple preceded it (Morgan 2015: 47–48).  
6 An overview of the archaeological research of the Greek temple in the 18th and 19th century can be found in Giangreco (2009).  
7 While the concept exists of the palimpsest as purely immaterial, for instance the memory palimpsest by Carruthers and Ziolkowski (2002), the analogy between the architectural palimpsest and the paleographic palimpsest as material artifacts suggests separate physical layers.  
8 Cicero, Orationes in Verrem secunda, IV 118, 122 (Giangreco, 2009: 41) and IV 124–125. For Livy on Syracuse, see Livius.org <http://www.livius.org>.  
9 In Syracuse, Byzantine rule lasted from 535 until 878. Zosimo was bishop in the middle of the 7th century. The commission by Zosimo in 645 is mentioned by O. Gaetani in his Vitae Sanctorum Siculorum (1657).  
10 The necessity of these alterations follows from the change from the ‘outward’ functioning of the temple to the ‘inward’ functioning of the church, designed to house the altar and the community, therefore requiring more space inside.  
11 ‘Epistula ad Leonani Arcrid de Syracuse. Urb’ (Letter to the Archdeacon Leo of the city of Syracuse), Expugn. Caruso, Bibl. Sicul. I.  
12 According to Cresti (2007: 25), it was in 910. During the Fatimid rule, the Byzantines regained control of the island for a short interlude (Cresti 2007: 23).  
13 Michele Amari set out to shed light on the Arab legacy on Sicily, but found that much was cancelled out by the Normans and Spanish, leaving only few traces of Muslim material culture on Sicily (Amari 1939; Peers 2010: 93; Smith 1968: 11).  
14 Michelle Provoost categorizes the various manifestations of architectural palimpsests in eight ‘rhetorical figures’ (1995: 38ff.).  
15 A commission which did not meet his belief that something begun by another was better left unaltered (De re aedificatoria, Book IX-11; Tavernor 1998: 59ff.).  
16 Perhaps the aversion against time was fuelled by fear and associations with decay, corrosion and death, and the perfect design was a means of reaching immortality by ‘vanquishing time’ (Trachtenberg 2010: 53ff., 82–85; Brand 1997: 10–11; Harries 1982: 60).  
17 The Tempio Malatestiano as discussed by Nagel and Wood in light of the ‘substitutional myth’ and the ‘authorship myth’ (2010: 175–77) echoes to a degree the comparison between ‘building-in-time’ and ‘building-outside-of-time’.  
18 Other documentation places Marcian in the 3rd century AD, and shows that Marcian died as a martyr under the persecution of Christians by Roman emperor Valerian. It appears the 1st-century Marcian became confused with the 3rd-century historical Marcian in a letter by Pope Nicolò I to the Byzantine emperor Michael dated 860 AD (Finley 1968: 46).  
19 ‘All production of artifacts; all art making, meaning making, and manipulation of codes; all histories of building and painting are histories of reuse. In fact, the true rarity is the opposite of reuse, namely, pure creation ex nihilo’ (Nagel and Wood 2010: 178).  
20 ‘Interesting as such an architectural palimpsest may be for historians, for architectural purists it is often an aesthetic nightmare, an indigestible hodgepodge that combines wildly incompatible elements of different styles from different eras’ (Sullivan 2006: 22 and Watkin 2009: 103–104).  
21 Choay discusses this issue with regard to monuments (2001: 58).  
22 ‘zit namelijk minder in beleefheidsfrases .. dan in de architectuur als een fysieke ingreep in het bestaande’ (Provoost 1995: 9).  
23 Although the images generated by the aura of ‘after-life’ as discussed by Aby Warburg and Walter Benjamin are rich with significance (Morton 2006: 362ff.), the points of departure in the present article are the functional nature of architecture and the palimpsest as a form of reuse. As Richard Brilliant points out, ‘Reuse implies use’ (Brilliant and Kinney 2011: 3).
Competing Interests
The author has no competing interests to declare.

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