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BETWEEN PLACE: AN EXPLORATION INTO THE PALIMPSESTIC SPIRIT OF PLACE

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ABSTRACT

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This project examines how we, as humans, interact with the world around us, zeroing in on the complex dance between the things we've created and the natural environment. At the center of this exploration stands the Ponte Rotto Bridge—an ancient relic that, despite its neglect, symbolizes how far we've drifted from both our own creations and nature itself. This gap highlights a trend in society to see both objects and nature simply as tools for our use and manipulation, often revealing a deep disconnection from the greater world. Using the Ponte Rotto Bridge as a starting point, this study explores the larger picture of what this disengagement means, how our growing distance from cultural and natural heritage leads to a fading sense of the value and the rich stories this heritage holds. By weaving together ideas from environmental philosophy, cultural history, and phenomenology, I aim to find ways to rebuild our relationship with our past and the natural environment. I do this by exploring the Ponte Rotto Bridge using a range of methodologies, from photography to charcoal drawing to digital collage to physical creations. This thesis not only brings attention to the overlooked stories of places like the Ponte Rotto but also suggests a new way to see our role in a future where humans live in harmony with our environment and respect our cultural legacy.

We only recognize the fact that man *is* an integral part of the environment, and that it can only lead to human alienation and environmental disruption if he forgets that. To belong to a place means to have an existential foothold, in a concrete everyday sense. When God said to Adam: "You shall be a fugitive and a wanderer on the Earth"[60]; he put man in front of his most basic problem: to cross the threshold and regain the lost place.

figure 1; source: "Genius Loci: Towards a Phenomenology of Architecture" Norberg-Schulz page 23



THE AVENTINE HILL AND REMAINS OF THE PONTE ROTTO.[1]

figure 2: Ponte Rotto Etch; source: 1890 Wood Engraving Ancient Roman Aventine Hill Ponte Rotto Bridge, author unknown

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figure 3: Tiber River at dusk, Ponte Rotto in shadow; source: photo by author

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THE CURIOSITY THAT LED ME HERE



THE CURIOSITY THAT LED ME HERE

When I begin to talk about this project and the series of events that brought me here I always start in the same place. Crossing the Ponte Cestio in Rome for the first time, looking out into the falling rapids of the Tiber River, and seeing the Ponte Rotto stranded in the wake of the river's whirlpools, audibly gasping and asking my classmates, "What *is* that?".

Since that day, I have been asking myself the same question over and over again. Now, the question holds different meaning. I know what the Ponte Rotto is, how it got there, and why it ended up the way it is. Now I sit here 6 months later asking myself what *is* that special quality that makes the Ponte Rotto so fascinating. What *is* it about a place so forgotten, overgrown, and in disrepair that draws in spectator's, authors, artists, and poets to marvel at its... *what?* What I didn't realize at the time was that I had stumbled upon one of life's most treasured assets, a place that helps us understand our own meaning, a place that reinforces our own relationship with life and death, and the temporal fluctuations of existence. What I had found in the ruins of Rome's broken bridge was a mirror. A glimpse at my own fleeting time on this earth and the insight to understand how Rome came to be known as the Eternal City.



figure 4: Ponte Cestio, with the Ponte Rotto in the distance; source: photo by author

To consider our place as humans within the environment we must also consider the things that surround us. The prevailing trend seems to reduce items to mere consumables, discarded after use, while nature itself is often regarded solely as a means to an end—a resource to be exploited. I believe that alienation primarily stems from humanity's diminishing connection with the natural world and architecture that form our surroundings, further distancing ourselves from our environment. In this sense, the architecture of yesterday loses its importance, and the stories they carry are lost in a contemporary focused world. The aim of this thesis is to bring attention to one of these forgotten things, a structure that surpasses the age of antiquity, a functional object that no longer serves that original function, but offers so much more: the Ponte Rotto Bridge.

Nestled in the heart of Rome, Italy, the Ponte Rotto, or "Broken Bridge," bears scars of its storied past, yet stands as a symbol of endurance against the currents of time, culture and water. Using the concept of *genius loci*, sometimes referred to as the *spirit of place* as a creative foundation, I trace the story of the Ponte Rotto Bridge through its varied history and its axial relationship with Rome, to find meaning in this place between the earth and the sky. To represent this story, I explore the bridge as a palimpsest, revealing the layers of time, place, and meaning hidden within the bridge. This exploration culminates in an experiential exhibit that attempts to bring the static layers of the palimpsest to a dynamic dimension, uncovering the hidden meaning that exists in things all around us, both natural and man-made. I gathered the synergistic relationship between what I saw and felt when encountering and studying the bridge into a set of the palimpsestic representations of the bridge. I did this as a way to reveal life in its various aspects, layer by layer uncovering the meaning that I felt when visiting the site for the first time. I believe that we engage in poetic contemplation when we can discern the revelations offered by the elements of our surroundings. Objects are crafted with the intention of disclosure; they encapsulate the essence of the world and can, in turn, be assembled to create a microcosm.

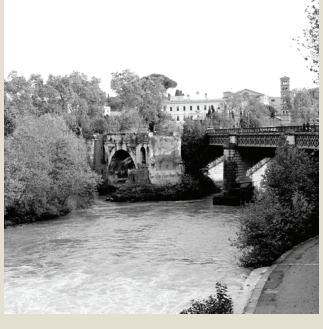
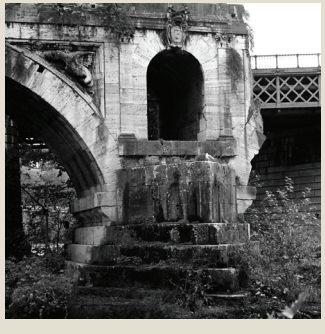
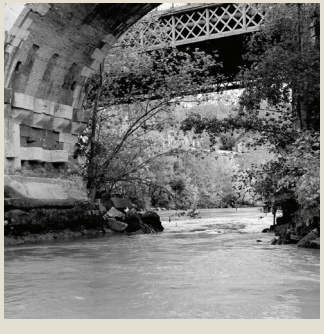
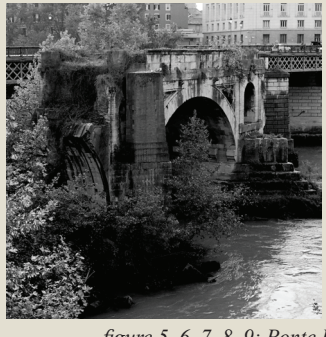
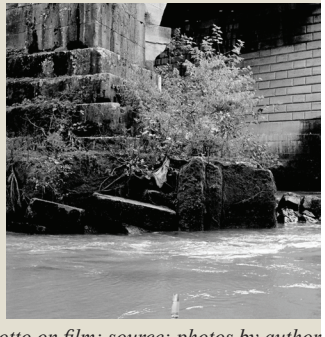

figure 5, 6, 7, 8, 9: Ponte Rotto on film; source: photos by author

statement of interest

This project is an inquiry into place meaning. Through the synergistic merging of *genius loci*, identity, and character, I aim to represent the story of the bridge as a palimpsest consisting of several dimensions. The aim is to arrive at a holistic approach to landscape architecture that goes beyond mere aesthetics to engage with history, memory, and significance embedded within a site such as the Ponte Rotto bridge. By synthesizing insights from literature and creative multi-media exploration, I define an approach to site design that subverts the desire to homogenize our collective environment but rather create places of distinct individual character. This outcome will not only enhance our approach to the design of the physical environment, but also foster a deeper understanding of place and a sense of connection and stewardship among users.

Central to this critical position is the recognition of the Ponte Rotto Bridge as a palimpsest – a site imbued with layers of meaning and history that transcend time. The term "palimpsest" originates from the Greek word *palimpsestos* meaning "scraped again" (Merriam Webster 2024). Historically, palimpsests were parchment or vellum manuscripts from which previous writings had been scraped or washed off to make room for new text, often due to the scarcity and high cost of writing materials. This practice allowed for the layering of different texts and served as a tangible record of cultural and intellectual evolution. As a palimpsest, the bridge serves as a tangible record of Rome's rich cultural heritage, where ancient ruins coexist with modern interventions, creating a dynamic interplay between past and present. The eternal quality of Rome is said to reside in its unique capacity for self-renewal (Norberg-Schulz 138). The Ponte Rotto Bridge is no exception in this regard, as its varied and layered history lends itself to a multitude of representations and stories. This layering of history may indicate that the *genius loci* of the Ponte Rotto has also been subject to frequent mutations. Contrary to what we may think, it is with the bridge's rootedness in its natural environment that we are able to derive its *genius loci*, not only the aesthetic quality of its shifting appearance. This connection to the surrounding landscape can be felt all around Rome, and this feeling creates an "idyllic" quality, surprising in such a grandiose metropolis. By layering the connections between the Ponte Rotto and its "natural meaning," we can unveil the site's *genius loci*. And it is through the embracing of a site's palimpsestic nature that landscape architects can create designs that celebrate the site's diverse layers, fostering a sense of continuity and connection with the past while also accommodating the needs of contemporary users.

In the unveiling of the site's *genius loci*, or the unique spirit of a place present there, we may be able to apply these methods to other sites in order to use this lens to identify locations by their distinct characteristics. By delving into the historical, philosophical, environmental, and architectural dimensions of *genius loci*, landscape architects can gain insights into the intrinsic qualities present in the site. This will allow landscape architects to create designs that resonate with the site's unique character and identity. Schulz (1980) argues that it is the place which gives us our identity, and, "Only

when understanding our place we may be able to participate creatively and contribute to its history" (202). As a rhetorical device, *genius loci* has value in its ability to help landscape architects argue for more sensitive approaches to planning, design, and construction. From a community standpoint, local landscapes often hold strong cultural and emotional significance. This attachment fosters social cohesion and resistance against the homogenization of landscapes (Thompson 2004). The concept of local distinctiveness, akin to *genius loci*, emphasizes the importance of creating landscapes with unique, recognizable characters to foster community identification and sustainable living. As Thompson states in his 2004 essay, What use is the *genius loci*?, "Human beings need their mysteries, and we may take more care of an enchanted landscape than one that we value only in an instrumental way" (94).

Why is there a wish to seize on something distinctive about a place? And why is it that places without a perceived character lead to such an alienation with our environment? Through this exploration, I unveil the *genius loci* of the Ponte Rotto bridge, while also highlighting the significance of the layers hidden within its weathered stones. Using analysis of Ponte Rotto's *genius loci*, I attempt to decipher the unique meaning and symbolism intrinsic to the existential quality of the bridge. By focusing on the distinctive characteristics of the Ponte Rotto Bridge, I aim to discover a design strategy that will evoke a sense of wonder, contemplation, and emotional resonance. The outcome of this exploration is to create a document that honors the unique context of the Ponte Rotto Bridge, embracing its palimpsestic nature, engaging with its *genius loci*, and imbuing its design with layers of meaning and symbolism that deepen our appreciation of the site. Whether through the strategic emphasis on elements that highlight the bridge's historical significance, or the integration of symbolic motifs that convey broader thematic elements, I hope to find a way to imbue my future projects with multiple layers of meaning that enrich the phenomenological experience and foster a deeper connection with the site. By drawing upon insights from this exploration, landscape architects can create designs that not only enhance the physical environment, but also enrich our understanding of the place and foster a sense of connection, identity, and stewardship among users.

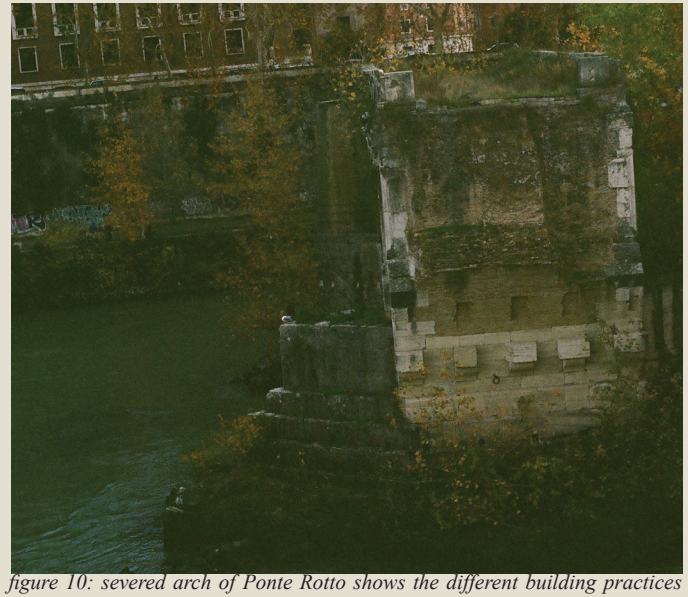

figure 10: severed arch of Ponte Rotto shows the different building practices used over centuries to renew the bridge, like the layers of a palimpsest; source: photo by author

To begin to explore the site in question, I will take this investigation back to ancient times. The Ponte Rotto, or "Broken Bridge," originally known as Pons Aemilius, is Rome's oldest stone bridge, serving as a poignant symbol of impermanence and transformation. The bridge's fractured state and its enduring presence amidst the flow of the modern city encapsulate profound themes of *betweenness* and liminality. Straddling the banks of the Tiber, yet no longer connecting them, the Ponte Rotto exists in a liminal space, neither fully functional nor entirely vanished, embodying a physical and metaphorical threshold. In my research I attempt to investigate this threshold between place, between land and river, past and present, life and death, purpose and void. The Ponte Rotto struck my interest because of its multiplicity, its ability to exist as so many things at once, while remaining neglected and forgotten in the tides of today.

In this effort I set out to understand the multiplicities that present themselves. I researched various sources and historical archives to begin to formulate an understanding of place. In my investigations, what fascinated me most was the similarities between past and present. As I analyzed the art history relevant to the Ponte Rotto, I was struck by the relatability of the scenes. Taking a closer look at the people occupying the site around the river, I was struck by the humanity of it all. These people a world apart from me came alive, felt so real, and I realized what these communities experienced at the Ponte Rotto 500 years ago may not be so different from my own observations. For a minute I was transported back in time, and back to the Ponte Rotto myself. This exercise had me reflect on a thought, how wonderful it is to exist right now with the generations of people I get to share this earth with, and how these paintings are a gift to be able to see into the present of the past, to witness a generation that has been lost to the temporality of life. It is these comparative symbologies of meaning that I sought to understand through this thesis, and with this meaning I intend to imbue my work as a landscape architect with intentionality in my designs that will be legible even after time has moved on. By taking a moment to exercise this curiosity I discovered a new workflow, one that leaves out the traditional site analysis and informed planning. This workflow, rather, picks a speculative perspective to investigate, it chooses to reconstruct the narratives of the past to arrive at an understanding of the present. While to observers this exercise may seem rooted in an artistic sensibility, my intention was exceedingly structured, as I used a framework and phenomenological concepts to guide my focus. In this regard, I was able to identify a unique approach to understanding the meaning present at a site, an intimate exercise of observation, articulation, and application of spirit.

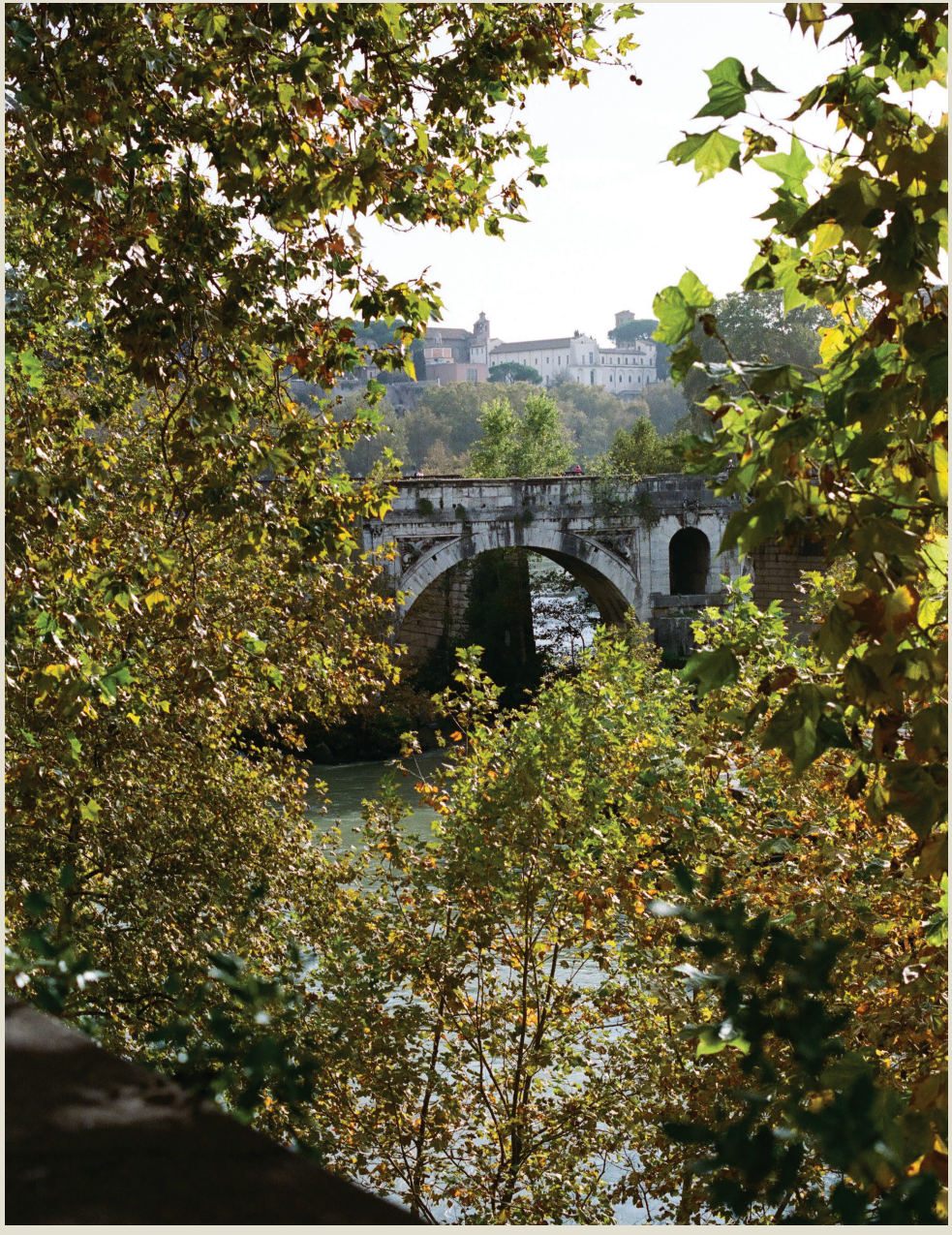

figure 11: Ponte Rotto peaks out through the London Plane trees on a sunny autumn afternoon; source: photo by author

palimpsest and meaning

When discussing the layers of meaning embedded in the Ponte Rotto, I found it best to imagine the bridge as a palimpsest. In architecture, art, and design, the concept of palimpsest extends beyond literal manuscripts to describe the layering of history, memory, and meaning within physical spaces and visual compositions. Architecturally, cities like Rome, with their stratified layers of civilizations built upon one another, serve as prime examples of palimpsests, where ancient ruins coexist with modern structures. In art and design, palimpsestic motifs evoke notions of time, memory, and transformation, as seen in works that incorporate collage, mixed media, or re-purposed materials (Youtube 2016). The symbolism of layered existence inherent in palimpsests speaks to the complexity, richness, and temporality of human experience, highlighting the interplay between past and present, continuity and change, and the enduring imprint of time upon the fabric of existence.

Through the creation of the palimpsest I was able to search for this complexity of meaning within the site at Ponte Rotto. It is with the intentional layering and deconstructing that the essence of my project came to life. Without that strategic eye, I would not have been able to discern my own interpretation of the Ponte Rotto, and the unique *genius loci* that presented itself to me may have been lost in translation. Each layer of the palimpsest carries a choice, and these choices begin to create a narrative. This is where I believe the answer lies. It is with the intentional construction of our reality that allows us to engage with our surroundings in a meaningful way. We make sense of our experiences by generalizing, which is crucial for our functioning. Nouns get their meaning from noticing similarities between different objects, and verbs from recognizing similarities between events or actions. However, our experiences are specific, and each of us needs to see ourselves in unique as well as general contexts. This need is often unmet in a homogenized world. The fashion industry and the distinctive features of domestic architecture and suburban gardens show our unfulfilled desire for a personal identity in a unique environment (Seddon 2016).

By actively participating with the representation of my perception of the Ponte Rotto, I was able to engage with my subliminal inclinations, take notice of my overlooked intuitions, and investigate the curiosity that led me here. In the following chapters, I will take you through my process, from the comparisons derived from the ancient *genius loci* to the ancient Ponte Rotto, into my understanding of the Eternal City, and diving into the unique history of the bridge to land in the creative interpretation of time, place, and meaning in the creation of palimpsests. These works showcase my winding investigations, offering an approach to landscape architecture that goes beyond site analysis and into the deeper meaning of place.



figure 12: double exposure of Ponte Rotto; source: photo by author


BETWEEN SPIRIT AND PLACE



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Since its ancient conception, *genius loci* has hung on the precipice of understanding human experience of place. This concept has fascinated thinkers for millenia; poets, artists, and architects alike have all used the term to interpret their reality in esoteric and abstract ways. From its beginnings as a latin phrase, *genius loci* has evolved over time. Several terms have come out of *genius loci*, such as the English 'genius of a place,' subsequently emphasized as '*spirit of place*,' and an even more direct interpretation as 'nature of place' (Dixon Hunt 2020). At times, the significance of a place is suggested without explicitly mentioning any specific term, as many individuals harbor a sense of local importance, familiar to them or unexpectedly found in a new setting. The characteristics of a place can be identified and articulated, captured through drawing or photography, and even composers may convey or 'depict' aspects of the physical world in their music (Dixon Hunt 2020). *Genius loci* can be engaged through multiple perspectives, as it represents a vital manner of existence in the world: it's less about the inherent nature of a place and more about how we identify, characterize, and utilize it, thereby appreciating its unique significance.

Referencing John Dixon Hunt's: *Genius Loci: an Essay on the Meanings of Place* (2020), in this exploration I trace the term back to its Roman origins, drawing parallels between the thinking of the ancients and our modernized conceptions. It seems apparent that this phrase is still meaningful to people; however, it may have morphed into something unrecognizable from its original interpretation. From my research, I have found that ancient understandings hold more truth than is apparent at the surface, and by unpacking these understandings and comparing them to our modern definitions we may begin to appreciate the parallels. Walking through the use of the term since its conception, I found that many of the new interpretations still hold many of the same meanings as the ancients. And maybe that will be the point that we land on here, that *genius loci* is just a feeling, a shared feeling that transcends cultures, places, and time. It is this layering of understandings that will serve as the theme throughout the project, beginning with the layering of *genius loci*.

Delving into the origins of *genius loci* reveals a profound connection between humans and their environments, a link that has persisted through the ages. The concept of *genius loci* hinges on an individual's connection to a location - their home, their immediate environment, their national identity - aspects of which can be tactile, like scent, noise, and particularly, language.

Places can profoundly influence our being. At times, it is merely that specific locations effectively awaken aspects of ourselves that were previously unrecognized or unexpressed elsewhere. The Romans not only coined the term *genius loci*, they also practiced it in their daily lives, recognizing and venerating the protective spirits of their surroundings. This ancient practice was not merely superstition but a reflection of the deep bond between people and the places they inhabit, a sentiment that continues to resonate in contemporary interpretations of *genius loci*. The Romans attributed the concept of *genius loci* to their temples, streets, homes, and natural landmarks like rivers, springs, or mountains (Dixon Hunt 2020). This notion referred to the existence of gods or renowned ancestors within these spaces, where they may have engaged in worship, thereby imbuing these sites

with significance. Persisting into the Renaissance, *genius loci* had evolved into a metaphor for the character of place, as seen when classical statues adorned gardens and architecture, or when poets employed classical mythology as a tool to bring their verses about place to life (Tsenova 2022). As we transition from ancient to modern times, the essence of *genius loci* has been preserved, adapted, and reinterpreted by scholars, designers and artists through various definitions. While communities may have a collective perception of a place, individuals are also capable of forming their own unique interpretations.

Geologists and geographers engage with the concrete details, phenomena, and objective concepts of a place. Artists and designers then interpret these facts, extracting significance through creative and imaginative methods. In architecture, the spirit of a place informs design decisions, encouraging a harmonious relationship between the built environment and its natural setting (Tsenova 2022). In art, the concept is expressed through creations that capture the essence and atmosphere of a location, evoking emotional responses that connect viewers to a specific place (Dixon Hunt 2020). Poetry and music further explore this connection, using language and sound to convey the unique qualities and emotions tied to different locales (Thompson 2004). The metaphoric ways of description employed by artists and designers is really just a re-interpretation of the facts, and it is these facts and interpretations that give a place its unique spirit.

The enduring relevance of *genius loci* is perhaps most evident in the way it influences our perception of, and interaction with, the world around us. It prompts us to consider not just the physical characteristics of a place but also its emotional and spiritual dimensions. This holistic approach to understanding our environment encourages a deeper appreciation for the intricate ways in which culture, history, and nature intertwine to give each place its unique identity. Expressed in literature from various fields of interest, *genius loci* seems to shape-shift through the public consciousness through multiple terms. These synonyms, or definitions; panpsychism, pantheism, energy field, special beings, special atmosphere, essence, character, authenticity, narrative, health, local distinctiveness, and ecosystem (Thompson 2004), may seem at first to hinge on differing elements embedded in a site, but rather all hint at the same intrinsic point, that spirit of a place is a layered understanding of a local, rather than a singular distinctive trait.

By examining the evolution of *genius loci* from its Roman roots to contemporary applications, we uncover a universal theme: the search for meaning and connection in the places we occupy. This quest transcends time and culture, suggesting that the spirit of a place is not just a concept but a fundamental human experience. Through this exploration, we see that *genius loci*, in its many forms, offers a way to bridge the past and present, inviting us to explore the depths of our relationship with the world. This project aims to peel back the layers of understanding surrounding *genius loci*, revealing the unbroken thread that connects ancient wisdom with modern insight, and in doing so, illuminate the shared experience of place that defines our existence.

Does genius loci exist?

Throughout my research I have found several sources that debate the clarity and utility of *genius loci* in contemporary settings. The various synonyms, or definitions, of *genius loci*, mentioned previously, energy fields, authenticity, coherent narrative, local distinctiveness, essence, character, ecosystem, pantheism, pansychism, health, and special atmosphere, (Thompson 2004, 86), suggest to positivists that the term is too varied in its range of interpretations to be practical. While this opinion may seem dismissive of the enchantments of landscape, there are some elements that appear difficult for modern thinkers to digest. Ideas surrounding the spirit and theistic inclinations seem irrelevant to contemporary design intentions. In order to address these varying interpretations I will go ahead and dissect the term *genius loci* and its definitions back to its root as an ancient belief. In doing so, I maintain that the concept has not lost its meaning, but rather builds on the interpretations over time, with modern cultures using modern language to identify the feeling of *spirit of place*. As John Dixon Hunt (2020) argues in his defense of *genius loci*, "Underneath all *genius loci* is a remnant of the Roman wish to engage with religion-spiritual meaning. That still pertains, even in a world where such intimations take different forms" (42). I assert that there is something profoundly human to seek spiritual meaning from our environment, whether that be through religion or connection to nature and the scientific universe, we are all searching for concepts that are bigger than ourselves, in order to understand our own existence. While this concept and the study surrounding it is inherently philosophical and academic, I do believe that this curiosity about place and meaning can be found in our collective population, and the study of a concept like *genius loci* by designers may be instrumental in bringing this associated meaning to the visiting public.

This brings us to another debate surrounding *genius loci*, which lies in whether this concept is relatable to individuals who have no formal training in design, architecture, or philosophy. Is it possible for a place to possess an inherent spirit that is discernible to any passerby, or is the experience of *genius loci* entirely subjective, holding relevance only for the individual who already knows to look for it? This development I consider to be the interpretive definition of the term, where it can be said that without the observers full attentive and creative focus spent on the place, a comprehensible *genius loci* may not be obvious. With this thought in mind, this project explores the role of art and expression in transcending personal and theoretical boundaries, making the essence or spirit of a place accessible to a broader audience, regardless of their prior exposure to or understanding of the site in question. The making and observing of art challenges the notion that the experience of *genius loci* is confined to those with specific backgrounds or training by bridging the gap between specialized knowledge and universal appreciation.



figure 13: Engraving of a wall painting from House VI 26 at Herculaneum;
source: "Genius Loci: An Essay on the Meanings of Place" by John Dixon Hunt

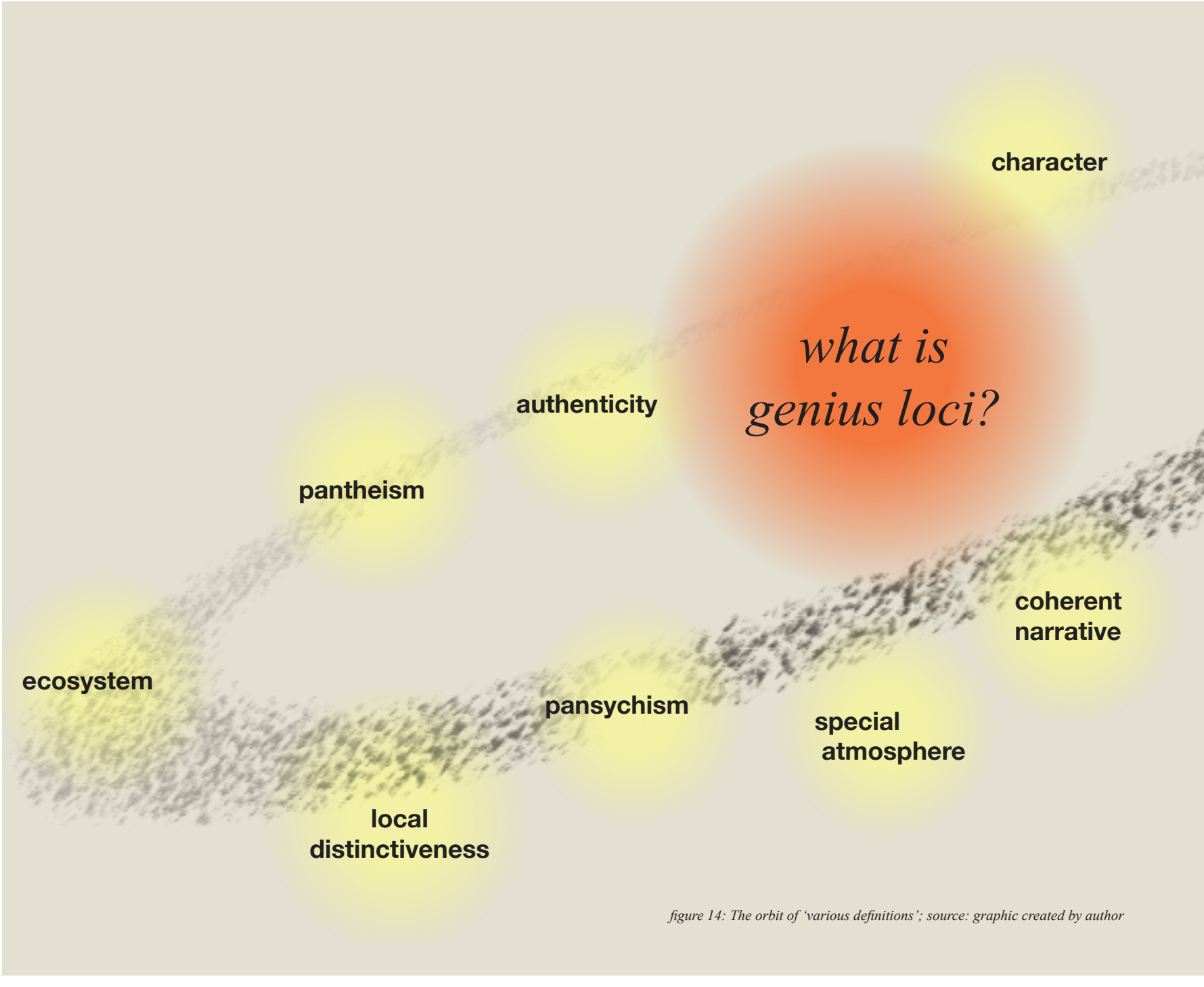
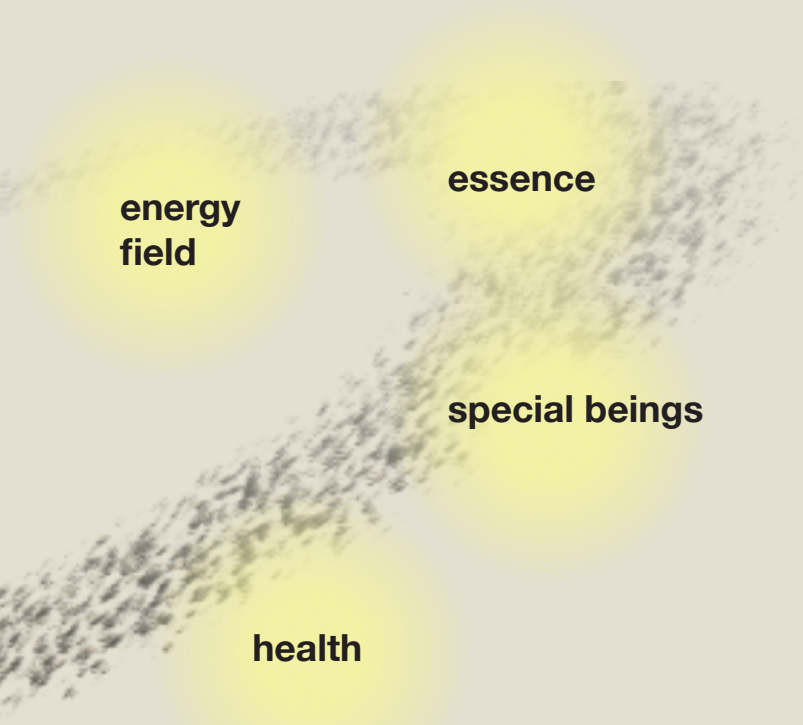


figure 14: The orbit of 'various definitions'; source: graphic created by author



So does *genius loci* exist or is it just a phenomenon that has been blown out of proportion by centuries of scholars building on air? After extensive analysis, it seems that to fully grasp a site's *genius loci*, we must feel some sort of unique presence there, something that sparks your curiosity enough to get to know a place, become enamored with it, and seek to understand it more fully. I believe that the Ponte Rotto had this effect on me as a passerby, and what has led me to this investigation is that initial feeling of interest. As I look ahead to a career in landscape architecture, I aim to uncover a practice that will be useful in my work for years to come. The engagement with the site is a main priority to the work of landscape architecture, and with this thesis I intend to uncover a way of knowing and understanding that I can apply to future sites and locations throughout my career. In order to design for the enchantment of future individuals one must be able to discern the unique essence of a place, and in doing so be able to pass on this feeling, and by all means avoid the erasure of such a spirit. Dixon Hunt (2020) states, "Perhaps it is only landscape architecture, or place-making, that can provide a visual and palpable version of a site for us to understand more fully." (36) This thesis aims to provide a guide through my interpretation of *genius loci* and into my exploration using analysis combined with art to arrive at a perceived understanding of a *spirit of place*.

Genius loci and Its Meaning Throughout History

While researching *genius loci*, I traced the history of the use of the term through different sources and disciplines, using the work of John Dixon Hunt as a guiding framework. I was able to determine five distinct periods of the term that explain its meaning and use at that time. These five categories are: original significance and meaning, emblematic interpretations, spirited associations, positivistic observations, and interpretive distinctions. This organizational strategy aims to show that the relevance of *genius loci* has not faltered, but rather grown in its complexity over time.

The term has been used by various poets, artists, designers, and geographers to describe their experience with the place. As was discussed previously, this wide recognition indicates the importance of the *spirit of place* to our collective culture, but also lends itself to ambiguity and confusion. My goal in this analysis of *genius loci* is to show that the definition hasn't varied too far to lose all meaning, but rather built on itself, like a palimpsest, to show our relationship with the environment through the *spirit of place*.

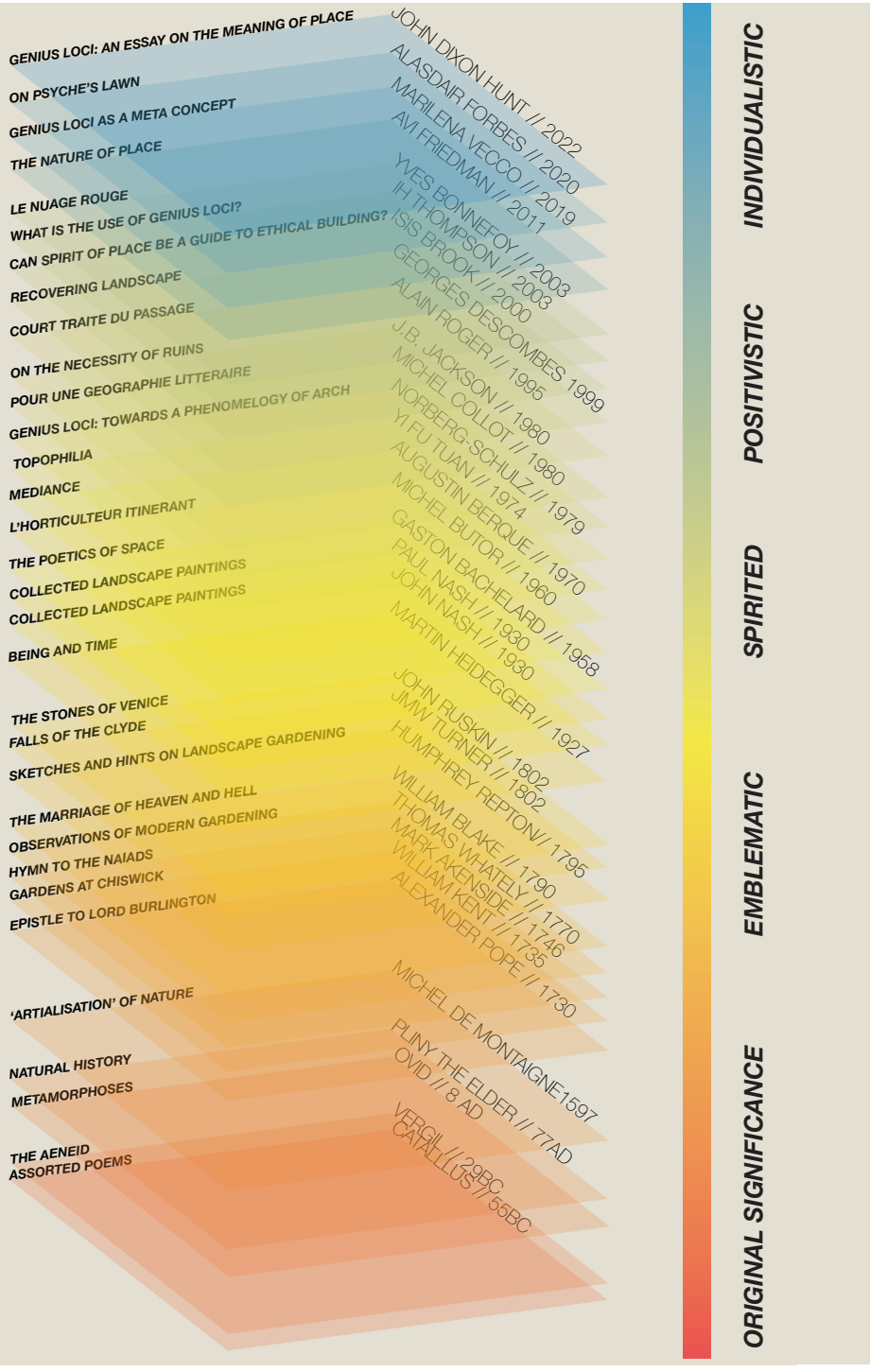


figure 15: Diagram that shows the appearence of genius loci throughout history in various works. The message is that these sources are building on eachother, like a palimpsest, to inform our understanding of the term today; source: diagram created by author

original meaning & significance

For the ancient Romans, the concept of the genius pervaded every aspect of their daily lives, imbuing both the mundane and the sacred with profound significance (Dixon Hunt 2020). They decorated their living spaces, gardens, hearths, and public crossroads with representations of spirits, gods, and lesser deities. These figures were not merely decorative but served a deeper purpose, acting as intermediaries that provided insight into the significance of various locations or natural formations. Susan Stewart's *The Ruins Lesson* (2020) features numerous writings in which 'presences' bring life to locations in ancient ruins of landscape and poetry. Through these representations, Romans sought to understand the deeper meanings and narratives associated with their environment, from the smallest household shrine to the most significant geographical landmarks. This practice reflects the Romans' holistic view of the world, where the divine and the earthly realms were closely intertwined, and every place held potential for connection with the divine.

Pliny the Elder's *Natural History* had many examples of the presence of deities in the natural environment of the ancients. From Tellus, goddess of earth and fields, to Pomona, deity of gardens, each type of environment held characteristic significance to the Romans. (Dixon Hunt 2020). Everyday gardens for ancient Romans were populated by statues of Venus, nymphs surrounding fountains and springs, and the Muses, male, female, Polyhymnia, Clio, and Urania (Hill 1981). Gods also appeared in Roman poetry and folk tales as well. The poet Virgil whose famous *Aeneid* dates back to 29 B.C. was known for invoking the term *genius loci*. At this time the phrase was considered a precise term, compared to today's somewhat vaguer rhetoric. The renowned poem *Metamorphoses* by Ovid (8AD) sheds light on how Romans might have perceived the concept of the spirit of a place, as its lines honor the beginnings of natural phenomena: Narcissus becomes a flower, Daphne turns into a laurel, nymphs inhabit a grotto, and giants morph into mountains. John Dixon Hunt (2020) recalls the impact of these ancient writers on the use of the concept today, "What these ancient writers chose to identify, explain and celebrate are still essential instincts today, and whether or not we use their term and despite the fact that we no longer deal with their gods, for the idea of *genius loci* has enjoyed a long life, even if that particular formation did not survive." (14) From these ancient understandings we are able to see how the use of *genius loci* has morphed across different cultures, religions, and time periods.



figure 16: Apollo guarding a temple, Pompeii; source: photo by author

As the ancient pagan ways shifted towards a Christian monotheistic society, the use of *genius loci* morphed as well. In the tapestry of Christian Europe, the pantheon of ancient Roman deities maintained a presence, albeit transformed into metaphorical or symbolic representations of classical gods and goddesses. The Roman concept of *genius loci*, deeply rooted in polytheistic traditions, found itself less compatible with the evolving monotheistic paradigms (Dixon Hunt 2020). As a result, this concept underwent significant adaptation to align with the linguistic and cultural contours of emerging European societies. The essence of *genius loci* was distilled into more accessible interpretations that emphasized the tangible and familiar elements that define a place – its language, its landscape, and its unique characteristics – moving away from the mystique of housing foreign deities. This shift underscored the importance of engaging with and understanding local vernaculars and geographies, steering the focus towards a grounded appreciation of one's immediate environment rather than the dwellings of distant, ancient gods. This re-imagined emphasis on locality and the immediate physical world mirrored a broader cultural shift towards a more introspective and human-centric view of place, encouraging a closer, more personal connection to the natural and cultural landscape.

The term "genius" was assimilated into the vernacular of early Christianity, similarly to how remnants of Roman architecture found new life within Christian places of worship. It can be observed that a winged spirit evolved into the Christian conception of an angel, and it can be inferred that the serpent transformed into the devil (Highet 2010).

During the Renaissance, creators of gardens and architecture remained knowledgeable about classical references, and it was this symbolic imagery that continued to characterize and shape the gardens and buildings constructed during this era. With notes taken from my visit there, the Villa d'Este, constructed in 1550, stands as a prime illustration, with its design deeply rooted in classical references and metaphorical imagery. Its gardens and architecture harmoniously blend Renaissance ideals with ancient Roman motifs, showcasing the enduring influence of classical antiquity on Renaissance artistry and vision. At the estate, one of the standout features is the Fontana di Tivoli, or the Fountain of Tivoli, which acts as a geographical allegory for the surrounding Tivoli landscape. At the fountain's heart, a waterfall flows down from a substantial cup into an oval pool, above which an artificial mountain crafted from porous stone mimics the nearby Tiburtine Mountains. Adorning the mountain are three towering statues: the central figure is the Sibyl Albunea (Tiburtina) with her son Melicertes, flanked by the reclining forms of the Herculaneum and Anius rivers. The courtyard around the fountain features two nymphaea, resembling shrines, each with a small fountain added in 1569, echoing the legend of the Sibyl, the nursemaid to Bacchus. This fountain and others like it show the morphing of the use of *genius loci* in design, from literal to emblematic presences. Literal meanings shifted to metaphorical tales to explain the human

relationship to the environment they dwell in.

As the centuries progressed, the Latin term *genius loci* began to shift ever more, into an anglicized understanding of *spirit of place*. In monotheistic cultures, the Roman idea of *genius loci* became less relevant, prompting changes in local languages and leading to a more straightforward understanding of places (Dixon Hunt 2020). Mark Akenside's 1746 work, *Hymn to the Naiads*, illustrates this transformation. His poem describes ancient beings believed to dwell in rivers, springs, and waterfalls, drawing heavily on classical sources like Homer, Virgil, and Ovid for an authentic depiction. Dixon Hunt points out that Akenside acknowledged modern readers' lack of interest in the genealogies or personal stories of pagan gods but found it useful to use these ancient figures to personify natural phenomena and illustrate the interplay between physical and moral forces (Dixon Hunt 2020). Additionally, Dixon Hunt analyzes JMW Turner's painting, The *Falls of the Clyde*, created over fifty years later, which features nymphs by a waterfall, symbolizing the 'powers of nature.' (Dixon Hunt 2020). JMW Turner returns to this scene nearly 30 years later to repaint the landscape in oils, with the elimination of the naiads, and using his own technique in the craft to create atmospheric indications of the spirits, rather than literal characters. This transition shows that the idea of the Latin *genius loci* did not completely disappear, but rather shifted in perception to convey the attention of localities present at the site that influence the *spirit of place*, rather than the embodiment of metaphorical gods.





figure 17 & 18:
source: JMW TURNER ; THE FALL OF THE CLYDE, 1802 ;
source: JMW TURNER ; THE FALL OF THE CLYDE, 1845

phenomenology and the spirited approach

As the Latin understanding of *genius loci* fell out of fashion, the emphasis on the spirit became a focus for philosophers and designers who wished to establish a deeper reasoning behind our human attachments to our surroundings. The term spirit inherently contrasts with the concept of the physical body, representing an intangible essence rather than a visible form (Dixon Hunt 2020). This elusive quality is believed to be a fundamental force behind an individual's perception and connection to a place, shaping their understanding and relationship with it on a deeply personal level. Out of this concept emerged the philosophy of phenomenology, launched by Edmund Husserl, Martin Heidegger and others in the mid 19th century. Phenomenology, at its core, is the endeavor to articulate the essence of experiences and phenomena, to translate the unspoken and unseen into comprehensible language (Norberg-Schulz 1980). Within this philosophical framework, invoking the spirit of a place provides a viable means to encapsulate and convey its intrinsic meaning. It allows for an exploration beyond the physical attributes of a location, delving into the emotional and psychological impact it has on individuals. This approach to understanding a place acknowledges that our interactions with our surroundings are mediated not just by our senses, but by a deeper, spiritual connection that informs our perception and appreciation of a place. In the context of *genius loci*, this perspective highlights the importance of recognizing and articulating the intangible qualities that define a place's essence, offering a nuanced way to appreciate and relate to the environments we inhabit. Through the examination of work by four seminal thinkers on phenomenology and landscape – Martin Heidegger, Gaston Bachelard, and Christian Norberg-Schulz – I will articulate the relevance of this way of examining space in the practice of determining *genius loci*. Although the term *genius loci* isn't always explicitly mentioned in phenomenological studies, its definition as the *spirit of place* creates a clear connection between these two ideologies. The scholars I will be discussing may not use the term directly, but their philosophies inherently capture the essence of the *spirit of place* by exploring our embodied responses to the environment. Their work seeks to understand how we experience and interact with the spaces around us, reflecting the core principles of *genius loci*.



figure 19: "The marriage between heaven and earth forms a point of departure..." (Norberg-Schulz 24) source: collage of photos by author



"Every questioning is a seeking. Every seeking takes its direction beforehand from what is sought. Questioning is a knowing search for beings in their thatness and whatness."
Heidegger, Being and Time, page 5

Martin Heidegger, a German philosopher of the 20th century, made significant contributions to the phenomenology of space that profoundly influenced not just philosophy but also architecture, environmental studies, and urban planning. His exploration of being, space, and architecture is deeply embedded in his broader philosophical inquiries into the nature of Being (Sein) and human existence (Dasein) (Stanford Encyclopedia of Philosophy 2024). Heidegger's approach to the phenomenology of space diverges from traditional metaphysical conceptions of space as merely a container for objects or a backdrop for human activities. Instead, he proposes a more nuanced understanding of space as being intrinsically linked to human existence and our engagement with the world.

Heidegger's *Being and Time* (1927) introduces the concept of Dasein, which translates to "being-there" or "presence," to describe the human condition of being fundamentally entangled with the world (Stanford Encyclopedia of Philosophy 2024). For Heidegger, space is constituted through human activities and relationships. This existential approach to space emphasizes how our understanding and experience of space are shaped by the ways in which we inhabit and move through the world. He further elaborates on this idea in his later essays, such as *Building Dwelling Thinking* (1951), where he discusses the intimate relationship between building (architecture), dwelling (the manner in which we inhabit space), and thinking (our conceptual and perceptual engagement with space) (Stanford Encyclopedia of Philosophy 2024). Heidegger argues that truly meaningful spaces are those that arise from our existential engagement with them, thereby challenging us to rethink the role of architecture and urban planning in facilitating in our daily lives.

Heidegger's influence on the phenomenology of space is far-reaching. His ideas have inspired generations of architects and thinkers to consider the deeper existential meanings of space and place, urging a shift away from viewing buildings and environments merely as functional entities towards appreciating them as embodiments of human experience and being. This has fostered a more holistic and human-centered approach in design disciplines, encouraging the creation of spaces that resonate with our fundamental need for belonging and identity.

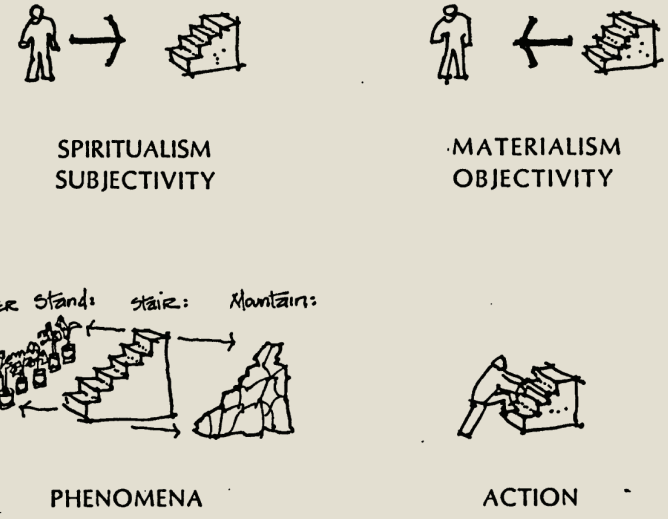
Applying Heidegger's ideas to the Ponte Rotto, we can see how this broken bridge, beyond its historical and architectural significance, embodies a deeper existential narrative. Heidegger's concept of dwelling, the idea that to truly inhabit a space, we must engage with it meaningfully (Norberg-Schulz 1980), can be applied to the Ponte Rotto as a site of contemplation and reflection. The bridge, in its ruined state, invites us to consider the passage of time, the transient nature of human endeavors, and our connection to history and place.

Heidegger's notion of being-in-the-world underscores the importance of our interactions with spaces like the Ponte Rotto, encouraging us to move beyond mere observation to a deeper engagement with the site. The bridge becomes a symbol of liminality, a threshold that evokes a sense of in-*betweenness*, mirroring the human experience of transition and transformation. Heidegger's emphasis on the authenticity of place aligns with the *genius loci* of the Ponte Rotto. The spirit of the place is not just in its historical context but also in how it shapes and is shaped by our experiences and perceptions. As we engage with the Ponte Rotto, we contribute to its ongoing narrative, reaffirming its significance as a space that holds and reflects the essence of human existence.

HEIDEGGER

figure 20: diagram outlining Heideggerian thought (Murray 42)
source: "GENIUS LOCI: AN INTERPRETATION OF THE IDEA OF PLACE IN CITY DESIGN" Martin A. Murray

DASEIN is a complex concept that captures the unique way human beings are situated in the world, marked by their consciousness, temporality, and existential choices. Through the lens of Dasein, Heidegger seeks to explore the fundamental questions of existence and the nature of being.



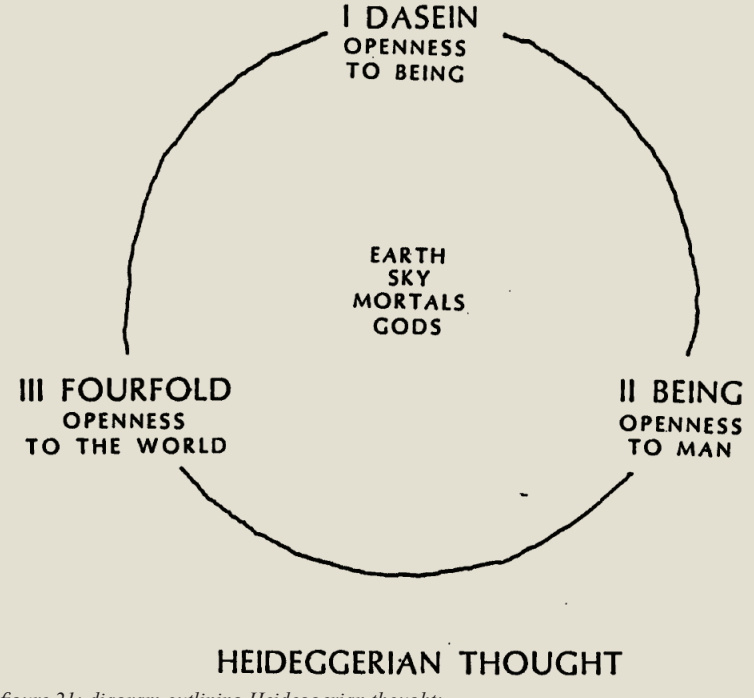


figure 21: diagram outlining Heideggerian thought;
source: "GENIUS LOCI: AN INTERPRETATION OF THE IDEA OF PLACE IN CITY DESIGN" Martin A. Murray

SPIRITUALISM // SUBJECTIVITY Spiritualism delves into the belief in non-material aspects like the soul, emphasizing personal, inner experiences beyond the physical realm, closely related to subjectivity which focuses on individual internal experiences.

MATERIALISM // OBJECTIVITY Materialism asserts that only physical matter and its changes exist, relating to objectivity, which aims for an unbiased understanding of the world based on observable facts.

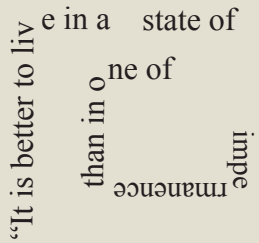
PHENOMENA // Phenomena are the aspects of the world as they are experienced subjectively, highlighting how things appear to our consciousness.

ACTION // In phenomenology, action is seen as purposeful behavior infused with personal meaning, reflecting the individual's intentions and interactions with the world.



figure 22: Roman dwelling at Ostia Antica; source: photo by author

BACHELARD



Gaston Bachelard, The Poetics of Space, page 61

French philosopher Gaston Bachelard, in the text *The Poetics of Space* (1957) offers a deep consideration of how spaces feel on a more personal and emotional level, drawing heavily on literature, poetry, and our wild imaginations. While Heidegger unpacked the deeper meanings of being and where and how spaces are formed, Bachelard was more concerned with the personal corners of our world like homes, attics, cellars, and even the drawers and nests that hold special places in our hearts (Bachelard 1957).

In *The Poetics of Space*, Bachelard takes us on a thoughtful journey through these intimate spaces that play a big role in our inner lives, suggesting they’re much more than just bricks and mortar. These places are like treasure chests of imagination and memory, crafting the emotional and psychological backdrops of our lives. To Bachelard, the home is especially significant, acting as a sanctuary for personal identity and a cozy corner where our thoughts and memories weave into the essence of who we are.

Bachelard’s reflections have touched everything from architecture and literary studies to psychology and beyond, pushing professionals in these fields to think harder about how spaces can stir up memories, feelings, and daydreams. His work has offered new insights into how we navigate both the real and the metaphorical spaces we dwell in. The *Poetics of Space* encourages us to see the spaces around us in a new light, inviting us to embrace the poetic and imaginative potential they hold for stirring contemplation, nostalgia, and dreaming.

These concepts resonate with my research on the Ponte Rotto, where uncovering the *genius loci* of the bridge spurred many daydreams of far-off realities and allowed my imagination to dwell within the site. Bachelard’s framework helped me understand the bridge not merely as a physical structure but as a vessel of memories and dreams, where the past and present intertwine, evoking a sense of *betweenness*. The broken bridge, once a vital connector, now stands as a symbol of transition and contemplation, inviting visitors to pause, reflect, and imagine the countless lives and stories it has witnessed. This imaginative engagement transforms the Ponte Rotto into more than a historical relic, making it a canvas for exploring deeper meanings and personal connections, and exemplifying how Bachelard’s theories apply to real-world sites.

Christian Norberg-Schulz's influential work, *Genius loci: Towards a Phenomenology of Architecture* (1980), has played a significant role in shaping my thesis. Norberg-Schulz delves into the concept of *genius loci* arguing for its central importance in the creation and understanding of architectural spaces. I have drawn extensively from this work to guide and lay the groundwork for my own explorations, particularly in examining the Ponte Rotto and the *genius loci* of Rome.

Norberg-Schulz's exploration of *genius loci* transcends the mere physical attributes of a location, embodying the deep-seated sense of identity and belonging that people feel towards a place. It encompasses both tangible elements, such as buildings and landscapes, and intangible elements like memories, traditions, and symbolic meanings, which together forge a location's unique character. His text advocates for a holistic engagement with our environments, challenging the conventional emphasis on visual perception by promoting an experience that activates all the senses.

He elaborates on *genius loci* through a framework of four thematic dimensions: earth, sky, divinities, and mortals. This comprehensive lens includes the topography of the land, the cosmological conditions like the quality of light, the architecture that represents human contributions to the landscape, and the symbolic and existential meanings embedded within the environment. One of my key takeaways from Norberg-Schulz's work is the emphasis on natural conditions, categorized into three primary landscape characters: romantic, symbolizing the wild and untamed; cosmic, reflecting the vastness and mystery of the universe; and classical, denoting harmony and balance.

The concept of natural meaning is central to Norberg-Schulz's theory. Natural meaning refers to the inherent characteristics of a landscape that evoke specific emotional and cognitive responses from individuals. These natural characteristics shape our relationship to the physical world by providing a context that influences how we perceive, experience, and interact with our surroundings. Understanding the natural meaning of a place allows us to appreciate its unique qualities and fosters a deeper connection with it.

I have applied these themes to inform the creation of palimpsests that reflect the layered history and spirit of the Ponte Rotto. By considering the bridge's physical state, its historical context, and its emotional resonance with the people of Rome, I have sought to capture the essence of its *genius loci*. The concept of dwelling, central to Norberg-Schulz's argument, has been particularly influential. Dwelling involves a poetic and existential engagement between individuals and their surroundings, encompassing emotional, cultural, and spiritual dimensions.

Referencing Norberg-Schulz's work, I have examined the Ponte Rotto not just as a historical artifact, but as an active participant in the urban fabric of Rome. This perspective allows for a deeper understanding of how the bridge interacts with its surroundings, contributing to the city's collective memory and cultural identity. The natural meaning of the Ponte Rotto, characterized by its interaction with the Tiber River, its partial state of ruin, and its integration into the modern urban landscape, highlights the dynamic relationship between the physical environment and human experience.

NORBERG-SCHULZ







figure 23, 24, 25: Napoli; Montemalbe; Ostia Antica
source: photos by author

positivistic observations

By the mid-20th century, there is a notable shift towards a more positivist methodology, increasingly favored by the scientific community. This paradigm prioritizes empirical evidence and measurable outcomes, aiming to distill the essence of place into quantifiable attributes (Dixon Hunt 2020). Such a move diverges significantly from the existential and subjective lens through which phenomenology views the spirit of a place, instead adopting a stance that seeks to objectively analyze and categorize the environmental and physical characteristics that define a location. This positivist approach endeavors to establish a universal framework for understanding places, leveraging data and statistical analysis to explore patterns, correlations, and causes in the human-environment relationship. While this methodology might sacrifice the depth of individual experience and cultural nuance emphasized by phenomenological perspectives, it offers the promise of replicable, scalable insights into how environments impact human behavior and well-being, potentially informing more evidence-based urban planning and design strategies.

This morphology of the term *genius loci* was crafted to highlight the empirical aspects and a positivist understanding of place. Geologists and geographers' expertise, along with the preference for photographic over drawn representations, began to shape various methodologies for comprehending the essence of a place. According to this perspective, delving into a place's character or 'nature', its physical components, cultural significance, and daily activities become essential, thereby necessitating a deeper understanding of the place itself (Dixon Hunt 2020). While the characteristics of a site can be itemized and dissected, any notion of supernatural or spiritual significance in interpreting a place is dismissed. The underlying notion is that authenticity can be gauged through tangible features and by comparing them with alternative locations. For instance, we discern the authentic Amsterdam by contrasting its canals with those of Venice or Bruges; likewise we distinguish Tel Aviv from Toronto based on visual cues unique to each. (Dixon Hunt 2020) Dixon Hunt argues that this approach "eschews any sense that *genius loci* might admit any idea beyond the finite and ontological" (Dixon Hunt 2020, 29). Dixon Hunt goes on to use J.B Jackson as an example of an author who uses his perspective on 'everyday America' as a notion of contact and celebration that colors his regard for places, beyond sentimental explanation from the spiritual realm, but with the fervor to adequately interpret positivistic perspectives in a nuanced and personalized manner. This article relates well to this thesis and the concept of memory landscapes, incorporating Jackson's argument into the work has provided another pillar of foundational strength to the work.



figure 26, 27 28: Perugia; Black Diamond; New York; source: photos by author

"Topophilia is not the strongest of human emotions. When it is compelling we can be sure that the place or environment has been the carrier of emotionally charged events or perceived as a symbol."
Yi-Fu Tuan, Topophilia, page 93

Yi-Fu Tuan, a Chinese-American geographer, introduces a fresh perspective to the discourse on space, place, and human experience with his seminal work *Topophilia* (1974). Tuan's geographic approach plays off of phenomenology by emphasizing the empirical study of how physical environments and cultural perceptions intertwine to shape the human experience of place. The book focuses on 'the affective bond between people and place or setting' (Tuan 1974, 4) and explores the idea that the 'senses' of a location influence our experiences. Thus, he explores ideas such as 'vision', 'hands and tactile sense', 'hearing', and 'smell' As they relate to place and experience (Tuan 1974). I became interested in incorporating these concepts to my work based on their ability to discern the sensorial component of *genius loci*, mentioned by Dixon Hunt earlier. This analysis has served me well in my own analysis by by giving me the ability to perceive place from not just an abstract phenomenological perspective, but also from a place of feeling and tangible geographic reality. "Topophilia," a term Tuan popularized as a way to describe the affective bonds between people and places, explores the myriad of ways in which individuals and societies develop deep connections to their environments. Tuan's analysis spans the spectrum from natural landscapes to urban settings, investigating how aesthetic, sensory, and cultural factors contribute to the formation of these bonds. His geographer's lens focuses on the interplay between the physicality of space and the subjective experiences of individuals, thereby expanding on the phenomenological investigation into how spaces are perceived, conceived, and lived. Tuan also highlights an intriguing aspect, emphasizing that the experience goes beyond just the 'place' itself. (Tuan 1974) He points out that 'the group, by expressing and enforcing societal cultural norms, significantly influences the perceptions, attitudes, and environmental values of its members' (Tuan 1974, 246).

The Ponte Rotto serves as an example of how the physical environment can shape cultural practices. The bridge's remnants have been integrated into the urban landscape of Rome, influencing both the movement patterns and the cultural rituals of the city's inhabitants. Its presence in the cityscape contributes to a collective memory, where the bridge becomes a site of storytelling and historical narrative, reflecting Tuan's idea that places are repositories of meaning and memory. The interplay between the bridge and its surroundings, including the Tiber River and the modern infrastructure of Rome, creates a dynamic environment that continually shapes and is shaped by human activity. This dynamic relationship underscores Tuan's argument that the environment is a shaping force in human life, influencing behaviors, experiences, and even identities.

Tuan's work adds an important empirical dimension

TUAN



figure 29: Bagnoregio; World Heritage Site; source: photo by author

to the study of *genius loci*, offering insights into how specific environmental features and cultural practices influence human feelings and behaviors towards places. This understanding of the interaction between human experiences and spatial environments, can be applied to the Ponte Rotto by examining how this ancient Roman bridge served as a critical conduit for social and economic activities. By analyzing the bridge through Tuan's lens, we can appreciate how the physical structure of the Ponte Rotto not only facilitated connectivity but also symbolized the resilience and continuity of the community throughout history. Tuan moves the conversation into the broader field of human geography, where the relationship between people and place is seen not just as a backdrop for human activity but as a dynamic and shaping force in human life.

J.B. Jackson's (1980) *WW* has been instrumental to this project. In this text, Jackson takes us through how places, memories, and time all mesh together. He argues that ruins are key to our collective memory, serving as physical echoes of the past and highlighting the unyielding march of time. He believes ruins are more than just remnants to be pitied or idealized; they're vital pieces of a place's story, teaching us about change, endurance, and the ongoing accumulation of human history. Jackson challenges the usual nostalgic view of ruins. Instead of seeing them just as symbols of decline or nostalgia, he sees them as crucial for grasping the *genius loci* over time. Ruins showcase the dance between human efforts and nature's might, reflecting the cycles of building, destruction, and renewal that mark our history. They remind us that places change; they evolve and mirror the shifts in the communities that made and left them.

His article emphasizes that truly connecting with a place means acknowledging and valuing its history, including its ruins. Jackson warns against artificially keeping places in a frozen historical state or recreating past settings without their genuine context, which can lead to a diluted or dramatized grasp of history, disconnected from present realities and past lessons. For him, ruins are not just relics but key to truly appreciating the spirit of a place, linking past to present and encouraging deep reflection on the layered meanings that make up a place's real character. (Jackson 1980)

In his essay *A Sense of Place, a Sense of Time*, 1995, Jackson touches on how he views the *sense of place*, translated from *genius loci*, with a bit of skepticism towards the subjective emotions often linked to it (Jackson 1995). While he sees the value in the emotional bonds we form with places, he's wary of interpretations of the *genius loci* that lean too heavily on sentimentality or romanticism. An excerpt from his article explains this point well:

> "Our modern culture rejected the notion of a divine or supernatural presence, and in the eighteenth century the Latin phrase was usually translated as the *genius of a place*, meaning its influence. Travelers would say that they stayed in Rome for a month or so in order to savor the genius of the city. We now use the current version to describe the atmosphere of a place, the quality of its environment. Nevertheless, we recognize that certain localities have an attraction which gives us a certain indefinable sense of well-being and which we want to return to, time and again. So that original notion of ritual, of repeated celebration or reverence, is still inherent in the phrase. It is not a temporary response, for it persists and brings us back, reminding us of previous visits" (Jackson 1995, 1)

Jackson's hesitation lies in his fears that such views can simplify places into mere containers for our nostalgia, missing their complex reality. Jackson calls for a more grounded approach to understanding places, one that considers their tangible aspects, history, and cultural significance.

Taking a page from Jackson's book, I aimed to be diligent in my approach to analyzing the Ponte Rotto, understanding that the *genius loci* is derived from more than just spiritual inclinations but from the collective impact of history and cultural significance. Jackson argues that focusing too much on the emotional side of places can mystify or idealize them, moving us away from understanding the genuine, lived experiences that give a place its character. He advocates for a balanced view of places, valuing both their beauty and historical importance as well as their role in everyday life. Jackson's perspective is that the spirit of a place comes from a mix of its visual appeal, its history, and its day-to-day significance, pushing us to see our surroundings with both awe and a critical perspective. In my project, I applied Jackson's logic by striving to balance the romanticized aspects of the Ponte Rotto with a grounded analysis of its historical and cultural context. This meant not only appreciating the aesthetic and evocative qualities of the bridge but also understanding its practical role in the lives of those who interact with it daily. By doing so, I aimed to capture a more holistic picture of the *genius loci*, reflecting both the tangible and intangible elements that define the bridge. Jackson's emphasis on the lived experience of places and their everyday significance is particularly relevant to the Ponte Rotto. This ancient bridge is not just a historical monument; it is a part of the urban fabric of Rome, influencing and being influenced by the city's rhythms and routines. By incorporating Jackson's balanced perspective, I was able to approach the analysis of the Ponte Rotto with a methodological rigor that includes both positivistic interpretations and an appreciation for the site's spiritual and emotional resonance. This approach allowed me to analyze the site from all angles, spiritual and tangible, and to understand the bridge not just as an isolated relic but as a dynamic part of the city's identity. By doing so, I could appreciate the full complexity of the Ponte Rotto's *genius loci*, recognizing its role in both historical narratives and contemporary life. This balanced methodology provides a more comprehensive understanding of the site, informing design and preservation practices that honor both its past and its present.



figure 30: J.B Jackson drawing, American Southwest, 1947; source: J.B Jackson

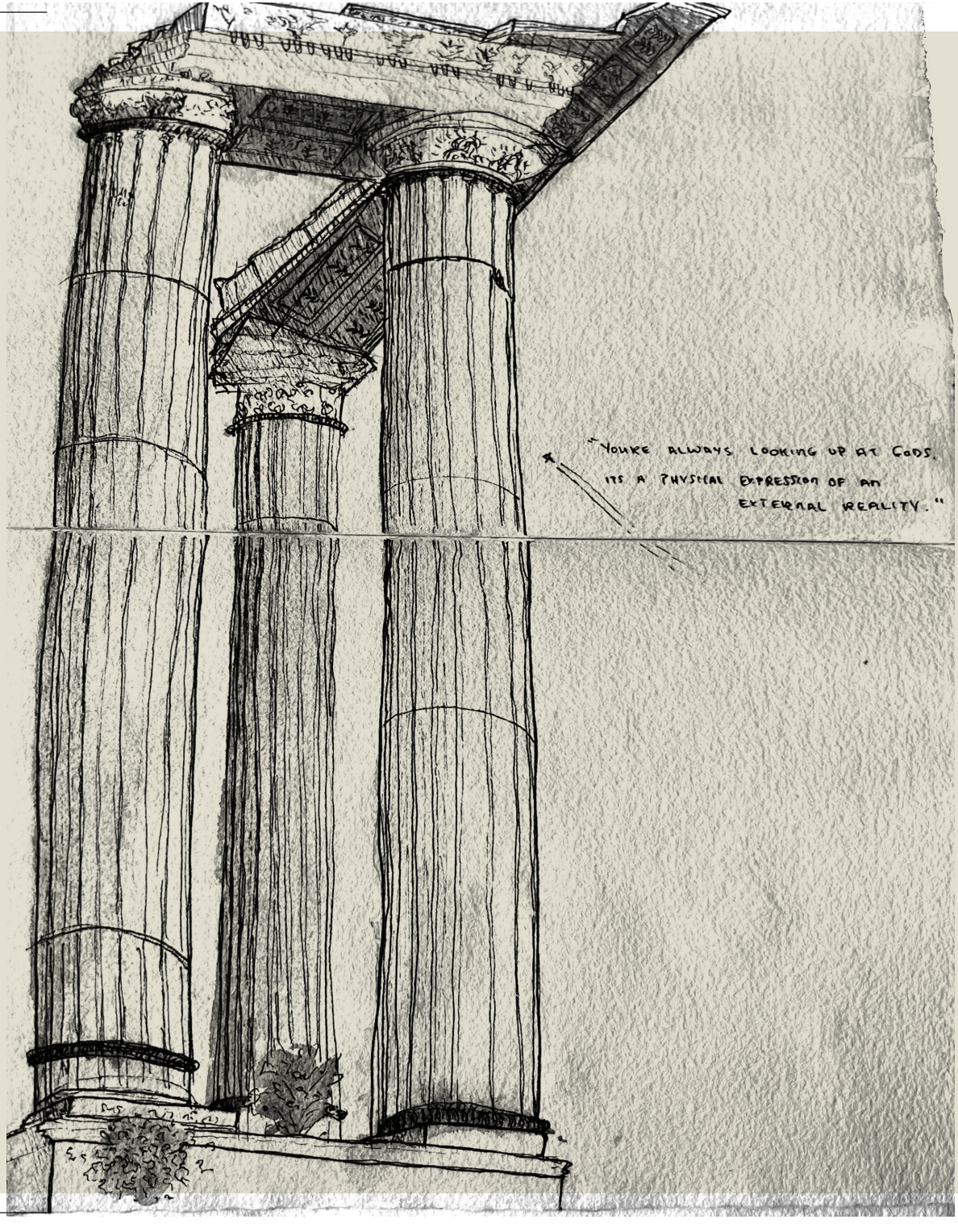


figure 31: Sketch of Roman Theater
source: sketch by author

To grasp our current relationship with *genius loci*, it is crucial to view previous definitions as cumulative. The key insight gleaned from past perspectives is that our understanding of places hinges on individual interpretations shaped by personal experiences and perceptions. Each visitor or traveler brings their unique lens to engage with the essence of a place, influenced by their inclination to delve into its specifics and their ability to observe, interpret, and learn. Do we passively accept what we see as self-evident, without delving deeper into the nature of a place? Is there a discernible spirit or essence waiting to be uncovered? Emerging from a positivistic stance, I believe that a more nuanced perspective can arise, bringing enthusiasm and objectivity, suggesting that meaning emerges through the interplay between the viewer's imagination and the environment.

Humanizing our surroundings stems from genuine encounters with actual places and the significance ordinary individuals attribute to them. Our responses to places are shaped by both their inherent qualities and our subjective perceptions, consequently influencing how we articulate and depict them (Dixon Hunt 2020). Writing about or depicting landscapes not only reflects our deductions and interventions but also invites others to engage with the essence of a place, akin to the Roman concept of *genius loci*. This essence, however, extends beyond obvious landmarks or symbols, encompassing the broader landscape and the interventions made upon it. Beneath the concept of *genius loci* lies a remnant of the Roman desire to imbue places with spiritual meaning, which persists in contemporary forms. (Dixon Hunt 2020) In our engagement with the land, words become essential tools, but they must be complemented by visual representations to facilitate a deeper understanding of specific instances of *genius loci*. Landscape transcends being merely an object; it becomes a site where a symbiotic relationship is established between humans and their environment, necessitating a narrative that acknowledges its history, both spoken and written, as well as experienced first hand.

George Descombes highlights the importance of engagement with the land in his essay in *Recovering Landscape, Shifting Sites: The Swiss Way,* (1999). Descombes starts with a statement that captures this sentiment well, "My attitude toward intervening in the landscape circles around paying attention to that which one would like to be present where no one expects it anymore. Thus, for me, to recover something – a site, a place, a history, or an idea – entails a shift in expectation and point of view." (Descombes 1999, 79) In this effort, Descombes goes about his landscape intervention from a place of noticing, an act of paying attention to what is already there, to arrive at a place of design that challenges any preconceived notions about the site's character. The philosophy of George Descombes regarding interventions in the landscape emphasizes subtle yet significant transformations aimed at uncovering overlooked elements and qualities of a place. This method aligns closely with the nuanced understanding of the spirit of a place by exploring the rich interweaving of history, personal narratives, and the interplay between natural and human factors.

Descombes advocates for a deliberate shift in perspective and expectations to unearth the hidden potential and dynamics within a landscape that often go unnoticed or dormant. His approach meticulously engages with the landscape's composition, aiming to reawaken and highlight its inherent character through careful adjustments in structure, form, and arrangement. This strategy is designed to provoke a change in how we perceive our surroundings, fostering a sense of novelty and encouraging deeper connections, mirroring the essence of the interpretive *genius loci* which calls for a more profound and complex interaction with our environments. Focusing on the dynamic aspects of landscapes, shaped by elements like weather and seasonal changes,

Descombes values the historical and future possibilities embedded within a site. He perceives the remnants and traces within a landscape not merely as historical relics but as indicators of ongoing changes and latent potentials, capturing the evolving nature of *genius loci*. Descombes emphasizes the significance of acknowledging the passage of time within a landscape and unlocking its future potentials. His designs surpass mere visual appeal, incorporating sensory and physical engagement with space, advocating for designs that respect the human experience of space in terms of scale and sensory interaction (Descombes 1999). He also underlines the importance of considering the mental and imaginative aspects of navigating a landscape, suggesting that making an environmental intervention is a cultural act that enriches the

history and future of a site and its community. This perspective echoes the interpretive approach to *genius loci*, which appreciates the emotional and imaginative aspects of place, suggesting that the design process is as concerned with conceptual and perceptual elements as it is with the physical and material. In his projects, such as the Swiss Way, Descombes aims to expose the intricate network of paths and potentialities within a landscape, challenging the simplifications common in modern planning. He proposes targeted, strategic interventions over broad, sweeping plans, championing a belief in the transformative power of detailed, carefully considered design moves to create more meaningful and engaging interactions with our surroundings. Descombes' approach and ethos present a vision of landscape intervention that deeply resonates with the concept of *genius loci*, advocating for an enriched interaction with our environments through thoughtful, sensitive, and imaginative design strategies. His work invited me to reconsider my approach to landscape, urging towards a greater appreciation for the complex, layered essence of place. By engaging directly with the Ponte Rotto through a representative exercise, I was able to meditate on the site in a way that is thoughtful, sensitive, and imaginative, allowing for a deeper understanding of the perceived *genius loci*.



figure 32: Peek of a palimpsest
source: photo by author


ETERNAL ROME AND ITS CAPACITY F


OR SELF RENEWAL
03

ETERNAL ROME AND ITS CAPACITY FOR SELF RENEWAL

To fully grasp the *genius loci* of a specific site within Rome, it was crucial for me to broaden my perspective and consider the larger environmental and cultural context of the Roman region. The profound influence of the surrounding natural environment on the architecture and character of Rome is a vital component in understanding the unique spirit of the area. For instance, the geology of the Roman region has played a significant role in shaping the city's physical and cultural landscape. The availability of materials such as travertine and tufa has influenced Roman architectural styles and construction techniques, visible in the city's monumental structures and infrastructures. This geological backdrop not only provides materials but also shapes the terrain and the very foundations on which the city is built. A major influence on the story of the Ponte Rotto lies in the bridge's relationship to the forceful Tiber River. The river has a long history of destructive flooding that has been active in destroying the Ponte Rotto time and time again. Looking at the history of flooding and how it relates to the development of Rome is essential in discerning the unique physical landscape of Rome.

A specific piece of Rome's architectural history that has been heavily impacted by the force of the Tiber River are the great bridges of Rome. These bridges are not just feats of engineering, but are imbued with historical narratives that reflect the city's evolution over centuries. These bridges, like the Ponte Rotto, serve as physical and symbolic connectors across the Tiber, embodying the historical layers and the continuity of the urban fabric. They are central to understanding how the city has negotiated its geography and history, influencing its *genius loci* and impact on the character of Rome.

Drawing on the section from Christian Norberg Schulz's (1980) chapter on the *Genius Loci of Rome*, here I will delve into how these elements, the geological, architectural, and historical, converge to form the unique spirit of the place. Norberg Schulz emphasized the importance of understanding a place's character and identity through its physical context and the meanings ascribed to it by its inhabitants. This analysis is important to consider when I refocus on the Ponte Rotto to understand how the bridge aligns with the greater *genius loci* of the Roman region.

By analyzing these broader forces at play in Rome, particularly in relation to the Ponte Rotto, I was able to form a more nuanced understanding of the bridge's *genius loci*. This endeavor will explore how the physical, historical, and cultural contexts not only coexist but interact to shape the spirit of Rome, offering insights into how the *genius loci* of specific locations within the city, like the Ponte Rotto, are manifestations of these larger dynamics.

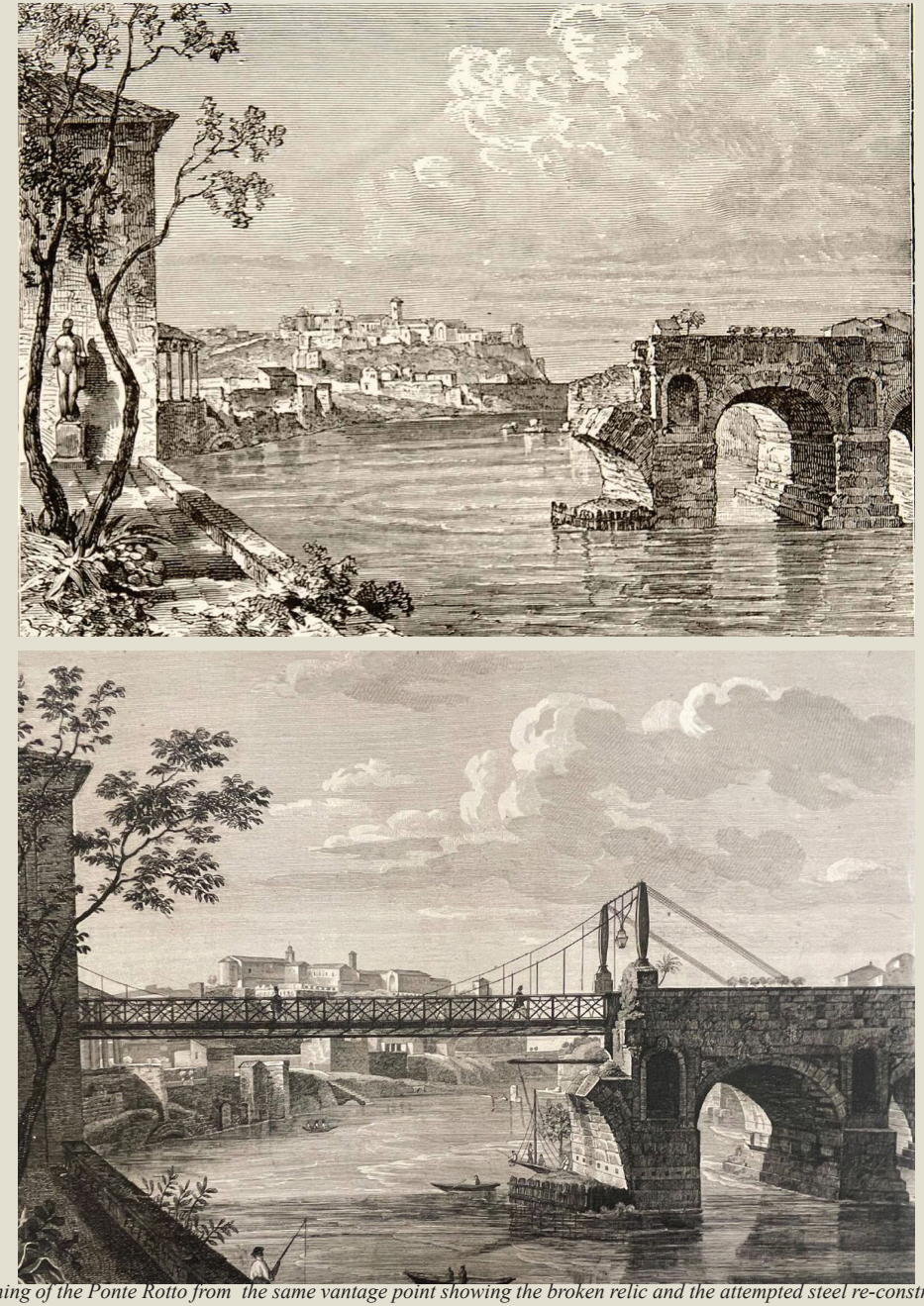


figure 33 & 34: Etching of the Ponte Rotto from the same vantage point showing the broken relic and the attempted steel re-construction (1828 ; 1890)
source: "1890 Wood Engraving Ancient Roman Aventine Hill Ponte Rotto Bridge", author unknown;
source:"Rome Bridge Aemilius 1828 Ponte Rotto Per Achilles Parboni" , author unknown

The Tiber River and its Geologic Significance

The Tiber River that flows through the Roman campagna, a low lying region surrounding Rome, is forceful, with hundreds of tributaries feeding the fertile plain. It is important to look at the impact this river has had on the development of the region to understand how a river like this has impacted the growth of the Roman empire. This analysis provides insights into the forces behind the rapids at the Ponte Rotto's bend, and helps us understand why the bridge was broken in the first place.

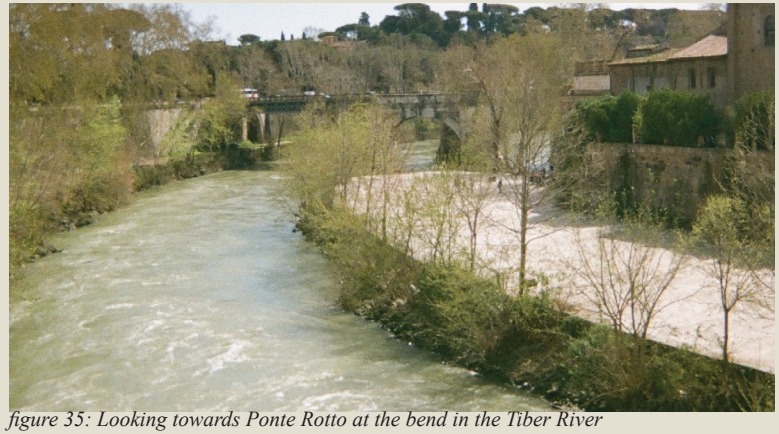
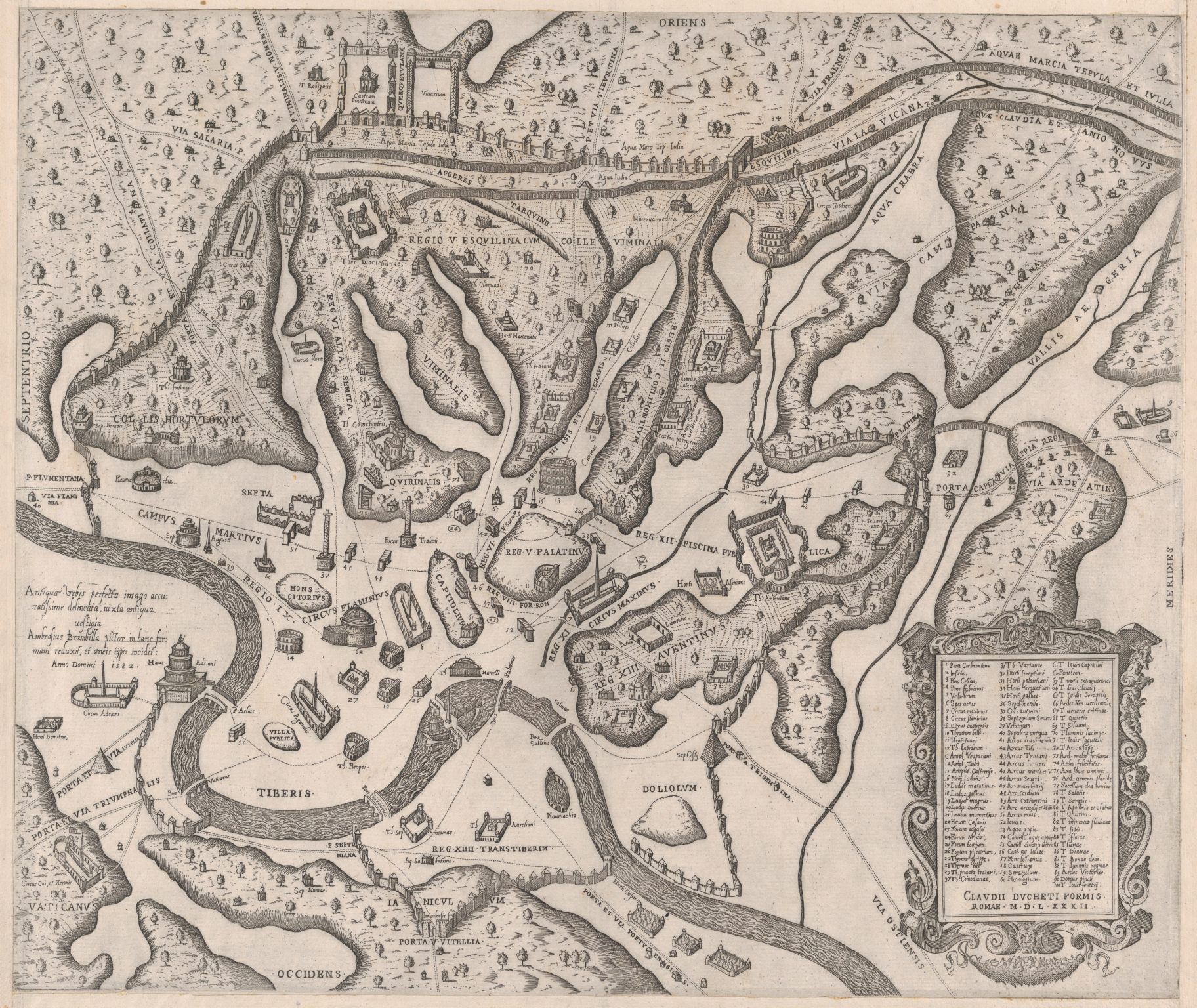


figure 35: Looking towards Ponte Rotto at the bend in the Tiber River
source: photo by author

Many historians consider the Tiber River the lifeblood of Rome. The river itself is found in myths and folktales dating back to antiquity, starting with the original founding of Rome by Romulus and Remus as babies in a basket floating down the Tiber River. The geologic features of the Tiber are responsible for the unique conditions present in the city. The Tiber River originates in the Apennine Mountains and flows for nearly 252 miles before reaching the Tyrrhenian Sea. (Cheramie 2021). Crossing through these mountainous regions causes high amounts of erosion and the large elevation drop increases velocity, which in turn has a significant impact on the river's hydrology and flow. The Tiber River is relatively short by global standards, but it has more than 40 tributaries above Rome (Rinne 2011). Located in the Tyrrhenian coastal plain, Rome sits in a halfway point between the mountains and the sea. The Tiber River bisects this plain, and weaves through the landscape carrying sediment and debris out to the sea. The two nearby volcanic fields, the Sabatini volcanoes to the northwest, and the Alban Hills to the southeast, are responsible for depositing the well known tuff, composed of ash, pumice, and rock, across the plain (Cheramie 2021). Tuff, a soft, porous rock formed from volcanic ash, is a part of the soil makeup of the region, and has been essential to the city's development as it creates fertile soils that allow for a diverse regional ecology. This fertile soil drew inhabitants to Rome, and was ideal for the creation of the aqueduct system, but it also had a part to play in the city's history of flooding. The tuff surrounding the region is highly porous and permeable, meaning it has many small interconnected spaces that can hold and transmit water (Princeton 2023). In the rainy season, or when the Tiber River overflows, this porous material allows water to infiltrate and overwhelm the groundwater. The water then is able to flow back to the surface in instances of overload, increasing the amount of inundation in the city as well as the prolonged effects of the flood. Another characteristic to consider about tuff is that it does not have a uniform composition, and some varieties of tuff erode more easily than others when exposed to wind or water (Princeton 2023). This variable erosion contributed to the development of gullies, channels, and uneven terrain that could channel floodwaters in unpredictable ways.

Italy as a whole is one of the most geologically complex regions of the world, with diverse landscapes and active volcanic influences. As the field of geology came into consideration, the Italian countryside was relatively straightforward in its

figure 36: Ancient Rome, and its Hills, from the West; source: "Speculum Romanae Magnificentiae"


ORIENS
AQVAE MARCIA TEPVLA ET IVLIA
AQVAE CLAVDIA ET ANIO NOVVS
VIA LAVICANA
VIA PRAENESTINA
VIA SALARIA
AGGERES TARQVINII
REGIO V ESQVILINA CVM COLLE VIMINALI
REGIO VI ALTA SEMITA
VIMINALIS
QVIRINALIS
REGIO II COELIMONTIVM
REGIO III ISIS ET SERAPIS
REGIO IX CIRCVS FLAMINIVS
REGIO V PALATINVS
REGIO VIII FOR ROM
REGIO XI CIRCVS MAXIMVS
REGIO XII PISCINA PVBLICA
REGIO XIII AVENTINVS
REGIO XIIII TRANSTIBERIM
REGIO IX CIRCVS FLAMINIVS
CAPITOLIVM
MONS CITORIVS
SEPTA
CAMPVS MARTIVS
COLLIS HORTVLORVM
SEPTENTRIO
P. FLVMENTANA
VIA FLAMINIA
VIA COLLATINA
PORTA ET VIA TRIVMPHALIS
PORTA ET VIA AVRELIA
VILLA PVBLICA
TIBERIS
VATICANVS
OCCIDENS
IANICVLVM
PORTA V VITELLIA
PORTA ET VIA PORTVENSIS
DOLIOLVM
PORTA TRIGEMINA
VIA OSTIENSIS
VIA ARDEATINA
PORTA CAPEA VIA APPIA REGIO
VALLIS AEGERIA
AQVA CRABRA
AQVA CAMPANA
VIA LATINA
MERIDIES
Antiquae vrbis perfecta imago accuratissime delineata, iuxta antiqua uestigia
Ambrosius Brambilla pictor in hanc formam reduxit, et aeneis typis incidit:
Anno Domini 1582.
CLAVDII DVCHETI FORMIS
ROMAE · M · D · L · XXXII ·

ability to be studied and accessed (Cheramie 2021). Rome and other major cities provided a new challenge, uncovering earth buried under centuries of human development. The continuous use and modification of Rome over millennia has resulted in extensive alterations to the city's topography, land use, and geological features. Urban construction, road networks, and subterranean infrastructure have played a part in obscuring the original geological context of Rome, making the study of the city's geology a foreboding endeavor. This undertaking creates a meticulous interdisciplinary approach that must consider not only the natural geological processes, but also the influence of humans with the environment throughout the city's long and dynamic history.

The seven hills of Rome, the Capitoline, Palatine, Aventine, Caelian, Quirinal, Viminal, and Esquiline Hills, have been noted throughout history for their integral role in the city's prosperity and development. These hills are a result of the region's active geology, and the meandering nature of the Tiber River (Princeton 2023). The hills themselves are the remnant of an ancient plateau, formed by volcanic deposits in the region. As the river cut its course through the plateau, the hills that are formed of erodible tuff, were worn away. The tuff material found in the hills has been a valuable resource for the early construction of the city and its infrastructure. Early Roman development purposely chose the hills for their geographic advantage. They provided protection from encroaching armies, and the ferocious Tiber River. As the population grew, Romans carefully considered what to put in the floodplain, limiting development to structures like theaters, temples, and military training grounds due to their ability to withstand the Tiber's flood. The unique topography of Rome is considered tantamount to the city's resilience and namesake as the Eternal City.

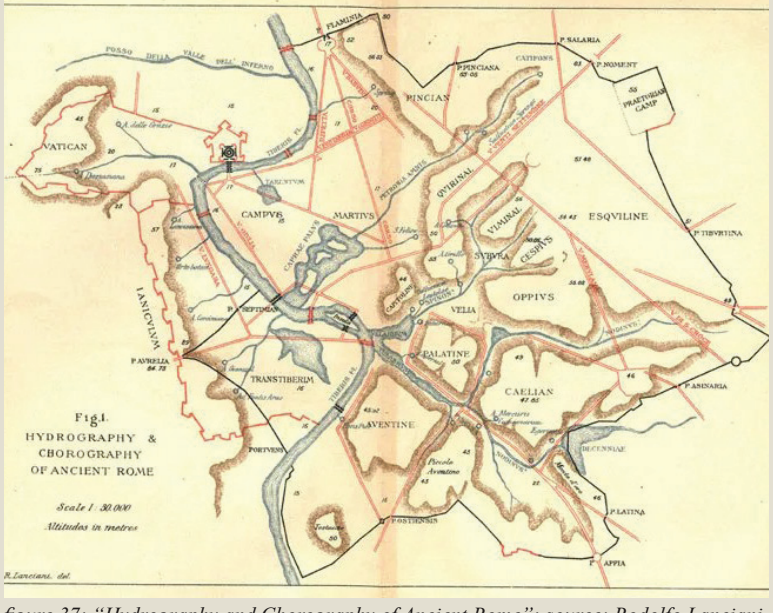


figure 37: "Hydrography and Chorography of Ancient Rome"; source: Rodolfo Lanciani, 1897

Tiber Island, which I will discuss in further detail later in the thesis, is located in a narrow bend in the river. This island was formed due to the accumulation of weathered sediment, getting trapped in the rapid waters at the river's bend (Princeton 2023). This dependable crossing point is a foundational staple of the city due to its ability to be bridged. The constant traffic across the island for centuries has allowed it to become a center for trade and commerce.

Rome's unique geomorphological conditions have allowed for ideal conditions to foster the development of the eternal city. While the constant flooding of the Tiber River has been catastrophic for Romans, the fertile soil and undulating topography created by the river's flow have created a nourishing environment for centuries. The city continues to prosper from these conditions, and especially now that the river has been fortified, the eternal city will continue to stand the test of time.

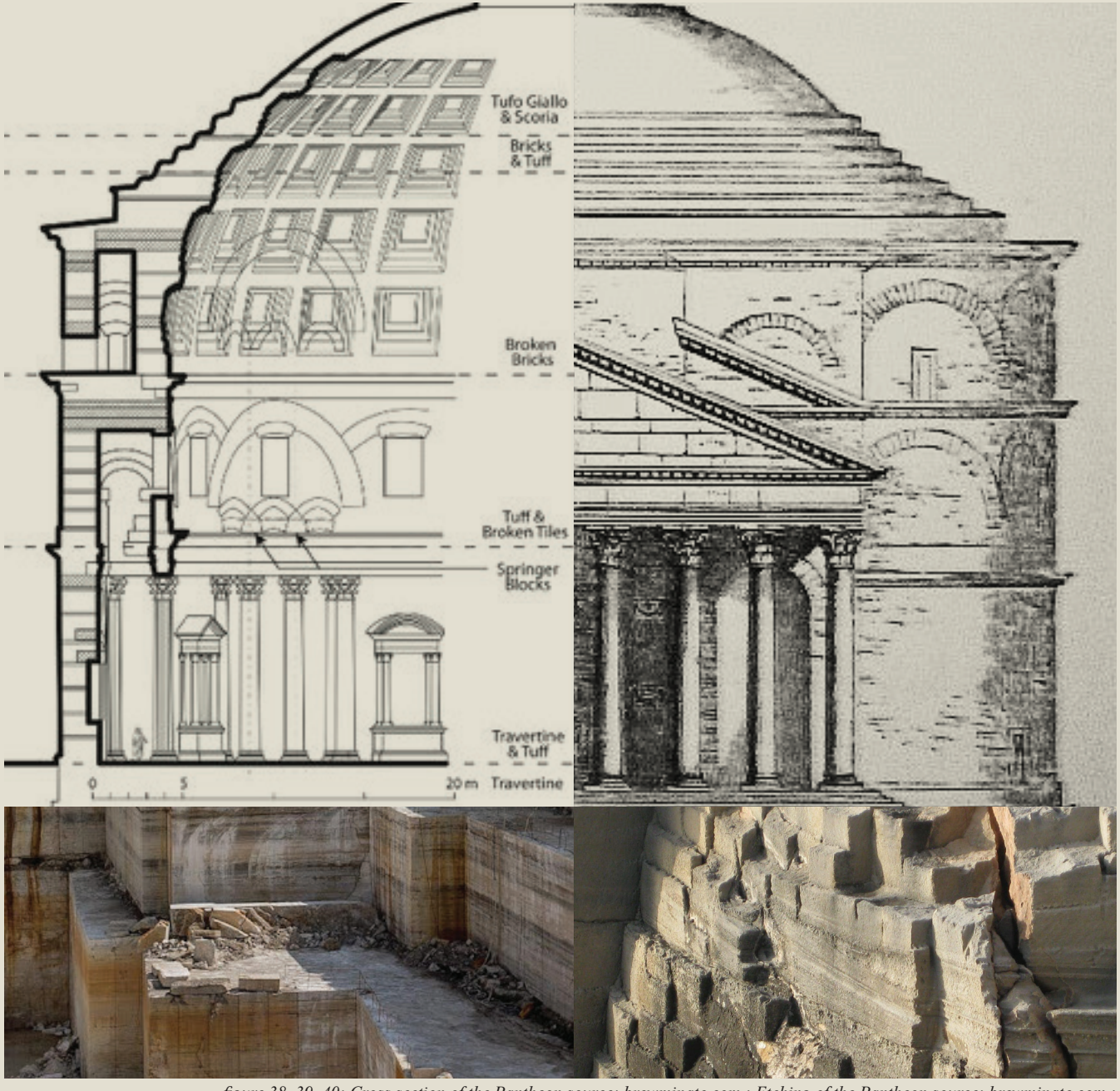


figure 38, 39, 40: Cross section of the Pantheon source: brewminate.com ; Etching of the Pantheon source: brewminate.com ; Italian Travertine source: aretinamarmi.com ; Italian Tufa source: aretinamarmi.com

The Bridges of Rome

The active physical environment surrounding the Roman region meant that the planners and engineers who built the great empire needed to be able to outsmart nature on a daily basis. Dating back to antiquity, bridges in Rome have been engineering marvels that allowed the empire to expand and conquer. Guilds of engineers and skilled workers were employed across the empire, with the highest honor being given to those bestowed with the title *Pontifex maximus*, or "great bridge builder", the most important position in ancient Rome (Sheehan 2017). On the tomb of *Pontifex Maximus Caius* Julius Lacer, 104 AD, is an epitaph that reads, "I leave a bridge forever in the centuries of the world." Time has proven just how right he was in this statement. Why are the Roman bridges so strong? There is a myth floating around that the Roman engineers in charge of bridge building would have to stand beneath them as the scaffolding was removed, and it was this threat of death by falling debris that led to such tight structural planning. In actuality, historians attribute the engineering guilds for the collective knowledge and planning of the Roman bridges (Sheehan 2017). These pioneers in structural design are responsible for some of the most innovative technologies in bridge engineering, many of these methods still employed today.

Retracing the Roman bridges through time brings us back to humble roots. The earliest bridges in Rome were simple wooden structures. While none of these wooden bridges stand today, we still have records of their existence. Perhaps the most notable is the *Pons Sublicius*, also known as the *Sublata*, which was the first bridge built over the Tiber River around 642 BC (UNIKO 2023). Located near the foot of Aventine Hill, the construction of *Pons Sublicius* was ordered by Ancus Marcius around 642 BC. Made entirely of wood, *Sublicius* is a name that means "resting on pilings", because the bridge was supported by pilings driven into the riverbed. A similar construction was used by Julius Caesar's engineers to build the Rhine. As time marched on, Romans gradually transitioned to more durable materials, such as stone and concrete. This era birthed iconic structures like the *Pons Fabricius* (62 BC) and the *Pons Cestius* (46 BC), both of which still stand today (Fabricius 2023).

It is the masonry bridges that continue to stand in the modern world. Rome is the first civilization to use concrete in the construction of their bridges. Using a natural cement, pozzolana, combined with the cofferdam technique to build piers in wide rivers, allowed the builders to create foundations in soft riverbeds, common in Rome (Sheehan 2017). Today, most surviving bridges were those built on rock, but one of the most famous, the Ponte Sant'Angelo, built in 134 AD, is still standing on its cofferdam foundation. The iconic arches seen in the bridges around Rome and the rest of Italy, particularly the semi-circle arch, help distribute the weight of the bridge evenly, reducing stress on the bridge and ensuring stability. To provide additional support, the Romans employed keystone technology to lock the arch in place, allowing the arch to be self-supporting and stable (Sheehan 2017). The keystone, which was inserted at the peak of the arch, had a trapezoidal shape that utilized the weight of the stone and concrete in the bridge to compress the blocks together. This structured arch was nearly impenetrable, and would require a tremendous amount of force to rupture it. This unique building design lasted the Romans centuries, and is still in use in many of the bridges we cross today.

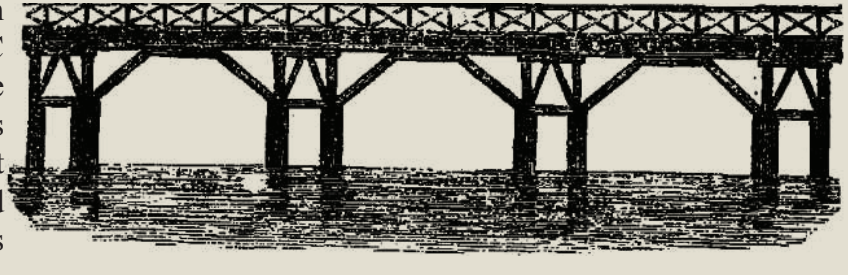
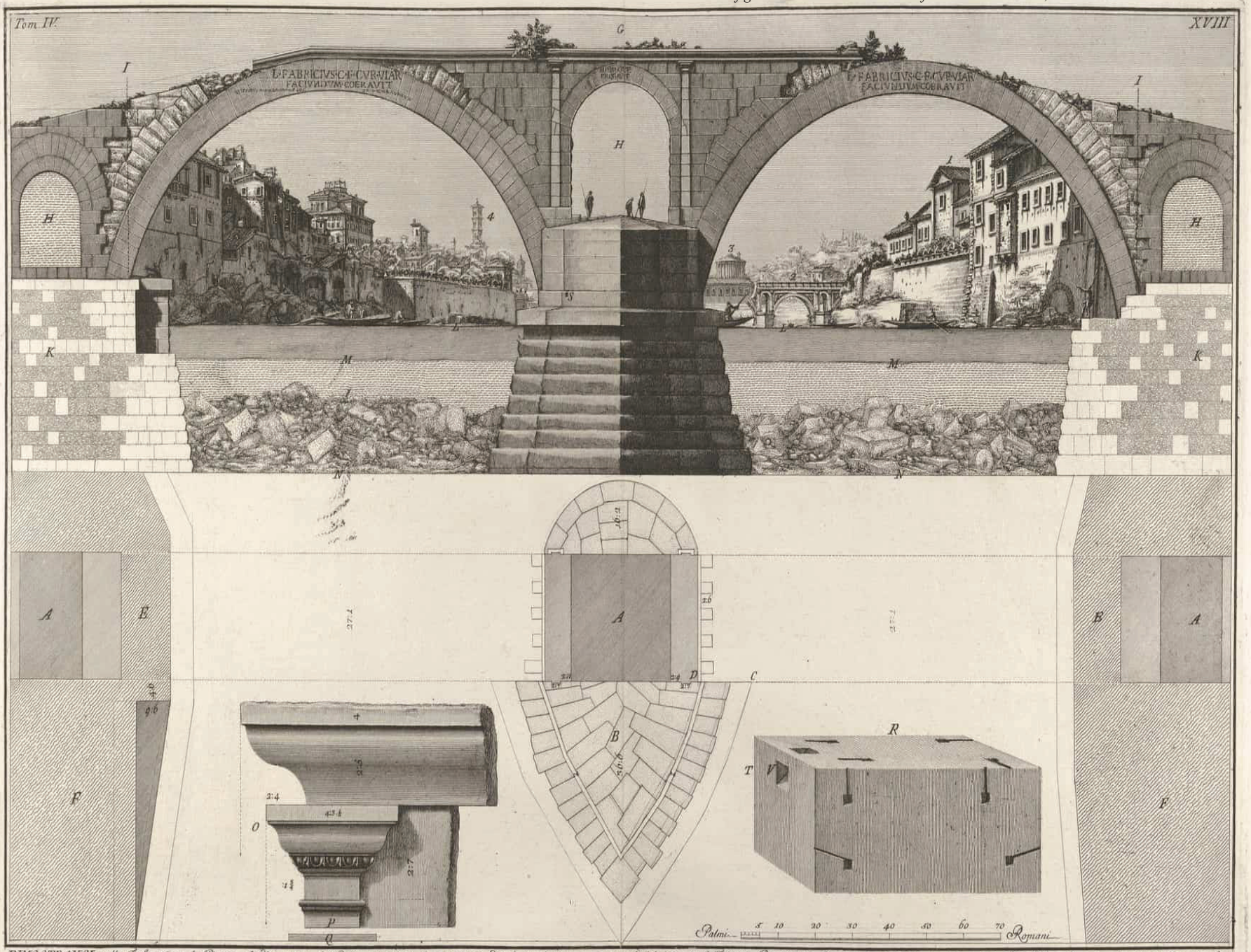


figure 41: Pons Sublicius original wooden form; source: Luigi Canina

figure 42: Plan and elevation of the Pons Fabricius; source: Giovanni Battista 1756



DIMOSTRANSI nella Tav.a presente la Pianta, ed Elevazione del Ponte, oggi detto Quattro Capi. Egli è antichissimo, e chiamavasi Fabricio da L. Fabrizio Presid.e delle Strade, che lo fabbricò nel fine della Repubblica. Augusto poi coll' occasione, che fece ripurgare il letto al Tevere, lo fortificò maggiorm.te sotto il Consolato di M. Lollio, e Q. Lepido l' Anno vigesimo terzo del suo Imperio, e quaranta quattro dopo la di lui edificazione. A. Pianta. B. Sperone, il quale sopravanza in C. dai lati degli Archi D. aggiunto dai detti Consoli. E. Muovi Ripari, fatti da Consoli, i quali si uniscono alle Ripe F. e sono soprapposti ai lati degli Archi del Ponte. G. Elevazione. H. Archi, i quali servono per iscarico delle inondazioni. I. sino a questo segnò parte del Ponte, e degli Archetti resta interrata nelle moderne Ripe. K. Spaccato delle Ripe a linea de' Ripari soprapposti, i quali cingono il Poduzzo dell' Arco da ambe le parti. L. Livello dell' acqua in tempo di Agosto. M. Letto moderno. Notasi che in questo sito il Letto è mutabile, poiche le escrescenze de ogni anno ora vi portano dell' arena ora ve la levano. N. Letto antico ricoperto di rovine. O. Modinature de Capitelli dell' Arco di mezzo col suo Cornice, e Restremazione del Pilastro. P. e Larghezza dello stesso da piede. Q. il quale posa senza base. R. Travertino situato nel di sopra dello Sperone in S. la cui Testata T. esce in fuori. I Lati del medesimo sono guarniti de buchi per li Perni, e connettono internam.te colle altre Pietre dello Sperone. V. Foro nell' angolo esterno fatto a bella posta per legarvi le Barche. Altri simili si veggono quivi, ed in altri Ponti. 1. Chiesa di S. Bartolomeo all' Isola. 2. Ponte Rotto. 3. Tempio di Cibele, ora di S. Maria del Sole. 4. Campanile di S. Maria in Cosmedin. 5. Rovine del Teatro di Marcello.

Piranesi Archit. dis. et inc.

The Bridges of Rome

The structural design of the early Roman bridges were exceptional, but another consideration of the original design's strength lies in the materials they used. The natural cement used by the ancient Romans, pozzolana, is a mix of volcanic ash, lime, and rock, which hardened with time and provided remarkable longevity for their bridges (UNIKO 2023). This material was used as a mortar for the legs of the Roman bridges. This "natural" cement is said to be ecologically safer than the cement used today, and it has the ability to grow stronger over time. Still used in some countries today, *pozzolana* has a supreme strength and stability, making it ideal for the construction of bridges in ancient Rome.

Beyond the fall of the Roman Empire, the Middle Ages saw the renovation of several bridges, including the *Pons Cestius* and *Pons Nomentano*, preserving their vital roles in the city's infrastructure. The Renaissance era was responsible for the renovation and beautification of bridges around Rome, most notably the Ponte Sisto, built between 1473 and 1479. This bridge stands as a replacement for an ancient bridge known as *Pons Aurelius*. Named after Pope Sixtus (Turismo Roma 2023), the Ponte Sisto today connects two of the most lively neighborhoods in Rome, Trastevere and Campo De Fiori.

As with much of the Eternal City, the bridges of Rome are often steeped in mythology, with many of the designs drawing inspiration from ancient legends and tales. This connection between myth and history adds depth and significance to the bridges of Rome. The Pons Aelius, or the Ponte Sant'Angelo was constructed by Emperor Hadrian in 134 AD. (Turismo Roma 2023). Now solely a pedestrian bridge, the bridge was used historically by pilgrims to reach St. Peter's Basilica, giving it a second title of "bridge of Saint Peter." In the 6th century AD the bridge was given its new name, Ponte Sant'Angelo,



figure 43: View of the Bridge and Castel Sant' Angelo; source: Giovanni Battista Piranesi

due to the legend that an angel appeared on the roof of the castle to announce the end of the plague. In 1669, Pope Clement IX commissioned Bernini, one of his last projects, to sculpt the ten angels holding instruments of the Passion, each symbolizing a different aspect of the Passion of Christ.

Ponte Fabricio, or *Pons Fabricius*, is the best preserved Roman bridge, and with that title comes centuries of myth and legend (Turismo Roma 2023). This bridge connects Tiber Island to the left bank of the Tiber, and was built in 62 BC. Inscribed with the names of the builders that have restored and repaired the bridge, the large letter engravings can be seen on its arches today. Recalled by poet Horace as the 'place from which people in despair often threw themselves into the river', this bridge stands above some of the fastest rapids through Rome due to the bend in the river at this point. Located closest to the Ponte Rotto, it is easy to see that this part of the river is most fierce due to the sharp bend in the geology. A modern name given to the bridge is Ponte dei Quattro Capi, "Bridge

of the Four Heads". (Turismo Roma 2023) According to legend, the heads adorning the bridge recall what happened to the four architects who worked on its restoration in the late 16th century. The constant arguing between them angered Pope Sixtus V, who had them all beheaded after the project was completed. In their memory, the monument was constructed so that they may live in eternal close contact.

The historic bridges of Rome, such as the Ponte Sant'Angelo and the Ponte Fabricio, are excellent illustrations of the concept of *genius loci*. These bridges not only connect different parts of the city, but also link the past to the present, merging technical brilliance with rich mythological and cultural layers. The Ponte Sant'Angelo, originally built to serve pilgrims and now adorned with Bernini's sculptures, and the Ponte Fabricio, steeped in history and legend, exemplify Rome's architectural ingenuity and its deep historical narrative. As we ponder these constructions, we are reminded that Rome's *genius loci* is woven through the fabric of its history, manifesting not just in the physical splendor of its monuments but also in the enduring soul of the city itself. In my analysis of the Ponte Rotto, I focused on how the bridge's natural and constructed elements interact to create a sense of place. The use of pozzolana cement, the integration of arches and keystones, and the bridge's position over the Tiber River all contribute to its physical resilience and symbolic meaning. The natural environment, with the Tiber's flow and the surrounding landscape, enhances the bridge's significance, creating a dynamic interaction between the built and natural worlds.

By understanding the *genius loci* of the Ponte Rotto through both its tangible and intangible aspects, I aimed to highlight how this bridge, like many others in Rome, is a testament to the city's ability to blend history, mythology, and engineering prowess. This holistic approach provides a deeper appreciation of the bridge's role in Rome's cultural and historical narrative, ensuring that the spirit of the place is preserved and celebrated in contemporary urban life.



figure 44:Ponte Fabricio; source: Piranesi 1756



figure 45:Collage; source:"ROME, A VIEW OF THE TIBER RIVER WITH THE PONTE ROTTO" Paolo Anesi

With this glimpse into the development and culture surrounding the river and the bridges of Rome, it's now time to think about how all this affects the area's *genius loci*. I purposely focused on the region of Rome as a whole, rather than jumping to the site surrounding the Ponte Rotto, to try to discern the unique spirit that makes the eternal city so special. To do this, I heavily reference Christian Norberg-Schulz's chapter on Rome in *Genius Loci: Towards a Phenomenology of Architecture*. Throughout this book, Norberg-Schulz compares several different cities and dissects their *genius loci* from a phenomenological standpoint: Prague, Khartoum, and Rome (Norberg-Schulz 1980). In this effort, he seeks to analyze the strong quality of place of each city, capturing their uniqueness and defining characteristics. In order to define these characteristics, Norberg-Schulz articulates the *genius loci* of Rome, its relationship to the surrounding geography, and the qualities present there that signify the city as eternal. I will go on to apply a similar analysis to the Ponte Rotto, examine how they complement each other, and try to discern what we can take away in our own analysis.

Christian Norberg-Schulz's (1980) exploration into Rome's essence, delves beyond its extensive historical tapestry to reveal a consistent preservation of its unique identity. His analysis is not merely an architectural study but a philosophical inquiry into what constitutes Rome's continuous self-renewal while keeping its core essence intact. (Norberg-Schulz 1980) He seeks to uncover the architectural soul of Rome, suggesting that its eternal nature stems from more than its ancient origins. Instead, he argues, it lies in its remarkable ability to adapt and evolve without losing its fundamental characteristics (Norberg-Schulz 1980). Norberg-Schulz challenges the conventional view of Rome as simply a grand capital by highlighting the absence of a singular geometric pattern in its layout, unlike other Roman-founded cities with their uniform designs. Rome presents a more intricate assembly of spaces and buildings, suggesting its *genius loci* or *spirit of place*, might be found not in abstract symmetry, but in its romantic forms and the cohesive integration of its architecture into a broader urban landscape. This challenges previous notions of Roman architecture as a derivative of Greek design, proposing instead a distinctive architectural language unique to Rome.

To further illuminate Rome's *genius loci*, Norberg-Schulz turns to the city's streets, describing them as "urban interiors" that unify rather than divide, fostering a sense of inclusion and continuity. (Norberg-Schulz 1980, 142) This contrasts sharply with other cities, where streets often serve as mere dividers. This unique characteristic of Roman urban planning offers a deep sense of belonging, indicating the *genius loci* might indeed be deeply intertwined with its urban and natural synergy. This "urban interior" can be felt at the Ponte Rotto as well, as the boundary walls constructed around the river provide this cavernous effect, segmenting the site from the urban hustle above. This cavern mimics the geography of the Roman campagna, with tall plateaus that have been carved through by tributaries of the Tiber for millenia. Walking through the winding streets of Rome, or alongside the Tiber River, brings the visitor out of the metropolis and into the countryside. The urban interior is both intimate and exposed, offering a local friendliness that feels like a small town in a big city. The connection between Rome and its surrounding landscape,

particularly the Roman campagna, plays a pivotal role in defining the city's character. This relationship underscores a deep-rootedness essential to understanding Rome's spirit, extending to the region's volcanic origins and the natural formations that have historically shaped human settlements and architectural expressions in and around the city.

This investigation through Rome's spatial and structural features unveils a city at the confluence of diverse influences — from the chthonic depth of Etruria to the classical clarity of the Alban hills, and the cosmic order evident in locales like Palestrina (Norberg-Schulz 1980, 147). Rome emerges as a crucible where varied landscapes and architectural ideals merge, crafting an urban and natural environment that is both grand and intimate, monumental yet profoundly humanized. Rome's identity, characterized by its remarkable ability for self-renewal while preserving its essence, stands as a unique testament in the architectural and cultural annals of the world. This enduring essence of Rome, marked by its harmonious integration of nature and culture, its amalgamation of varied architectural forms, and its deep sense of place, captures the eternal spirit of the city, offering profound insights into the broader human engagement with and comprehension of our surroundings.

The Ponte Rotto encapsulates key themes articulated by Christian Norberg-Schulz regarding the city's *genius loci*. Norberg-Schulz's exploration into Rome's essence—a narrative that weaves together the city's rich historical layers, its adaptive resilience, and the profound interplay between its architecture and the natural environment—finds a poignant illustration in the remnants of this ancient bridge. The Ponte Rotto, with its storied past and modern presence in the Tiber River, serves as a tangible representation of Rome's



figure 46: "View of the Roman Campagna with the Claudian Aqueduct"; source: Hermann David Solomon Corrodi, 1869

ability to preserve its identity through centuries of change and evolution. It exemplifies the integration of Rome's architectural heritage with its geographical and cultural landscape. This bridge, by standing through time, highlights the city's unique character, where historical continuity and architectural innovation merge seamlessly with the natural setting of the Tiber. It is this symbiosis of the built and natural environments, a central tenet of Rome's *genius loci* as identified by Norberg-Schulz, that the Ponte Rotto embodies.

The palimpsests I created as part of this thesis on the Ponte Rotto align with this methodology by seeking to uncover the layers of meaning that have accumulated at this site over time. This exercise delves into how the bridge's historical phases, from its inception to its present state, contribute to the



figure 47 & 48: Clouds ; image from "Genius Loci: Towards a Phenomenlogy of Architecture" (142) exemplifying Rome's "urban interior"



collective memory and identity of Rome. By examining the evolution of the Ponte Rotto, I was able to engage directly with Norberg-Schulz's themes of memory, transformation, and place-making, thereby enriching our understanding of how specific structures like the Ponte Rotto contribute to the overarching narrative of Rome's *genius loci*. This focused exploration of the Ponte Rotto, not only highlights its significance within Rome's architectural and historical fabric, but also underscores the dynamic interrelations that define the city's spirit. It exemplifies how landmarks act as keystones in the narrative of Rome's continuous development, embodying the essence of a city that Norberg-Schulz so eloquently describes as eternally rooted in its landscape, yet forever evolving in its expression and identity.


BRIDGE TO NOWHERE



BRIDGE TO NOWHERE



figure 49: View of the Ponte Rotto from Ponte Cestio; source: photo by author

Narrowing back in on the original curiosity, here we are again, viewing the Ponte Rotto from atop the Ponte Cestio, the same vantage point I was met with in my first week in Rome. Tucked away behind the plane trees, the broken bridge stands out, almost touching the modern Ponte Palatino, left to the will of the river for the rest of eternity. After dissecting the *genius loci* of the greater Roman metropolitan area, next I will focus on the site at hand, and uncover the layers hidden in this site that define its unique presence. This chapter will start from humble beginnings, analyzing the bridge from its birth as a wooden crossing in ancient Rome, to its renewed appearance as a product of Michealangelo's taste for the ornate, and into its destiny as a broken, crumbling, yet beloved monolith. In this analysis I will show the lifespan of the Ponte Rotto, and reveal the elements responsible for its distinct identity among the legacy of Roman bridges. This research lays the groundwork for the layers of the palimpsest, and in the end the exploration will unveil these layers can also be understood as a parallel into the unique characteristics that define Rome itself.

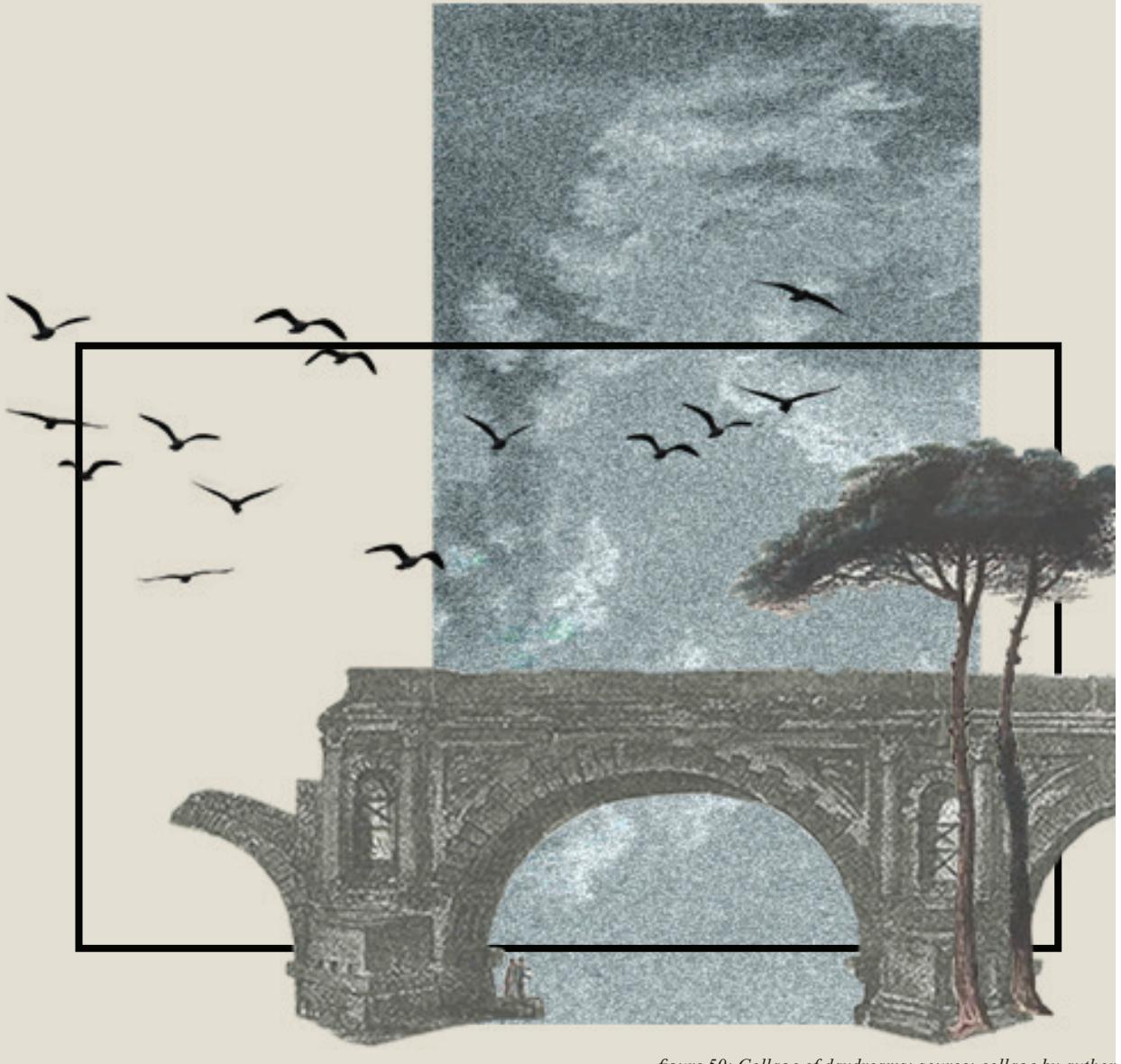


figure 50: Collage of daydreams; source: collage by author

Architecture of the Ponte Rotto Bridge

Closely analyzing the work of Alden Gordon's (2014) piece for the Wall Street Journal, *Ancient Rome's Bridge to Nowhere*, I was able to deduce the mechanics behind the construction of this ancient bridge. The Ponte Rotto or broken bridge has had many names. Constructed in 179 B.C., the Ponte Rotto was named Pons Aemilius, the Emilian Bridge, after one of the men who built it, Aemilius Lepidus, Pontifex Maximus and the leader of the Roman Senate. One of the few surviving examples of Roman Republican architecture, the Pons Aemilius was originally made of a wooden roadbed supported on five stone piers embodying multiple feats of innovative engineering. Compared to the bridges of the time that were made of wood and supported on timber piles driven deep into the riverbed, the Pons Aemelius was a breakthrough in Roman engineering. In his article Gordon breaks down the engineering behind the original Ponte Aemelius. The construction of the piers required the Romans to perfect the technique of assembling caissons, which involved creating wooden structures around sharp tree trunks that were embedded into the riverbed. During the dry season of summer, and with the help of pumps, these caissons could be drained of water, allowing for the riverbed to be excavated down to stable ground. The piers of the bridge utilized opus quadratum, also known as ashlar masonry, which consists of squared stone blocks arranged in parallel layers. These blocks were interconnected through a method where identical slabs were positioned in an overlapping and interlocking manner, either vertically or horizontally, known as headers and stretchers. Additionally, metal clamps were possibly embedded into grooves to secure the blocks against lateral movements. The material chosen was the previously mentioned volcanic tufa, sourced from local quarries. This stone was particularly manageable for carving into necessary shapes while still moist from extraction, and it gained superior compressive strength after being left to dry in the sunlight for a duration of two years.

In 142 B.C., P. Scipio Africanus and L. Mummius led the reconstruction of the bridge, incorporating two significant innovations in Roman architectural engineering: the introduction of the voussoir arch and the application of cement. For the construction of the arches, the bridge's piers were extended upwards using layers of long travertine blocks, interspersed with the usual tufa layers. Due to its superior tensile strength, travertine could be shaped into longer pieces



figure 51: Ponte Rotto Photograph, 1842; source: Joseph Philibert Gerault de Prangey

than tufa. To mitigate the impact of floodwaters, a barrel-vaulted portal was installed, enabling water to flow through and beneath the arches, thus lessening the force of the water pressure. Situated in a precarious location just downstream of the Tiber rapids and before a sharp bend, the Pons Aemilius was particularly vulnerable. The sections closest to the eastern bank, comprising two arches and their shared pier, were historically the first to succumb to the torrent's force, torn away as the rushing water intensified around the turn, exerting its full force against the side of the structure perpendicular to the flow (Gordon 2014).



figure 52: Broken bridge views; source: Karl Lindemann-Frommel, 1865, steel engraving

By the early second century B.C., the Romans had evolved from employing the corbel arch, characterized by layers of masonry extending progressively outward for limited distances, to adopting vaulted arches constructed from wedge-shaped ashlar stones, known as voussoirs, secured at the apex with a keystone. This advancement allowed for the addition of five splendid arches resting on four stone piers and two embankments, transforming the Pons Aemilius into a fully stone-based structure and marking it as Rome's inaugural stone arch bridge. The construction of the vaults involved the use of wooden frameworks over which alternating layers of header and stretcher lengths of travertine were carefully laid. After the removal of the wooden support, possibly through burning it in situ, the structural load was redistributed downwards and outwards to the pier buttresses, and subsequently to the underlying bedrock below the riverbed.

As Gordon (2014) details, the arches of bridges were engineered to surpass the strength of those in aqueducts or triumphal arches, equipped to support the roadway's weight, withstand the dynamic forces of traffic, and endure the marching of Roman legions. This durability reflects the Roman commitment to constructing enduring monuments, exemplified by the lasting presence of the Pantheon and similar edifices (Gordon 2014). The development of voussoir arches marked a significant innovation through the integration of cement, rubble, and brick infill above the arches, creating a robust yet lightweight roadbed. This cement, a blend of sand, pumice, and lime, is celebrated for its lightness, strength, and resistance to water. Repaired and rebuilt again during the ancient period by Augustus, Emperor and Pontifex Maximus, the bridge was nicknamed "Pons Maximus". (Through Eternity 2020) Another name



figure 53: Photograph of the Ponte Rotto with steel extension, 1876; source: author unknown

emerged for the bridge in the 9th century, Santa Maria Bridge when the Temple of Portunus in the Foro Boario, cattle market across the bridge, was turned into the church of Santa Maria Egiziaca. Further into the middle ages the bridge was renamed again to the Senatorium Bridge, due to the restoration at this time funded by the Senators of the day. (Virtual Roma 2014)

The Ponte Rotto traverses a significant path from its early days as the Pons Aemilius, showcasing the zenith of Roman engineering, to its present-day status as a poignant relic of history. Initially erected to bridge the Forum Boarium and Trastevere, this structure has witnessed the flux of time, enduring floods, the march of civilization, and transforming into an emblem of Rome's complex past. Alden Gordon's (2014) comprehensive exploration of the Ponte Rotto provided a foundational perspective for this architectural analysis. Gordon goes over how its construction utilized advanced methods such as caissons and opus quadratum, marking a pivotal moment in architectural advancements and setting a foundation for future Roman infrastructure projects. The integration of the voussoir arch and the pioneering use of cement not only displayed Roman innovation but also played a crucial role in the bridge's longevity against natural elements and human activity. Nonetheless, despite these technological strides, the bridge couldn't escape destruction, facing significant damages throughout the ages, with the 1598 flood leaving it in a state of picturesque decay. This shift from a vibrant conduit to an abandoned relic hasn't diminished its importance; rather, it has magnified its charm, drawing in artists and intriguing historians with its lasting legacy.

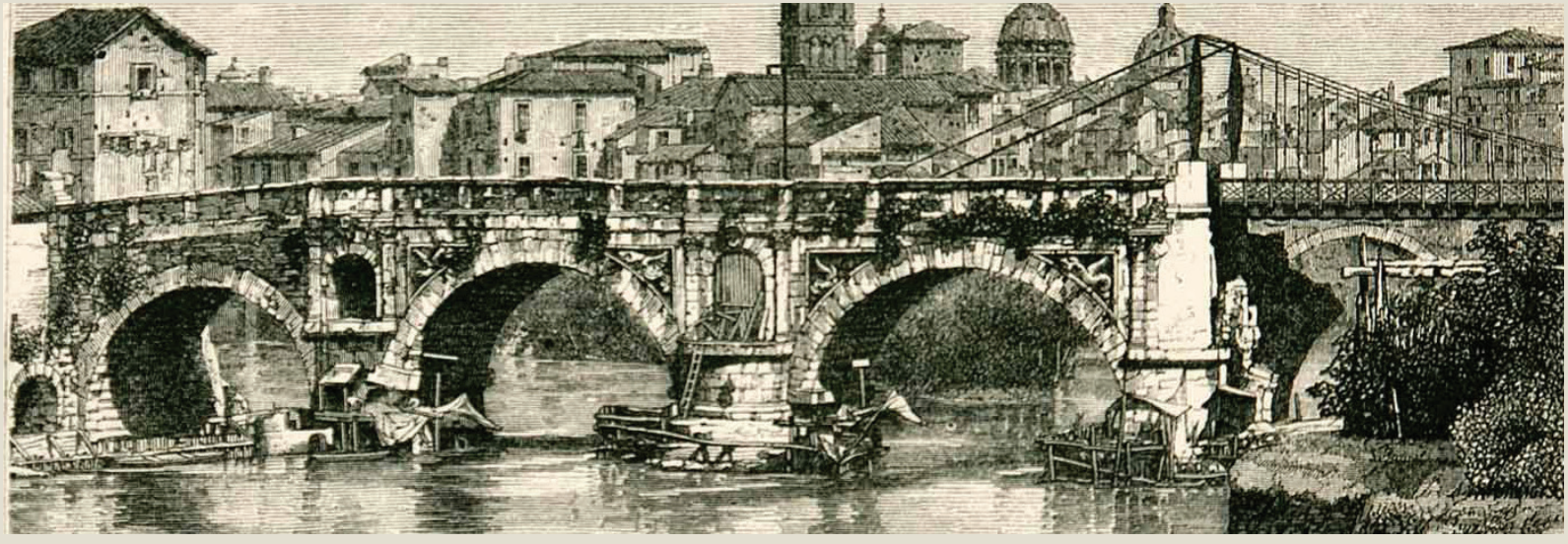


figure 54: Ponte Rotto Pre Demolition 1876, wood engraving; source: author unknown

Bridge Through Time

Historically, the Ponte Rotto bridge served as more than just a foot bridge for passing traffic. The bridge has stood silently through the passing centuries as a meter for the cycles of development, construction, catastrophic devastations, restorations, and its ultimate demolition. The bridge has been intimately connected to the growing establishment of Rome. Built to connect the Forum Boarium to the neighborhood Trastevere, the bridge stood through the ancient Roman empire, through the medieval dark ages, and into the Renaissance when the tragic 1598 Christmas Eve flood finally took out its connection to the shore. Even after its abandonment, the bridge was utilized by locals for fishing and gardening, and it has enchanted artists for centuries (Through Eternity 2020). The close proximity to Tiber Island also impacted the surrounding area, giving the bridge an air of sanctity and healing ritual. Until the late 19th century the culture that spanned the river was vibrant and active, but the building of the embankment walls in 1876 raised the city out of reach, casting the river area back into the wildness of nature. To understand the layers of culture present at this site means that this document must peel back the centuries, looking at the bridge from the perspective of the Romans, trying to understand the story that lays behind this crumbling relic. Throughout the centuries, efforts to repair and restore the bridge persisted: A significant overhaul in 1552, led by Nanni di Baccio based on Michelangelo's design, ultimately failed to hold, as the bridge was destroyed by a flood merely five years later. (Through Eternity 2020). Merely 20 years later, attempt at reconstruction was made in 1573, commissioned by Pope Gregory XIII. This effort is commemorated by a legible inscription and bas-reliefs featuring dragons, symbols of the papal crest, which were part of the project to extend the new Acqua Felice aqueduct to Trastevere, supplying the fountain in Piazza di Santa Maria in Trastevere. Yet, a devastating flood on Christmas night in 1598 ravaged the bridge as well, sweeping away three arches and two piers (Through Eternity 2020). The bridge's remnants, attached to the right bank, served as a hanging garden until the late 17th century, when the structure's deteriorating condition rendered it entirely unusable. It is this image of the broken arches that adorns art pieces from the 17th century through the 19th, a romantic vision of the grandeur that once had been. During the construction of the barrier walls in 1853, an attempt was made to connect the three remaining arches to the mainland on both sides with an iron footbridge. This structure proved too heavy for the ancient stone bridge to hold, and was demolished along with two of the three remaining arches. The Ponte Palatino was erected instead, and the Ponte Rotto stood as a silent sentinel, left to the will of the river and not to be crossed again.

As mentioned, the bridge originally served to provide access between the neighborhood Trastevere and the Forum Boarium, a cattle market that served the population of ancient Rome. One can imagine the noise and commotion present at this site, with the active conversation of merchants, fisherman, and travelers moving about the scene. The Forum Boarium was located a few hundred meters from the Ponte Rotto. This marketplace was known for its trade of livestock, and its use as a commercial hub for a variety of goods. (Virtual Roma 2014) Across the bridge to the south, Trastevere remains a vibrant cultural hub. This historic quarter, situated across the Tiber River, hence its name, derived from the Latin *Trans Tiberim*, meaning "beyond the Tiber," was intricately linked to the heart of the city through the



figure 55: Giovanni Battista Falda, Isola Tiberina, Ghetto; source: Piscinula, 1730

Ponte Aemelius. (Virtual Roma 2014) Trastevere has roots as an ancient Etruscan settlement, with winding streets that defy the organized carto-decumanus of central Rome. The village of Trastevere came to be known as a working class settlement, and many of the market vendors and fishermen lived on this side of the river. The bridge became a vital crossing between the neighborhood and market for economic exchanges and commuters moving through the city. In a phenomenological sense, the bridge gathered these two areas around it, connecting them, and creating a lifeline for culture and exchange to flourish.

The flourishing Roman culture was epitomized at the riverbanks along the Tiber. Before the construction of the embankment walls, the settlements along the river presented a vibrant and bustling scene. The shoreline was dotted with villages and settlements that housed fishermen, markets, gardens, and gathering places. Houses and slums both cropped up along the shoreline as well and many Romans called the banks of the Tiber River home. Despite the ferocious flood season of the Tiber River, the water provided fertility and sustenance for the communities that cropped up around the shoreline. A culture was formed around the agriculture and fish that were bountiful in the fertile flood valley. This culture existed as an integral setting in the Roman landscape until the protective barrier walls were erected in 1876. This monumental project, completed in 1900, created 16 meter high walls that protected the city from the wrath of the Tiber River. (Rinne 2011) The walls themselves created an acoustic buffer between the riverbank and the city above, creating a sense of detachment from the urban metropolis.

Today, the area around the river is in a process of re-wilding, and the presence of waterfowl, weeds, and other small mammals decorate the area around the river bank. A long winding bike path was completed in 2005 that runs the length of the river through the city and into the countryside (CNN 2016). This area now only hints at its past cultural influences, an area that was once teeming with human commerce has gone quiet and is returning to its wild, natural state. As the Tiber transitions into this new phase, it offers a poignant reflection on the loss of traditional cultures to modernization, while also providing a glimpse into the potential for urban environments to harbor spaces of wild beauty and ecological renewal.

The Tiber River's shores have experienced numerous shifts and restorations over countless generations, yet Tiber Island, positioned near the Ponte Rotto Bridge, has remarkably maintained its original purpose for thousands of years as a



figure 56: "A View of Rome from the Tiber, with the Ponte Rotto and the Temple of Vesta", 1870 source: Penry Williams

haven for health and recuperation. This enduring role traces back to the 3rd century B.C., during a period when Rome was grappling with a severe plague. In a bid to curb the disease, Roman emissaries were dispatched to Greece to acquire a statue of Aesculapius, the deity associated with healing and medicine (Taylor 2002). Upon their return, navigating the Tiber, a serpent, emblematic of Aesculapius and accompanying the statue, disembarked and swam to Tiber Island. This act was deemed a celestial endorsement by the Romans, prompting them to sanctify the island in Aesculapius' name and to erect a temple to celebrate this divine intervention. Consequently, the island evolved into a refuge for disease containment and recovery. This sacred connection persisted even as Christianity spread throughout Rome, with the ancient temple being re-purposed into the Basilica of St. Bartholomew, preserving its status as one of the city's most venerable sanctuaries. The establishment of the Fatebenefratelli Hospital in 1585 on the island underscores its long history as a center for healing, making it one of the oldest continuously operating medical facilities in Europe (Turismo Roma 2024).

As the Ponte Rotto evolved from the Pons Aemilius, undergoing various reconstructions and renamings, it mirrors the dynamic relationship between human aspiration, architectural progress, and nature. Now, as it stands, a lone arch bearing centuries' weight, the Ponte Rotto remains a solid connection to Rome's ancient story, a silent observer of the city's narrative of development, decline, and rejuvenation. In its broken grace, it continues to be a point for deep reflection on the transience of human efforts and the enduring allure found within the vestiges of history. As I continued to turn over the layers of time embedded in a diminishing relic like the Ponte Rotto, I began to notice that it is the stories of the past that paint the most vivid picture of the present.

Shifting our attention to the art that features the Ponte Rotto, we are able to look at the site through the lens of time, further unveiling of the unique spirit that is present there.



figure 57: Sign on Tiber Island; source: photo by author

The cultural significance of the Ponte Rotto as a broken relic isn't just in its physical remains, but in its deep impact on the art community, transforming it from a working structure into a powerful symbol of reflection, decay, and creativity. Artists and poets, inspired by its deteriorated state, found in the ruins a deeper, melancholic beauty, making the bridge a subject of artistic fascination from the 17th through the 20th century. The artworks that depict Ponte Rotto serve as a visual diary of its enduring decay, with each artist infusing their unique perspective and style into portraying its somber standing.

These artworks document Ponte Rotto's physical state across centuries and demonstrate the human fascination with decay, history, and the passage of time, immortalizing the bridge as an emblem of Rome's perpetual transformation and enduring allure. Ponte Rotto's narrative, transcending its mere existence to embody a profound symbol within Rome's extensive cultural and historical panorama, encapsulates the essence of both transformation and continuity within the Eternal City. Within this transformation lies a reflection of Rome's indomitable spirit: a city that, despite being reshaped by the forces of nature and human ambition, retains its core identity through the strata of history that define it. In its silence, the Ponte Rotto stands as a testament to this undying spirit, continuing to inspire and resonate with those who contemplate it, bridging the chasm between past and present, and serving as a reminder of the perpetual cycle of destruction and renewal that characterizes our existence.

Victor Jean Nicolle's "View of the Rotto Bridge in Rome" (1754-1826) is a detailed rendering that emphasizes the bridge's ruinous state against Rome's expansive landscape, highlighting the cultural divide between the city's grand hills and the bustling life along the riverbank.



figure 58: View of the Rotto Bridge in Rome; source: Victor Jean Nicolle, 1780



figure 59: Jacob de Heusch's 1696 "River View with the Ponte Rotto" magnifies the bridge's fragmented structure against a desolate riverbank, underscoring themes of destruction and rebirth.



figure 60: Claude-Joseph Vernet, by the mid-18th century, imbues ''View of the Ponte Rotto, Rome '' with a romanticized aura, casting the ruins in a heavenly light that captures the era's fascination with the picturesque.

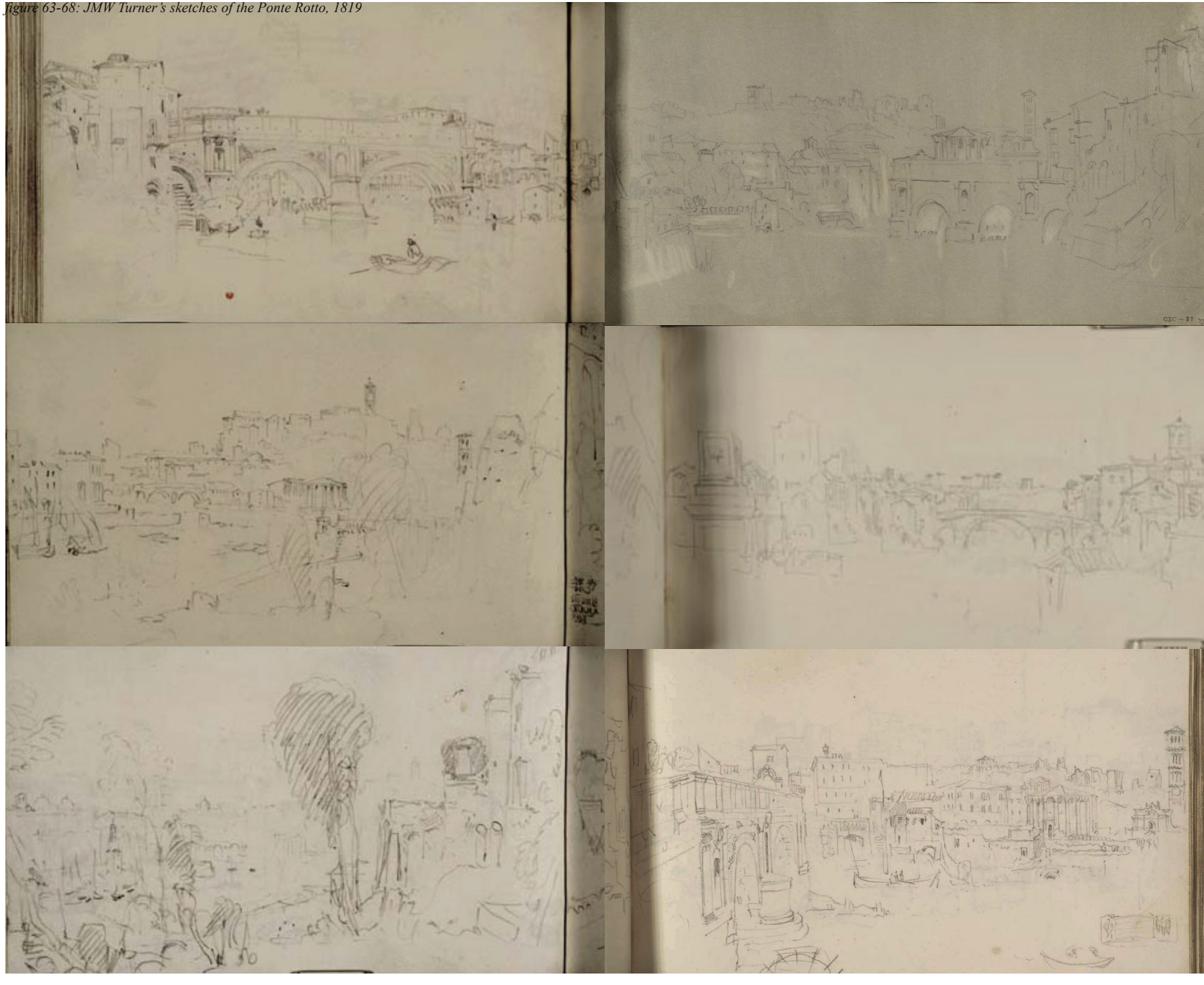


figure 61: Jean Baptiste Camille Corot's 1849 painting "Rome: View of the Tiber from the Ponte Rotto to the Isola Tiberina with the Monastery of S. Bartolomeo" harmoniously integrates the ruins with the river's life, celebrating Roman resilience.



figure 62: ""View of the Ponte Rotto over the Tiber with the church of San Salvatore de Pede Pontis", artist unknown.

figure 63-68: JMW Turner's sketches of the Ponte Rotto, 1819



While scouring the internet for the appearance of the Ponte Rotto in art history, I began to notice that many of the artists had several different pieces that showcased the bridge. It struck me that there are other designers and creative thinkers that became enamored with this relic bridge in the Tiber River. This realization had me feeling more connected to the artists of the past than ever, reminding me that you can be centuries apart and still share a common interest.

JMW Turner is an artist I referenced earlier in the chapter on emblematic *genius loci*. In researching his work for that section, I realized that he also spent a fare amount of time in Rome sketching the Ponte Rotto. His sketchbooks, which are available through Tate museum in London, show a perception of the bridge that is all too familiar to me. The quick and sketchy quality of his book is fascinating because if I didn't know otherwise I would say these images could have been drawn today. There is energy in these images that can be felt.

Another artist I came across in my research was Frank Brangwyn. Hailing from Wales (1867 - 1956), Brangwyn was versed in many artistic disciplines such as paint, watercolor, print, illustration, and design (Art UK). Brangwyn's diverse talents stood out in the work I found of the Ponte Rotto. He was able to capture several distinct feelings present at the site - abandonment, chaos, and monumentality. Not only did Brangwyn capture the unique beauty of crumbling masterpiece, he also represents the massive scale of the relic in comparison to the surrounding boats and fishermen. The use of color, shading, and composition bring the scene to life, providing a tangible understanding of where he was and what was happening there.

Maybe its just me, because I have spent countless hours analyzing this bridge, but I feel like these artists have captured something I was able to tap into myself. In their work I see myself and my own exploration into this fascinating relic, providing a mirror to my progress and dedication to discovering the meaning in this site.

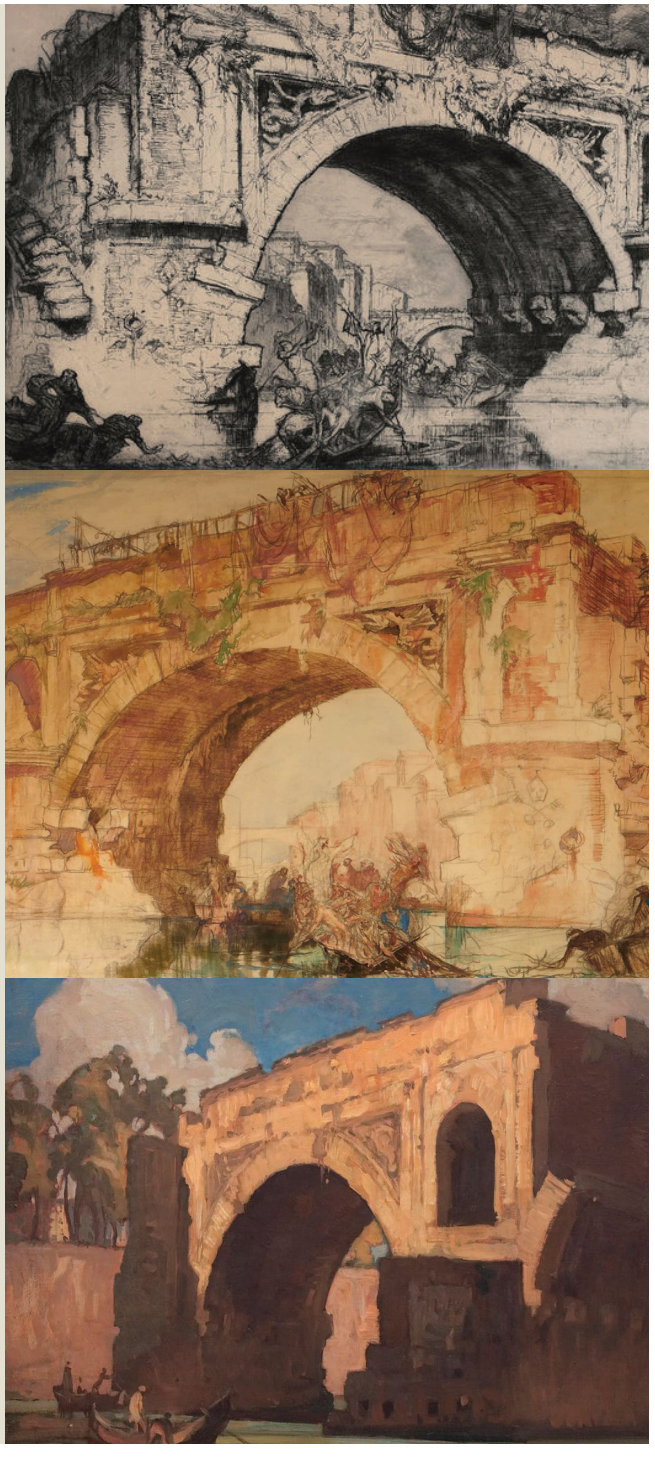


figure 69-71: Frank Brangwyn's multimedia representations of the Ponte Rotto

Betweenness

When I first began to explore the broken bridge, I was immediately struck by a feeling that I couldn't quite articulate. The idea of the bridge as an unreachable space, a threshold beyond grasp, captivated me. Initially, the word "liminal" came to mind, describing a place meant only to be temporarily moved through, one that feels mysteriously energized yet misunderstood. Through my investigation, I realized that the ruins standing as relics of the past embody their own form of liminality, existing in the threshold between past and present. Thus, the bridge is liminal in several ways: in its original purpose as a bridge and in its current status as a relic, it harbors many meanings and symbols within its weathered stones.

I wanted to delve into these diverse meanings of the bridge, and with my newfound understanding of phenomenology, I feel closer to identifying some of them. Heidegger (1951) uses the bridge as an example of a structure that gathers the world around the river, bringing it into a singular place. The bridge uniquely creates neighborhoods across an uncrossable threshold like the raging Tiber River. This concept of gathering is central to phenomenological thought, as it posits that the things in our existence that gather allow us to dwell, and to dwell is to find meaning in our environment. This gathering quality is what makes our neighborhood feel connected, giving our environment identity and distinct character. Norberg-Schulz (1980) states, "The identity of a place is determined by location, general spatial configuration, and characterizing articulation" (179). In this way, the Ponte Rotto Bridge was built to bring identity to the shores of the Tiber, allowing the villages of Trastevere to meet with the Forum Boarium and create a culture around these places. Norberg-Schulz (1980) further explains, "When all the components seem to embody basic existential meanings, we may talk about a 'strong' place" (179). I agree with his belief that Rome is such a 'strong' place, with a clear *genius loci*. I argue, then, that the Ponte Rotto and its surrounding area are in tune with this strength, if not adding and contributing to the greater influence of the city of Rome.

It is important to analyze the phenomenology of a bridge that no longer physically gathers the space around it. Without its purpose to connect two sides, what then is the characterizing quality of this place? The site itself offers several meaningful elements, such as rocks, trees, and water, but without access to dwell in this setting, what is the meaning for? Norberg-Schulz states, "The jug gathers earth and sky, and the bridge gathers the earth as landscape around the stream. In general, things gather the world and thereby reveal truth. A place is such a thing, and as such it is a poetical fact" (Norberg-Schulz, p. 170). I refuse to believe that just because the bridge no longer physically gathers land across the Tiber, it no longer reveals the truth. Instead, I believe that the bridge now metaphorically gathers truth around it in the form of mystery, myth, symbolism, and stories.

The notion of liminality can be reinterpreted to better represent this metaphor. The bridge is no longer a threshold we can pass through; it is now a representation of *betweenness*. The Ponte Rotto stands between the Tiber River and the land, between the past and the present, between purpose and void. The bridge now serves as a place in-between. The fact that it is unreachable adds to this notion, like another dimension beyond the reach of our mortal hands, like a time capsule stuck in the

ground. The Ponte Rotto bridge is a reminder of our own impermanence and transcendence through life. It even provides a glimpse at what lies ahead, for when our spirits pass on, they too enter an unreachable place. Thus, I believe that to speculate on a place's spirit, one must first consider their own spirit. As I speculated in the chapter on interpretive *genius loci*, I believe that a *spirit of place* stems from the influence our own spiritual presence lends to that place. The layers of meaning embedded in this story stem from the stories we tell ourselves and how we interpret them. And while there are truths that can't be ignored, we provide our own truth when we let our imagination fill in the gaps. Continuing this line of thought, it's fascinating to consider how the Ponte Rotto, through its physical and metaphorical liminality, becomes a canvas for our interpretations and projections. The bridge, in its silence and stillness, prompts a reflection on the nature of places and how they transcend their immediate utility to evoke deeper meanings. It embodies a form of silent storytelling, where its history and the visual spectacle of its ruin offer narratives that go beyond words, inviting observers to engage in a dialogue with the past and ponder the transient nature.



figure 72: "Betweenness" diagram highlights the parallels in the story of the Ponte Rotto; source: image by author


PALIMPSESTS AND THE SEARCH FO



OR MEANING

PALIMPSESTS AND THE SEARCH FOR MEANING

To explore all the richness of the Ponte Rotto Bridge, I pursued its essence through the creation of photographs, sketches and palimpsests, ultimately landing on the strategy of palimpsests to express its complexity and liminality. The purpose of layering various media in the study of the Ponte Rotto is to construct a holistic narrative that captures the essence of this ancient structure beyond its mere physical remnants. By integrating photography, charcoal sketches, map analysis, archival research, and art history, we synthesize a rich tapestry of insights that reveal the bridge's enduring physical form, its evolution through historical epochs, and the emotional resonance it holds within the collective memory of Rome.

My intention in the planning of this method was to find a structure that would be both replicable and comprehensive. After my initial research and literary analysis, I came away knowing that I wanted my approach to be representative of the story I was able to uncover. The themes of this story I valued most were those that lent new perspectives of the site. My thought behind this was that this place has been perceived and acknowledged by civilizations and culture so long ago they are nearly alien, and in my recounting of their perspective I am able to relink this history into the modern perception. Through this enriched perspective, we not only appreciate the bridge's architectural beauty and historical importance but also connect with the deeper, almost spiritual, dimension of its *genius loci*, reaffirming its relevance in the continuing story of Rome and its people.



figure 73: Peek of a palimpsest; source: image by author

Methods ((layers))

PHOTOGRAPHY

CHARCOAL

MAP ANALYSIS

ART HISTORY

ARCHIVAL RESEARCH

COLLAGE

The methods I employed in my investigation of the site began with my own exploration. It started with photography while in Italy, but with no discernable structure or intention. I followed this by creating charcoal reinterpretations of those photos, analyzing the area both presently and historically, examining art related to the site, and finally searching for archival sources that reference the location. This process unfolded iteratively, and from gathering these resources, I began layering the information in visual collages of subjective intent. The photographs captured my personal perspective, while the charcoal sketches allowed me to revisit the objects and moments of my work and closely study the scene. A historical map analysis provided a bird's eye view across time of the area's geography, and the study of art history revealed the daily life that unfolded at the site. Through archival searches, I began to interpret the Ponte Rotto as a symbol in historical narratives. Finally, by visually collaging these sources through overlays, I began to construct my own perspective and personal understanding of the shifting qualities of place. The practice of excluding, erasing, and embellishing started to shape a narrative that both embraced and challenged the complexities of time and place through the lens of the Ponto Rotto. This approach allowed for an intimate uncovering of the roots of my curiosity. This practice constitutes what I refer to as the "palimpsest" – the layering of found material, the editing of some, and the push for a narrative. From this practice emerged my unique understanding of and relationship with the Ponte Rotto and Rome, both in place and through time.

Photography

In today's visually dominant culture, where photography has emerged as a widely accessible and pervasive means of experiencing and expressing the world, it is a fitting tool for acquiring a form of knowledge about a place's unique spirit (Doroftei 2016). The methodology of using photography to explore the *genius loci* is aimed at understanding the local characteristics that contribute to a place's distinctiveness and recognizability.

Using the film I took during my visit to Rome, I was able to analyze and reinterpret my experience through the images I captured. Having used a camera for years to document such moments, I attempt to encapsulate the essence of the moment through the lens. From Iulia Doroftei's (2016) , *Photography as a Means of Depicting Genius Loci?,* I learned that while a camera can capture the "local presence," it might only convey the visual element of the site's unique experience, potentially flattening and the superficialization the memory. However, as Doroftei (2016) states, "...the photo-essay serves both as a means of synesthetic experiencing and as a tool for analysis and argumentation, revealing aspects of the place's 'own character,' its strong personality, and its recognizable image at a general level, or, in other words, it can display components of the *genius loci*" (14).

With this concept in mind, I expanded my photographic exploration by giving a camera to a classmate to document their own visit to the Ponte Rotto. This exercise allowed me to identify similarities and differences in our perceptions, such as the subjects and aspects of the bridge that we chose to photograph. I valued seeing the site from my peer's perspective, appreciating the ability to analyze the photos with a level of objectivity that I cannot achieve with my own images.

Through photography, I was able to document the site under various conditions: On a sunny fall day, a brisk December morning, and a vibrant spring afternoon. These images demonstrated how the perception of the bridge changed depending on the vantage point, and highlighted that the relationship with the river is just as significant as the connection with the city. These photos are the closest thing I have to a time machine, allowing me to revisit and experience the site as I did during my fall semester in Rome. Analyzing the scene through these shots was both limiting and enlightening, providing a unique record of my memory of the place.

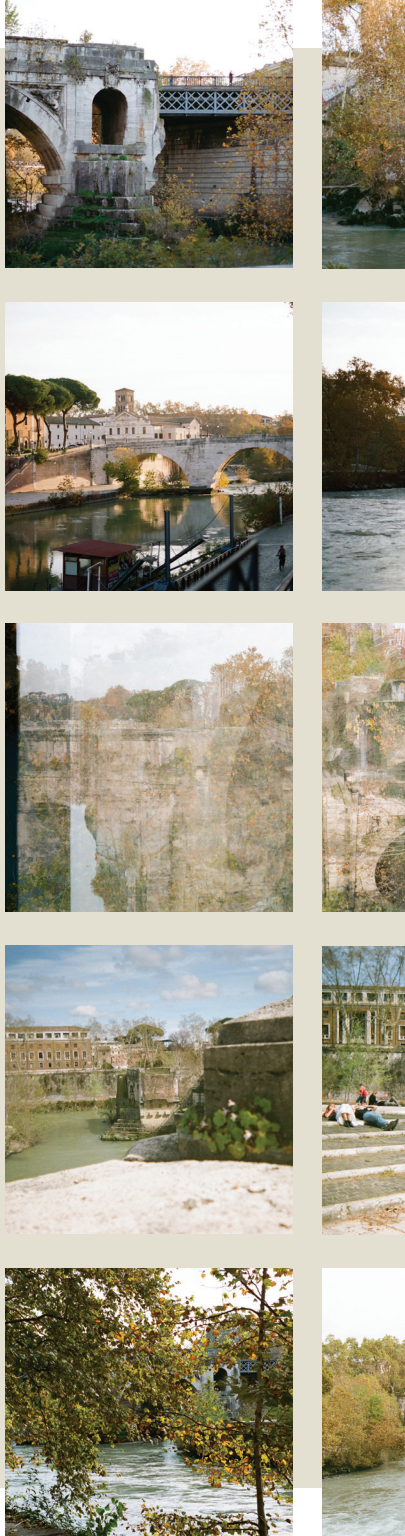


figure 74 (left): Collection of film photographs from my visits to the Ponte Rotto; source: photos by author



Charcoal

Using charcoal as an artistic medium provided a unique way to further analyze and interpret the photographs I took of the Ponte Rotto during my visit to Rome. A friend who uses charcoal sketching as a means of thinking deeply about a subject suggested I try this strategy. My friend pointed out that charcoal is an excellent medium for the portrayal of time and dynamic movement, as the material is easily wiped away or added upon. With its soft, malleable properties, charcoal allowed me to explore the textures and contours of the bridge in a way that photography alone could not capture. Once again, the perspective of another person has lent itself some added truth to my analysis, and at this point it is becoming apparent that this exploration is has been heavily influenced by the experiences of others. Thinking about my material choice in symbolic terms helped ground me in the work. The use of charcoal allowed me to delve deeper into the essence of the place, offering a tactile dimension to my visual memories.

The use of charcoal sketches, based on my photographs, brought a new layer of sensory experience to the scenes. By physically manipulating the charcoal, I could accentuate certain features of the bridge and its surroundings, highlighting elements like the roughness of the stone, the sweep of the arches, and the play of light and shadow. This process not only enriched my understanding of the visual aspects of the bridge, it also engaged my sense of touch, enhancing the overall impression of the site. The act of sketching allowed me to focus on the details that a camera might miss, such as the subtle shifts in texture and the depth of the space. This interpretive work, while rooted in the initial photographic evidence, transcended the limitations of the lens by introducing a personal, hands-on interaction with the imagery.



Figure 75: Close up of crumbling foundation

figure 75, 76, 77, 78, 79, 80, 81, 82: Collection of charcoal drawn by the author of the Ponte Rotto; source: sketches by author



figure 76: Ponte Rotto from Trastevere in morning light

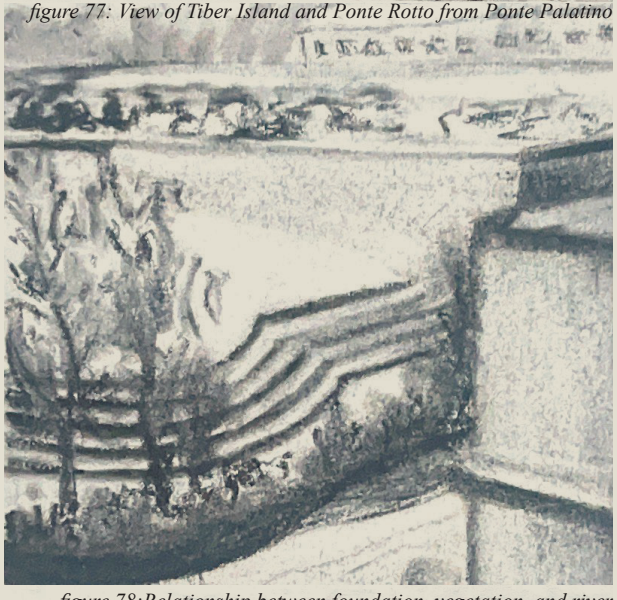


figure 77: View of Tiber Island and Ponte Rotto from Ponte Palatino



figure 78:Relationship between foundation, vegetation, and river

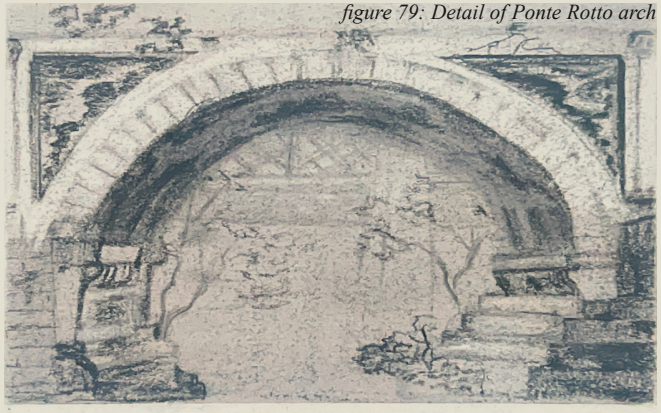


figure 79: Detail of Ponte Rotto arch

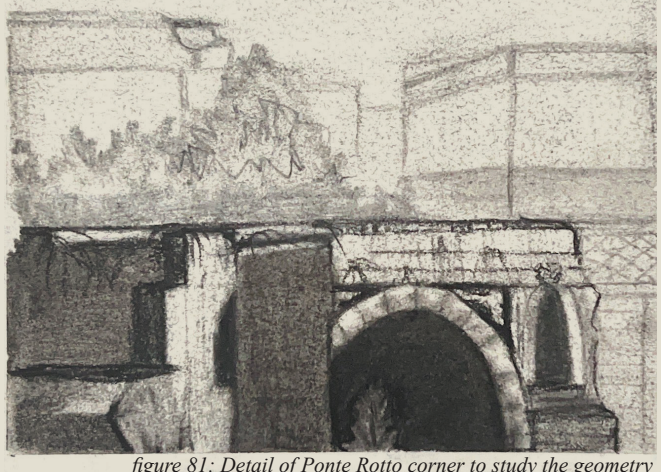


figure 80:Top of Ponte Rotto with neighboring Trastevere in the distance



figure 81: Detail of Ponte Rotto corner to study the geometry



figure 82: Image of easel and charcoal process; source: photo by author

Map Analysis

While studying in Rome, one of our initial activities was to divide the city into transects—line segments through portions of the city—to become better acquainted with a specific area. My group had a transect that led us from the Jewish Ghetto, across Tiber Island, and into Trastevere, bringing us face-to-face with the Ponte Rotto. We were tasked with identifying a cohesive theme for our transect and creating a corresponding figure-ground map to support our research. We chose to focus on the flooding of the Tiber and spent time analyzing the relationship between the floodplain and Rome's development. To create our figure-ground map, we consulted the well-known "Nolli map." Crafted in 1748 by Giambattista Nolli, this map provided a glimpse into Rome's past, before the city was fortified with barrier walls. Importantly, it positioned the Ponte Rotto within the 18th-century urban landscape of Rome, highlighting its connectivity and proximity to significant city landmarks.

I returned to map analysis while creating my artistic interpretations of the bridge. With a focus on the Ponte Rotto, I used the Nolli map alongside other historical mappings to examine the evolution of the surrounding area and how the bridge's role has transformed as Rome grew from ancient times to the present. I delved into various types of maps to trace its history and relevance over time. This analysis revealed changes in the Ponte Rotto's location and size in different depictions. By examining geological maps, I gained insights into the natural terrain that influenced the bridge's construction and its endurance against time and elements. Hydrological maps highlighted how changes in the Tiber River's flow and course have impacted the bridge, particularly during Rome's frequent floods.

Through layering these maps, I was able to discern patterns in the geography of the area. It became clear that there is a distinct rhythm to the cycles of renewal for the Eternal City. These documents revealed the interplay between the physical and cultural landscape, and by comparing them, I was able to discern the relationship between builders and their materials. Most notably, I saw how time changes everything, and how even a monolithic relic like the Ponte Rotto is subject to the erosive movement of the river.

figure 73 - 84: Collection of maps sourced by the author of Rome; source: see figures list



figure 83

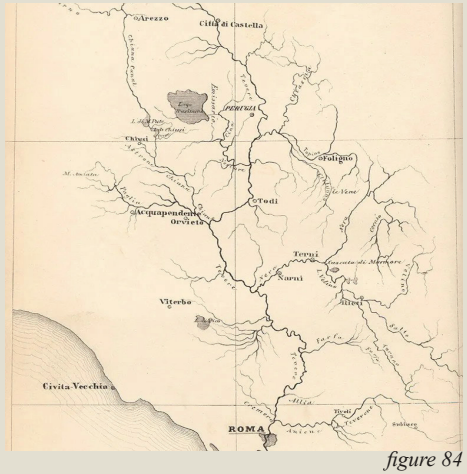


figure 84

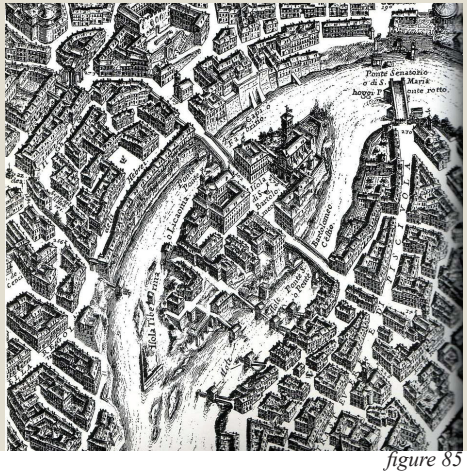


figure 85



figure 86



figure 89

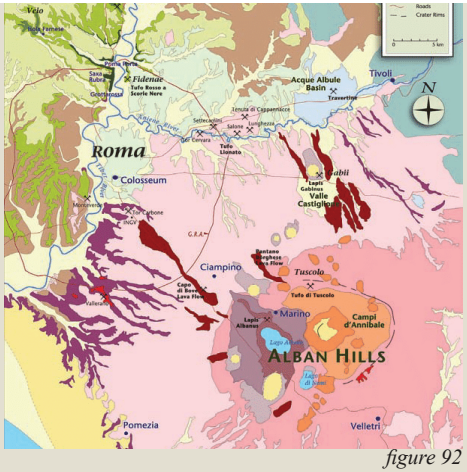


figure 92



figure 87



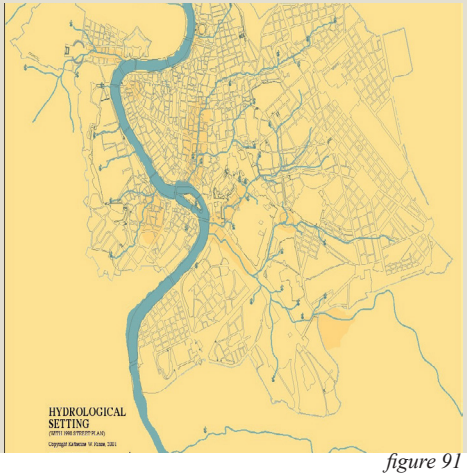
figure 90



figure 93



figure 88



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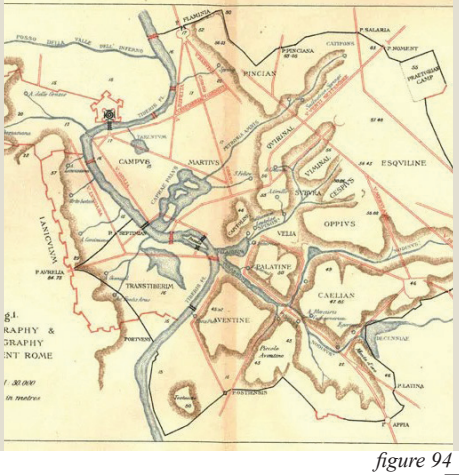


figure 94

Art History

The most fascinating part of my research has been discovering the vast amount of artwork that features the Ponte Rotto. Although most of these artworks are from the Renaissance to modern times, they helped me visualize the bridge as it has been seen for thousands of years—as a vital cultural spot and a main crossing in Rome. Each artwork shows the bridge and its surroundings as a romantic and enchanting place, like something out of a fairy tale.

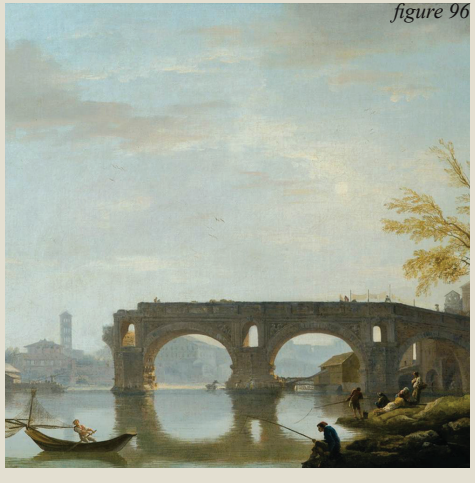
These paintings and sketches highlight how the Ponte Rotto has been more than just a bridge; it is a muse that has inspired countless artists. The art often captures the bridge bathed in the warm light of sunrise or the gentle colors of sunset, showing a blend of nature and architecture.

Looking at how different artists portrayed the Ponte Rotto over time also showed me how perceptions of the bridge changed with artistic styles and historical periods. Renaissance art usually focuses on balance and beauty, Baroque art adds drama, and modern art often explores the bridge's graceful aging. This collection of artistic interpretations has deepened my appreciation of the bridge's historical and cultural importance, and its role in shaping memories and imaginations. Each artist's view contributes to the ongoing story of the Ponte Rotto, reinforcing its place as a symbolic figure in Rome's rich history.

figure 95 - 109: Collection of art curated by the author of the Ponte Rotto
source: see figures list


figure 95


figure 98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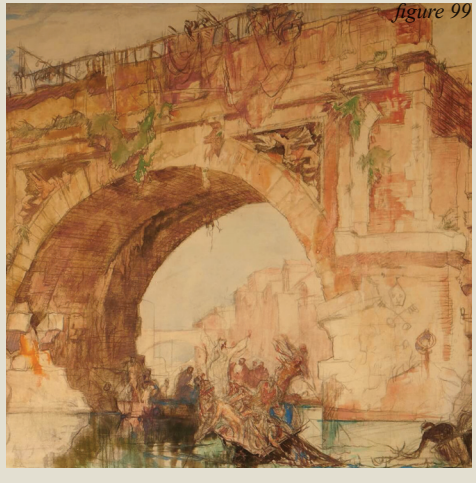
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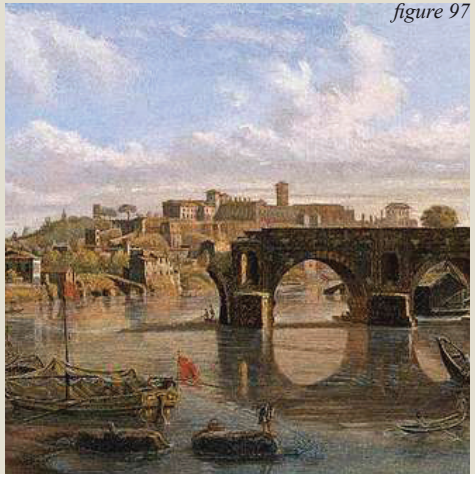
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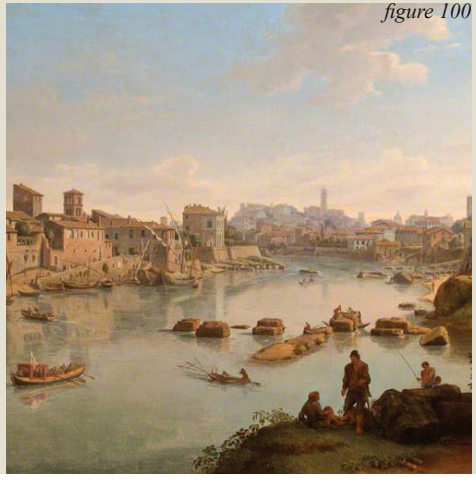
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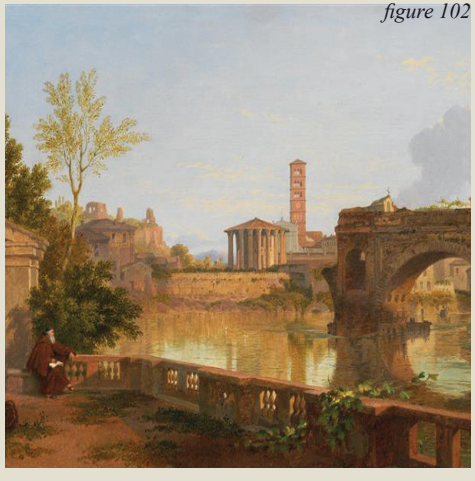
figure 101


figure 104


figure 107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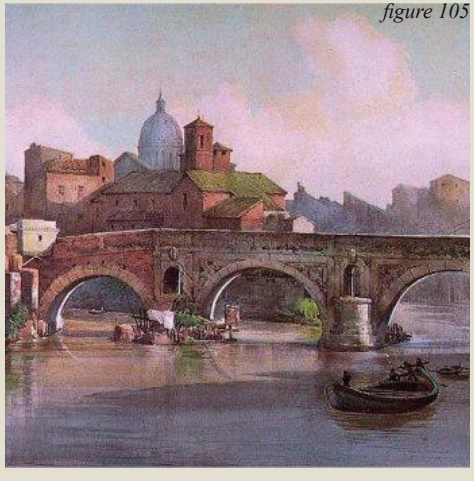
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figure 108


figure 103


figure 106

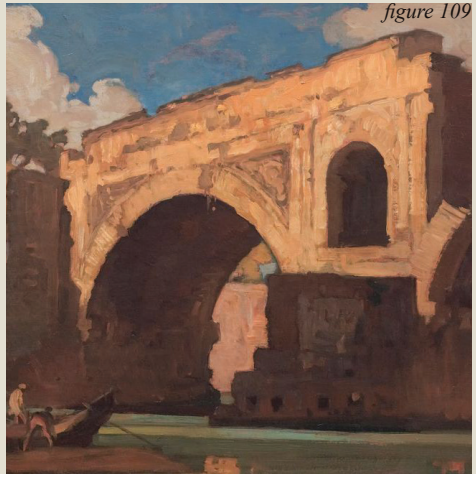


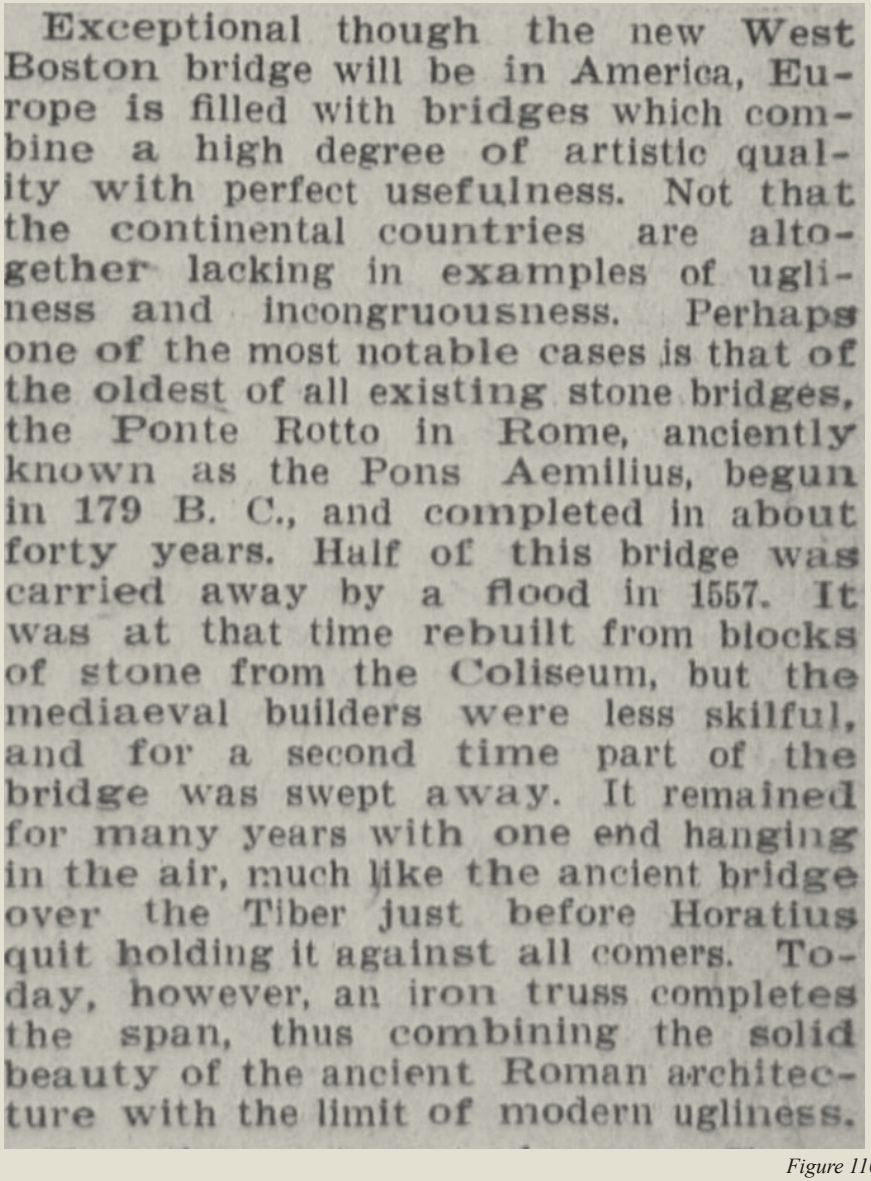
figure 109

Archival Resources

After exploring the art representations of the Ponte Rotto, I was eager to uncover the stories that might accompany these paintings from their respective times. I turned to the Library of Congress, where I discovered sources that traced the history of the Ponte Rotto back through centuries. Sorting through the digital archives I found as many references to the bridge as I could, mostly being found in newspaper clippings.

It was fascinating to come across headlines and clippings that seemed to capture the essence of the place in such a different perspective than my own. These textual sources supported the visual analysis I had been conducting and enriched my understanding of the bridge's significance in different eras. This convergence of visual and textual information has encouraged me to think about how these methods might come together in a broader conceptual framework, blending historical narratives with artistic interpretations to form a more comprehensive view of Ponte Rotto's legacy.

The archival sources I explored added a personal touch to my research, making me feel connected to the people who experienced the Ponte Rotto across different times. Reading diary entries and personal letters was like traveling back in time, seeing the bridge through the eyes of those who lived alongside it. These personal stories brought the historical and cultural importance of the Ponte Rotto to life, providing a perspective that official records and images alone couldn't offer. It felt as if these past voices were guiding my research, showing me the bridge not just as a structure, but as a part of the daily lives of the people who crossed it.



Exceptional though the new West Boston bridge will be in America, Europe is filled with bridges which combine a high degree of artistic quality with perfect usefulness. Not that the continental countries are altogether lacking in examples of ugliness and incongruousness. Perhaps one of the most notable cases is that of the oldest of all existing stone bridges, the Ponte Rotto in Rome, anciently known as the Pons Aemilius, begun in 179 B. C., and completed in about forty years. Half of this bridge was carried away by a flood in 1557. It was at that time rebuilt from blocks of stone from the Coliseum, but the mediaeval builders were less skilful, and for a second time part of the bridge was swept away. It remained for many years with one end hanging in the air, much like the ancient bridge over the Tiber just before Horatius quit holding it against all comers. Today, however, an iron truss completes the span, thus combining the solid beauty of the ancient Roman architecture with the limit of modern ugliness.

Figure 110
source: Los Angeles herald (Los Angeles [Calif.]), May 20, 1906, Library of Congress

Figure 100 - 109: Collection of archives accessed through Library of Congress digital archives; sources: see figures list for full list of sources



THE BRIDGE BUILDERS

Figure 111



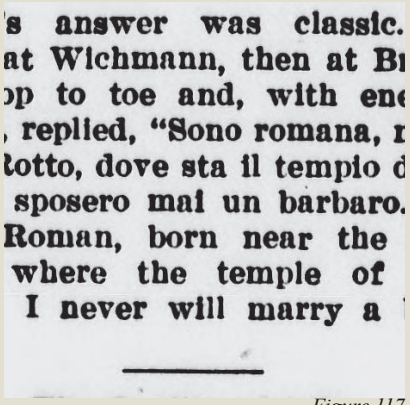
The New York Times

Bridges of Rome: Spanning the Centuries

Night and Day at Cape Canaveral

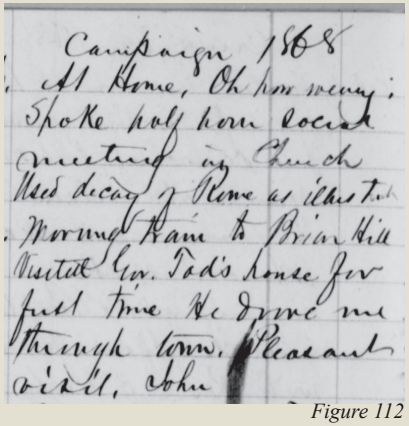
Cheap Transport: A Stranger's Car

Figure 114



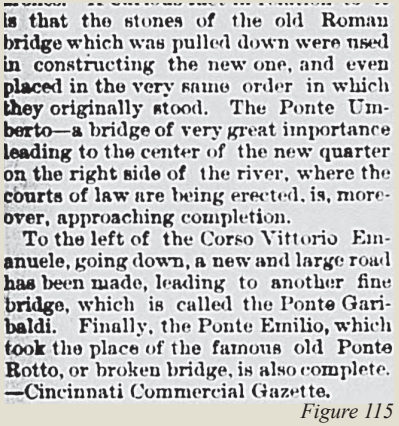
's answer was classic.
at Wichmann, then at Br
op to toe and, with en
, replied, "Sono romana, n
Rotto, dove sta il tempio d
sposero mai un barbaro.
Roman, born near the
where the temple of
I never will marry a

Figure 117



Campaign 1868
At Home, Oh how merry,
Spoke half hour Social
meeting in Church
Used decay of Rome as illustr
Morning Came to Brian Hill
Visited Gov. Todd's house for
first time He drove me
through town. Pleasant
visit, John

Figure 112



is that the stones of the old Roman bridge which was pulled down were used in constructing the new one, and even placed in the very same order in which they originally stood. The Ponte Umberto—a bridge of very great importance leading to the center of the new quarter on the right side of the river, where the courts of law are being erected, is, moreover, approaching completion.

To the left of the Corso Vittorio Emanuele, going down, a new and large road has been made, leading to another fine bridge, which is called the Ponte Garibaldi. Finally, the Ponte Emilio, which took the place of the famous old Ponte Rotto, or broken bridge, is also complete. —Cincinnati Commercial Gazette.

Figure 115



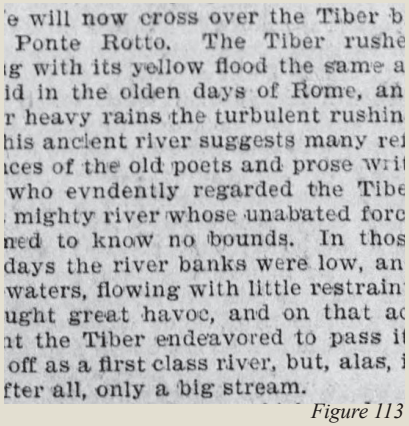
IZIETTE TELEGRAFI

MA, 9 marzo — Il Tev
mente in piena, ed ha alla
porta di San Paolo. L'a
il ponte Manero è rotto.

***

MA, 9 marzo — La regina
a ha inviato 200 lire per i
l movimento da erigersi
opolare Enrico Tosti.

Figure 118



e will now cross over the Tiber b
Ponte Rotto. The Tiber rushe
g with its yellow flood the same a
id in the olden days of Rome, an
r heavy rains the turbulent rushin
his ancient river suggests many re
ices of the old poets and prose wri
who evndently regarded the Tibe
mighty river whose unabated forc
ned to know no bounds. In thos
days the river banks were low, an
waters, flowing with little restrain
ught great havoc, and on that ac
nt the Tiber endeavored to pass it
off as a first class river, but, alas, i
fter all, only a big stream.

Figure 113

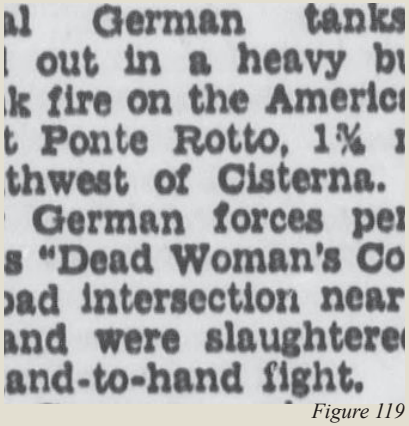


BREVITIES

Bridging the Tiber.

"O Tiber, Father Tiber, to whom the Romans pray!" exclaims the brave Horatius on the bridge, in Macaulay's stirring ballad. The "brave Horatius" would have had still more reason to apostrophize the Tiber had he lived in these days and seen the Tiber embankment now approaching to completion. Taken in conjunction with the series of magnificent new bridges which form

Figure 116



al German tanks
out in a heavy bu
k fire on the Americ
t Ponte Rotto, 1¾ m
thwest of Cisterna.
German forces pe
s "Dead Woman's Co
oad intersection near
and were slaughtere
and-to-hand fight.

Figure 119

Collage

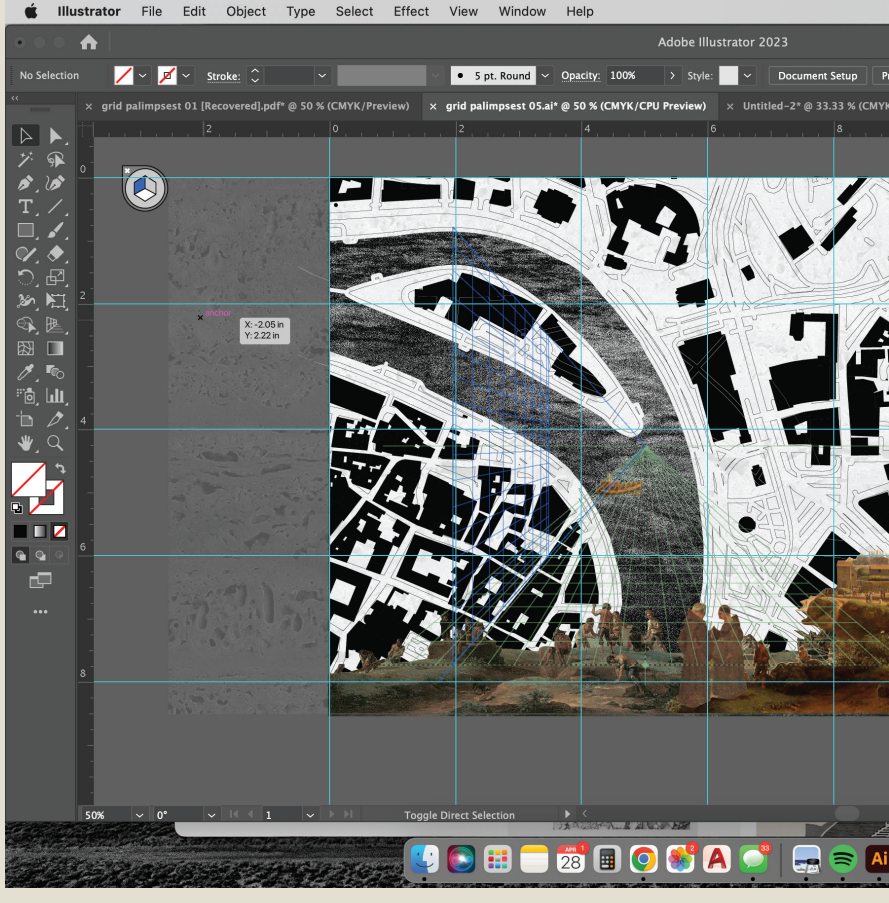
An unexpected method of my project was incorporating digital collage. Initially, I planned to work with physical materials, manipulating layers by hand to convey my message. However, I quickly realized that creating a palimpsest involved considerable pre-planning around composition, placement, focus, images, and application techniques to ensure a successful execution. To avoid wasting time and resources, I opted to start digitally, utilizing tools I am familiar with such as Adobe Illustrator, Photoshop, and InDesign. This approach allowed me to use compositional techniques to enhance my intentions, experiment with colors and textures, and easily undo mistakes with a simple ctrl+z.

For this exercise, I imposed certain constraints on my process like adhering to a grid system in each final collage to help structure the process. Beginning with a grid or a specific perspective enabled me to piece together elements of the collage like a puzzle, often leading to a final image that was both unexpected and revealing. Through this process, I found myself learning more about the content as I spent hours editing and refining details, such as examining a scene in a Renaissance painting or aligning significant sites on a map with their real-world locations.

This hands-on interaction, in a digital sense, brought me closer to the site on a more intimate level. I could engage with the resources I had collected more deeply, considering the purpose and significance of each element. This is why I added collage to my list of methods; although it is an action rather than a resource, it became an integral part of my investigation that deepened my understanding of the Ponte Rotto and its surroundings.

In the next section, I will delve into these collages, discussing their meanings and how I further developed this practice in the culmination of the palimpsests.

figure 120: Screenshot of method in illustrator, using a grid layout and perspective to inform composition



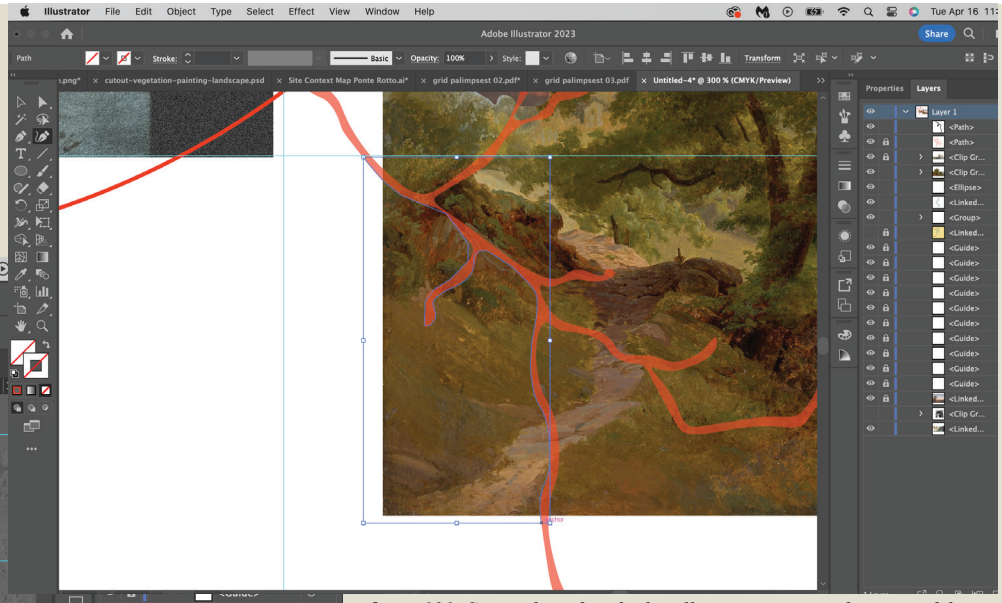


figure 121: Screenshot of method in illustrator, tracing the veins of the Tiber River and its tributaries

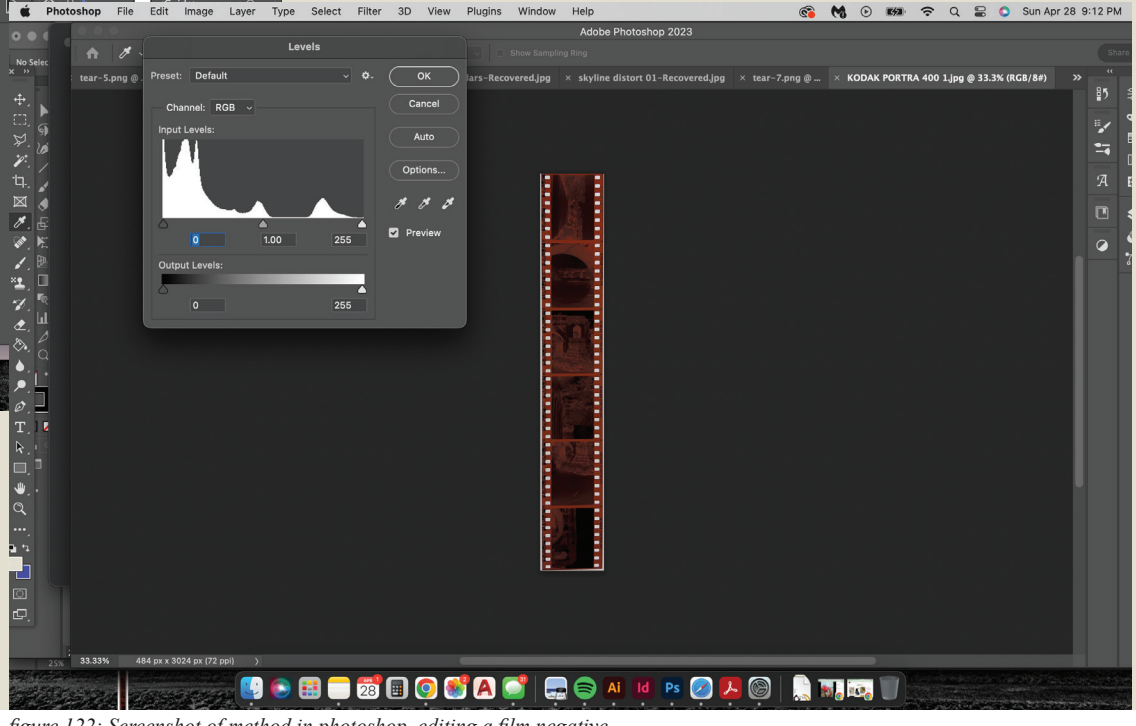


figure 122: Screenshot of method in photoshop, editing a film negative

This initial collage stemmed from my desire to illustrate the relationship between the river, the bridge, and the sky, much like Norberg-Shulz's notion of places bringing together earth, sky, divinities and mortals. I aimed to draw the viewer into a journey through the bridge by creating a perspective leading towards a horizon where an image of the Ponte Rotto rests.

To anchor the composition, I incorporated elements like clippings from landscape paintings that depict the shoreline and a fisherman battling the Tiber River. These details position the viewer onshore, distinct from the island that is the Ponte Rotto. I wanted to evoke the sense of being an observer of the bridge, close enough to see it but not to reach it. To enhance this effect, I included snippets of the surrounding skyline, the river, and the sky above, all serving to establish a threshold between the viewer on land and the distant bridge. The figure of a man in a boat, taken from Jean Baptiste Camille Corot's 1849 "Rome: View of the Tiber from the Ponte Rotto to the Isola Tiberina with the Monastery of S. Bartolomeo" reinforces this idea. He embodies the notion that the forceful Tiber, separating land from the bridge, is not merely a passable threshold but a formidable barrier, meant to be observed from afar rather than crossed. The collage also features layers of newspaper clippings I obtained from the Library of Congress, mostly from American newspapers in the early 20th century. A prominent headline reads "THE TIBER AT FLOOD," a striking yet faded statement that symbolizes the fading memory of the river's threat. Another clipping discusses the bridges over the Tiber, concluding with a mention of the "famous old Ponte Rotto, or broken bridge." This piece is intentionally faded in the background, representing the bridge's reputation as a venerable yet broken relic, known for its fractured presence even 150 years ago.

Finally, maps showing the location of the bridge are overlaid at the central focal point to complete the scene. My goal with this digital collage was to connect viewers to the environment surrounding the Ponte Rotto, fostering a sense of unreachable mystery. In this first attempt, I endeavored to include as much detail as possible without sacrificing the essential symbolism, allowing the viewer to feel drawn into and part of the scene's dynamic chaos.

collage #01

figure 123 (right): Digital collage #1; source:image created by author

Bridging the Tiber.

"O Tiber, Father Tiber, to whom the Romans pray!" exclaims the brave Horatius on the bridge, in Macaulay's stirring ballad. The "brave Horatius" would have had still more reason to apostrophize the Tiber had he lived in these days and seen the Tiber embankment now approaching to completion. Taken in conjunction with the series of magnificent new bridges which form part of the scheme, it is described as decidedly the grandest work undertaken in Rome by the Italian government. The Ponte Margharita, a fine bridge constructed entirely of stone at the upper extremity of the Eternal City, is already completed, as is the Ponte Cestio at the Tiberine isle.

This latter is a bridge of three noble arches. A curious fact in relation to it is that the stones of the old Roman bridge which was pulled down were used in constructing the new one, and even placed in the very same order in which they originally stood. The Ponte Umberto—a bridge of very great importance leading to the center of the new quarter on the right side of the river, where the courts of law are being erected, is, moreover, approaching completion.

To the left of the Corso Vittorio Emanuele, going down, a new and large road has been made, leading to another fine bridge, which is called the Ponte Garibaldi. Finally, the Ponte Emilio, which took the place of the famous old Ponte Rotto, or broken bridge, is also complete. —Cincinnati Commercial Gazette.

THE TIBER AT FLOOD.

ROME, Italy, Dec. 6.—The Tiber river is flooded and some [illegible] of this city are in danger.

Turning to my second collage, my initial aim was to highlight the materiality of the bridge, although it remains to be seen how successful this attempt was. I began by outlining the Ponte Rotto and applying a cut out of the Travertine texture to the outline. This texture is intended to emphasize the masonry that currently clads the bridge, bringing to the forefront ideas about materiality and resources. I then incorporated photographs of the site to showcase the surrounding vegetation. The London Plane trees that line the Tiber River and grow abundantly on the foundations of the bridge provided a lush backdrop that contrasts with the textured stone, underscoring the relationship between wild, growing nature and the humanly processed quality of the mined stone.

In this second collage, I juxtaposed this theme of materiality with several map overlays, aiming to symbolize the bridge's connection to the cosmos. I included a star map to convey the sensation of viewing the bridge from a "heavenly" vantage point, looking down through the stars. Beneath the star map, I displayed the black figure ground of the area, with the river running through the arch of the Ponte Rotto, similar to my last collage. Seeing the bridge from a birds eye view, and from a visitors perspective was designed to shift the bridge's vantage point across several levels, showing its existence in both time and space.

Next, I added film strips from my collection of photographs of the bridge on top, as I wanted to break the metaphorical fourth wall, reminding viewers that they are seeing the Ponte Rotto through my lens, influenced by my artistic choices. Lastly, I incorporated excerpts from stories that mention the bridge, adding a human element to the collage. This reminds viewers that these interpretations and stories shape our understanding of the world, helping us grasp our existence even if just a little more.

collage #02

figure 124 (right): Digital collage #2; source:image created by author



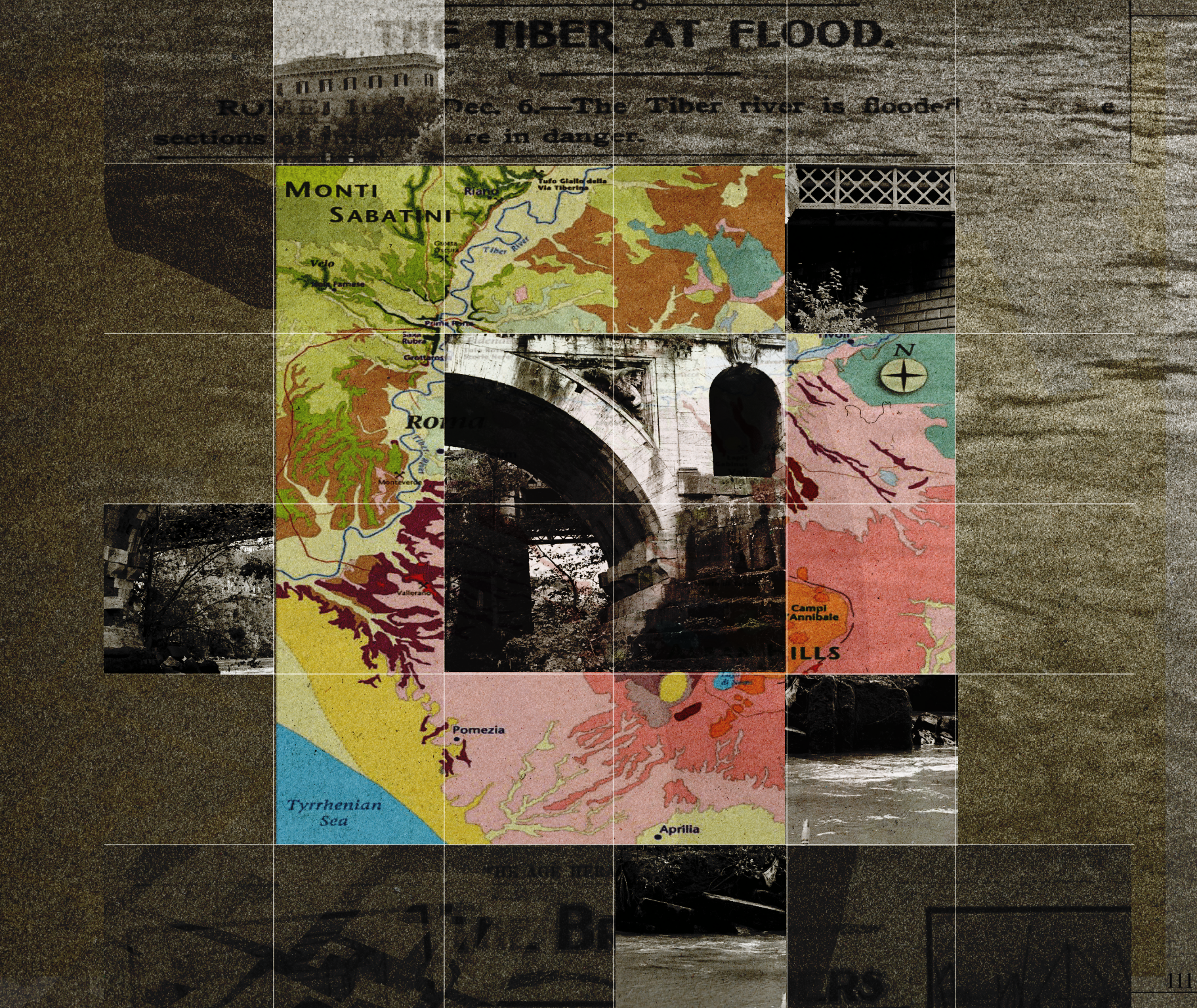
It's important to note that these initial collages were primarily exercises in planning and composition, with articulated meaning taking a secondary role. However, by the time I reached collage #03, I did approach it with a specific intention. At this stage, I was focused on linking the bridge to its broader context within the Roman landscape, particularly through the flow of the Tiber River. In the center of this collage, I placed one of my photographs of the bridge, cropped to highlight its iconic structure. I also added a regional map of the geological region around Rome, near the volcanic fields through which the Tiber runs, aiming to showcase the connection between Rome and its natural surroundings.

The background of the collage features an image of the Tiber's water, enlarged and distorted to create a sense of depth that seems to engulf the scene. With this setup in place, I applied a grid to start "flipping" pieces over, like solving a puzzle, to gradually reveal a larger picture. I included additional photographs to paint this picture—snippets of the Ponte Palatino, the decaying rocks at the bridge's base, and some surrounding architecture in the distance. This process was another attempt to both deconstruct and reconstruct the scene at the Ponte Rotto, inviting the viewer to experience my perception of the place.

Additionally, I incorporated clippings of contrasting newspaper headlines such as "the Tiber at flood" versus "the bridge builders of Rome." This juxtaposition draws a parallel between the development of human civilization and its natural destruction. Overall, the aim of this grid was to simplify and highlight this parallel, bringing to the forefront our complex relationship with the physical environment and how this relationship is felt and depicted through architecture and design.

collage #03

figure 125 (left): Digital collage #3; source:image created by author


TIBER AT FLOOD.
Dec. 6.—The Tiber river is flooded
sections
are in danger.
MONTI
SABATINI
Riano
Tufo Giallo della
Via Tiberina
Tiber River
Velo
Prima Porta
Grottaros
Monteverde
Vallerano
Campi
Annibale
ILLS
Pomezia
Tyrrhenian
Sea
Aprilia
N

In considering my fourth collage, I decided to broaden my focus and consider the river's relationship to the region as a whole, tracing the path of the Tiber River through Rome. I utilized maps of the Roman aqueduct systems to trace the tributaries of the Tiber into Rome itself. I chose to color this system red to symbolize the river as the "lifeblood of Rome," a common phrase that captures its vital role. To add a touch of modern reality, I overlaid a satellite image of the river, slightly offset from the red riverbed to illustrate the dynamic nature of the flood path.

After mapping the river, I incorporated artwork depicting the Roman countryside to transport viewers to the romantic settings of the region. I selected paintings that correspond to the general locations along the river, showcasing landmarks like the ancient Roman aqueducts, the Alban Hills, Mount Sabatini, Lake Bracciano, the Roman Forum, Villa Borghese, and more. I also carefully clipped segments from these paintings to emphasize the role of vegetation in defining the area's character.

Using the grid again for compositional planning, I alternated between paintings and photographs of the sites, juxtaposing romantic artistic interpretations with the straightforward reality captured in the photos. This collage was effective in reminding viewers of the interconnected systems that contribute to Rome's enduring spirit and served as a reminder of our susceptibility to the shifting tides of the rivers that sustain us.

collage #04

Figure 126 (right) : Digital collage #4; source:image created by author


Bridges in the West.
Bridging the Tiber.

In my final and fifth collage, I chose to focus on the cultural environment of the Ponte Rotto, which I consider the most successful in conveying its intended message. This piece layers scenes from landscape paintings depicting the area around the bridge. I meticulously cut and edited characters and settings from these works to create a narrative that seems to flow through the centuries alongside the bridge. While engaging in this process, I was captivated by the timeless glimpse into history it offered. One aspect that struck me was how relatable it felt; comparing my photos from six months ago with a 15th-century painting, it was hard to discern any change in the character of the people inhabiting the area. The vendors, fishermen, tourists, monks, children, and elderly— they all continue to weave into the current fabric of time.

Another surprising element was the effect of light on the warmth of the scene. Extracting buildings bathed in the golden hour transported me back to Rome at sunset. I could almost feel the warm air, smell the street food, and hear the bustling noise—a surprising reminder of how vivid memories of our senses can live in our minds, even from places far away.

This collage became almost a meditative exercise, as I delved deeply into the art I was working with, tracing layers back to convey a story much larger than myself. The final touch I added was the papal crest of Pope Gregory VIII, a symbol that decorates the bridge in its current form. This crest, depicting a dragon with its tail cut off, symbolizes the greatest enemy of God, deprived of its power. The inclusion of this crest aimed to represent the pervasive influence of the Catholic Church, particularly in the context depicted in these paintings.

As mentioned earlier, Pope Gregory VIII was responsible for the grand vision of the bridge we see today. His remodel was one of the most significant efforts to restore the old bridge. Yet, it's almost poetic how short-lived this effort was, destroyed by the most devastating flood in Rome's recorded history on Christmas Eve 1598 a mere 2 years after the restoration. Reflecting on this, it might be a stretch, but perhaps the Ponte Rotto too is like a beast with its tail cut off, left to weather the tides of the river for eternity.

collage #05

Figure 127 (right): Digital collage #5; source: image created by author

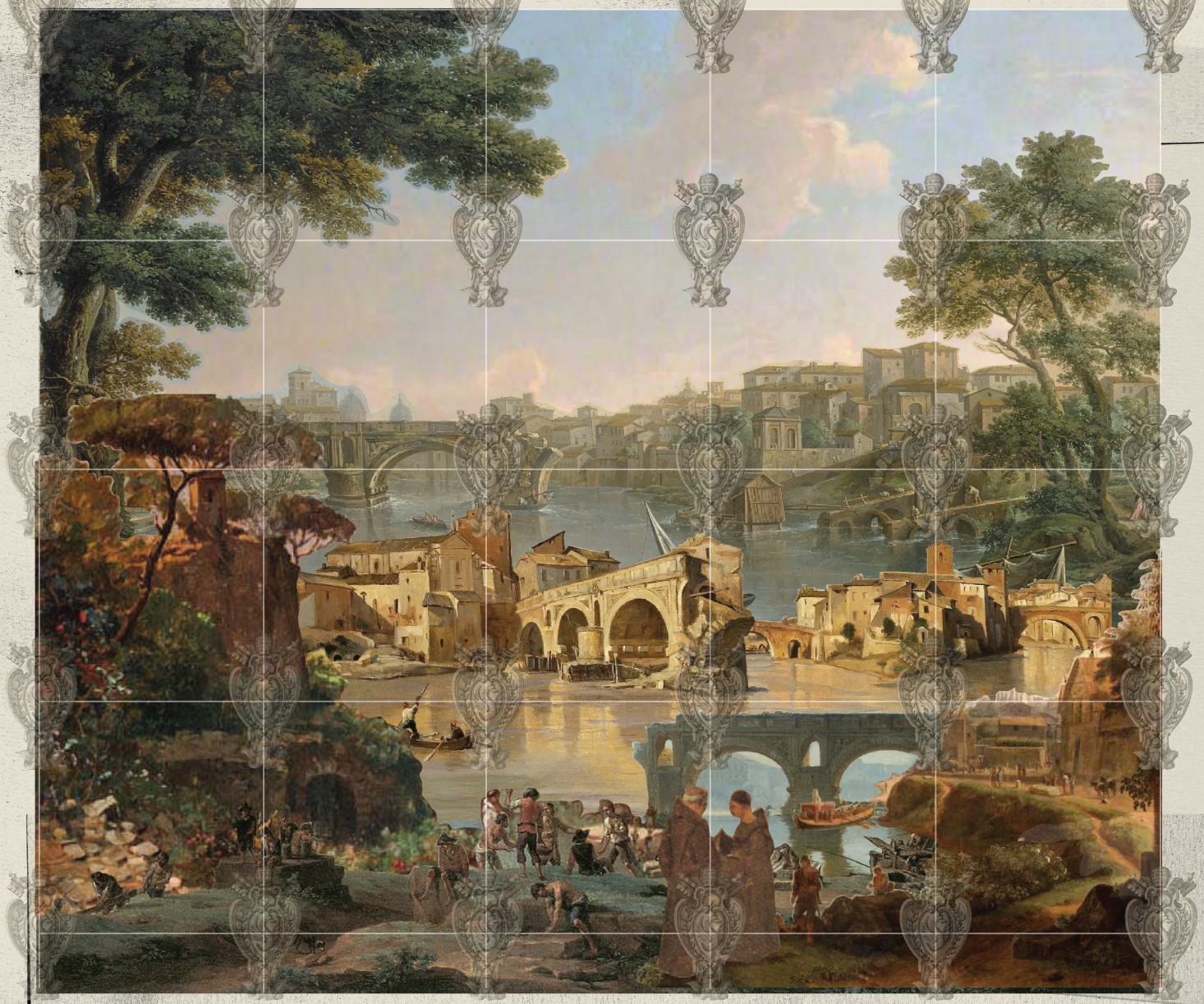




figure 128: Final palimpsests source: photo by author



There was a moment in my process after the digital collages when I paused and thought, “Is that it? Am I done?” I considered using the grids as my final product and ending it there. In hindsight, I don’t think this would have been the worst decision, but even before I knew where this process would take me, I felt that there was more to uncover. Honestly, the process of creating palimpsests by hand was intimidating; I was concerned about how wasteful it could be, only to potentially end up with nothing to show for it. Hesitation aside, I carried on, taking my original concept and running with it. I decided that there needed to be a bridge between the theory and the research, and I found that connection in the framework outlined in the following pages. This thesis is built on concepts, because without applying these concepts, the strength of the message would be weakened, despite my engagement with the material. In a last-minute effort, I locked myself in my office and set to work: ripping, cutting, clipping, erasing, painting, smudging, aligning, gluing, and, of course, redoing. The product follows. Did I uncover the spirit? Identify a discernible *genius loci*? I’m not sure. But I uncovered a process of knowing I had never engaged with before, and I can confidently say I get “it” now—my curiosity and all that makes the Ponte Rotto so incredibly special.

a framework for time & space...

In exploring the concept of *genius loci* and understanding a place through its inherent meaning, I found guidance in the work of Christian Norberg-Schulz. He describes the natural environment as emanating from a primeval experience of nature as a multitude of living "forces"... "Man [sic] was thus embedded in nature and dependent upon the natural forces" (Norberg-Schulz 1980, 20). These forces, as outlined by Norberg-Schulz, include Thing, Order, Character, Light, and Time. When creating my palimpsests, I used these elements as foundational strategies to structure the layers of the composition. Considering these forces as the essential qualities of our universe made them a natural choice for distilling my research of the site.

To represent this all-encompassing framework, I selected a color palette that mirrors the colors of our universe. I opted to use the colors of the visual spectrum—the rainbow—to suggest that the characteristics of natural meaning are integral and pervasive elements of our universe. This approach has helped me form a deeper understanding of the meaning present at the Ponte Rotto, and my last palimpsest serves as an ode to this discovery.



figure 129: Final palimpsests; source: photo by author

Thing, order, character, light and time are the basic categories of concrete natural understanding. Whereas thing and order, are spatial (in a concrete qualitative sense), character and light refer to the general atmosphere of a place[26]. We may also point out that "thing" and "character" (in the sense here used) are dimensions of the earth, whereas "order" and "light" are determined by the sky. Time, finally, is the dimension of constancy and change, and makes space and character parts of a living reality, which at any moment is given as a particular place, as a *genius loci*. In general the categories designate the *meanings* man has abstracted from the flux of phenomena ("forces"). In his classical work on the relationship between nature and the "human soul", Willy Hellpach calls such meanings "existential contents", and says: "Existential contents have their source in the landscape"[27].

figure 130: Norberg-Schulz 32

To fully represent the concept, I decided to include quotes and excerpts from Norberg-Schulz' *Genius Loci: Towards a Phenomenology of Architecture* instead of trying to define the concept in my own words. In applying someone's philosophy, there should be little room for interpretation beyond expressing one's own perspective. In this context, I will use quotes from Norberg-Schulz to convey the concept as he intended. The following page will feature several examples from his work to illustrate the framework more clearly.

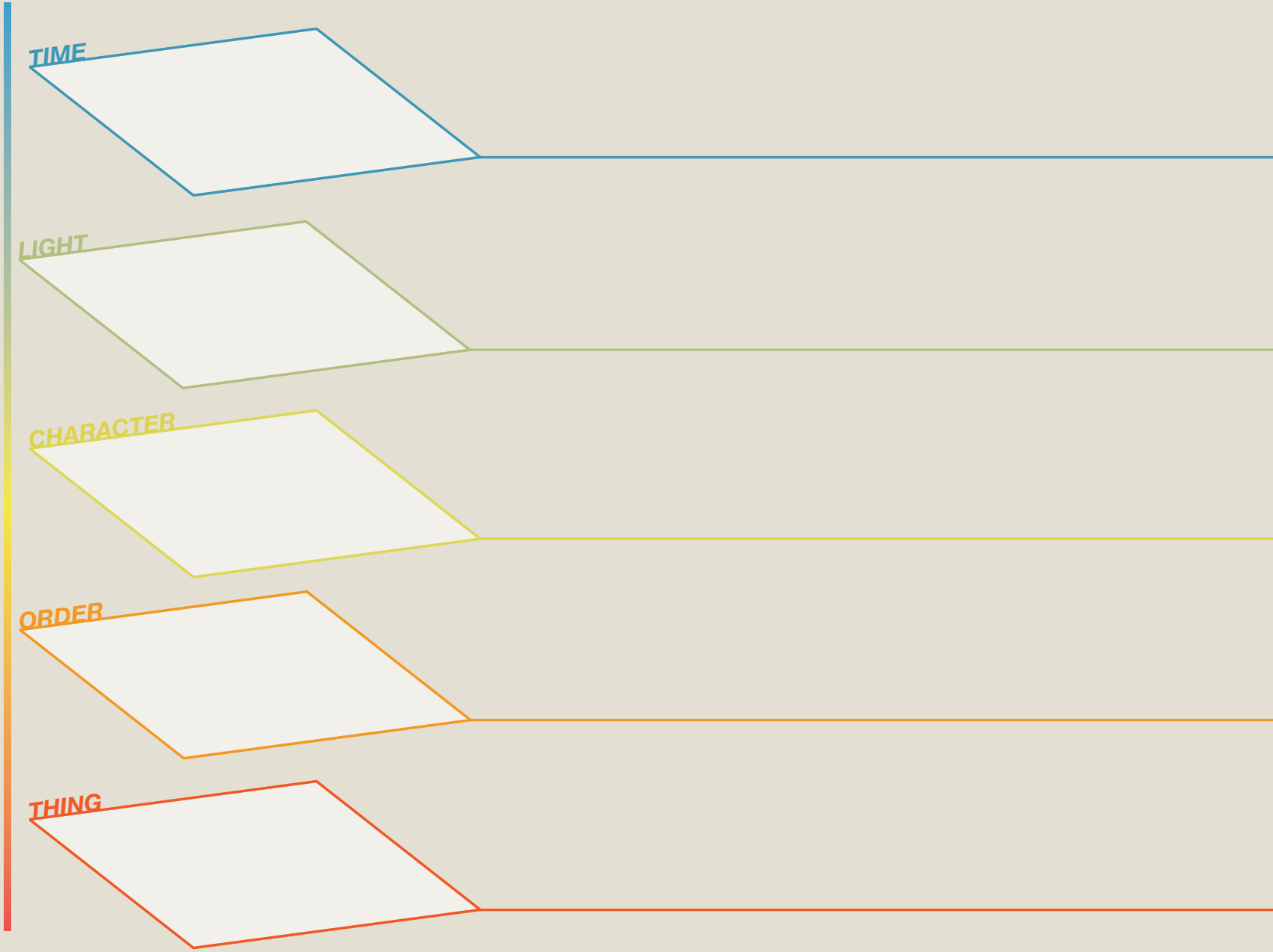


figure 131: "Natural Meaning" diagram; source: image created by author

IN NATURE:	IN BUILDING:
"...temporal rhythms of nature form a fifth dimension of understanding. The phenomena which distinguish a natural place cannot be seperated from these rhythms. The seasons, thus, change the appearence of places; in some regions more, in others less." ... "The temporal rhythms obviously do not change the basic elements which constitute a natural place, but in many cases they contribute decisevely to its character and are therefore often reflected in local myths and fairytales." ... "Time, finally, is the dimension of change, and makes space and character parts of a living reality, which at any moment is given as a particular place, as a *genius loci*". page 32	"In addition to "forces", order, character, and light, the categories of natural understanding also comprise time, which is basically a different dimension. Time is not a phenomenon, but the order of phenomenal succession and change. " ... "Man has succeeded in 'building' time, by translating basic temporal structures into spatial properties. Primarily life is 'movement', and as such it possesses 'direction' and 'rhythm'. The path is therefore a fundamental existential symbol which concretizes the dimension of time. Sometimes the path leads to a meaningful goal, where the movement is arrested and time becomes permanence. page 56
"...nature comprises a fourth category of phenomena which are less palpable. Light has of course always been experienced as a basic part of reality, but ancient man concentrated his attention on the sun as a "thing", rather than a more general concept of "light". In Greek civilization, light was understood as a symbol of knowledge, artistic as well as intellectual . In Christianity, light became a symbol of conjuction and unity which was connected with the concept of love... "Facts become art through love, which unifies them and lifts them to a higher plan of reality; and, in landscape, this all embracing love is expressed in light". page 31 - 32	"As the Christian world is founded on the spirit as an existential reality, Medieval articulation aimed at 'dematerialization', and negated the anthropomorphic classic orders. Dematerialization was a function of light, as a divine manisfestation. We may therefore say that the Medieval man 'built' light, the most intangible of natural phenomena. Since then light has been a primary means of architectural characterization." page 55
"The third mode of natural understanding consists in the definition of the character of natural places, relating them to basic human traits. The abstraction of characters was the achievement of the Greeks, and was evidently made possible by the very structure of Greek landscape. Topographically, Greece consists of numerous distinct but varied sites. Each landscape is a clearly deliminated, easily imageable 'personality'... "In understanding these characters, the Greeks personified them as anthropomorphic gods, and every place with pronounced properties became a manisfestation of a particular god." page 28 - 31	"Characters are more intangible than natural 'things' and spatial relationships, and demand particular attention from the builder. In fact, their concretization presupposes a language of symbolic forms (style)." Example... "Vitruvius maintains that temples ought to be built in a different style according to their dedication, and proceeds by explaining the Orders in terms of human characteristics. The Doric column "furnishes the portion of a man's body, its strength and beauty". The Ionic is characterized by "feminine slenderness", whereas the Corinthean "imitates the slight figure of the maiden". page 54
"The second mode of natural understanding consists in abstracting a systemic cosmic order from the flux of occurrences. Such an order is usually based on the course of the sun, as the most invariant and grandiose natural phenomenon, and the cardinal points." Examples: "Axis Mundi imagined by the Romans, whose heavenly cardo runs south from the Polar Star crossing at a right angle the decumanus, which represents the course of the sun from the east to the west." page 28	"The quest for order above all becomes manifest through the 'building' of one of the cosmic orders mentioned in the connection with natural place. The understanding of the natural environment does not precede building. The very act of building may become a means to this understanding, and the house may act as a 'model' for the cosmic image, at last if a structural similarity is present. We thus realize the fundamental importance of architecture as a means to give man an existential foothold." page 53
"The first node of natural understanding takes the forces as its point of departure and relates them to concrete natural elements or "things". Most ancient cosmogonies concentrate on this aspect and explain how "everything" has come into being." Examples: rocks, vegetation, water. "Being the primary natural 'things', rocks, vegetation, and water make a place meaningful or 'sacred'." page 24 - 27	"The first mode of building consists in concretizing the natural forces. Either the forces are "directly" expressed by means of lines and ornament, or they are concretized as man-made things, which represent the natural forces." ..."It is megalithic architecture where the material symbolizes the solidity and permanence found in mountains and rocks." ... "In the cultural landscape man "builds" the earth, and makes its potential structure manifest as a meaningful totality. A cultural landscape is based on 'cultivation', and contains defined places, paths and domains which concretize man's understanding of the natural environment" page 52

Palimpsest Process

With the characteristics of Natural Meaning in mind, I set out to cut, paste, rip, paint, and tape some of that meaning together. In the making of six palimpsests I destroyed two (2) books, used three (3) printer cartridges of ink, went through four (4) packs of glue, ran out of paper three (3) times, and will probably never get the tiny scraps of paper out of my carpet. Moving on from the digital collages, I set out with the intention to be as flexible as possible in the act of making. The idea was to construct but also de-construct, to create but also let go. With this mentality in mind I was able to create freely and without fear of perfectionism. A quality I wanted to capture in my work was the idea of destruction, of the unpredictable quality of life, and the notion that nothing is perfect in nature. Seeking a method to chip away at a perceived *genius loci*, it was my aim to feel completely entangled with the place, swimming in my own perception of its layered story. A vision in my head of the outcome allowed me to construct my own interpretation of *genius loci*, to narrow in on the essence that I perceive, and come up with a gallery of work to represent the emotional quality of space (as I see it).

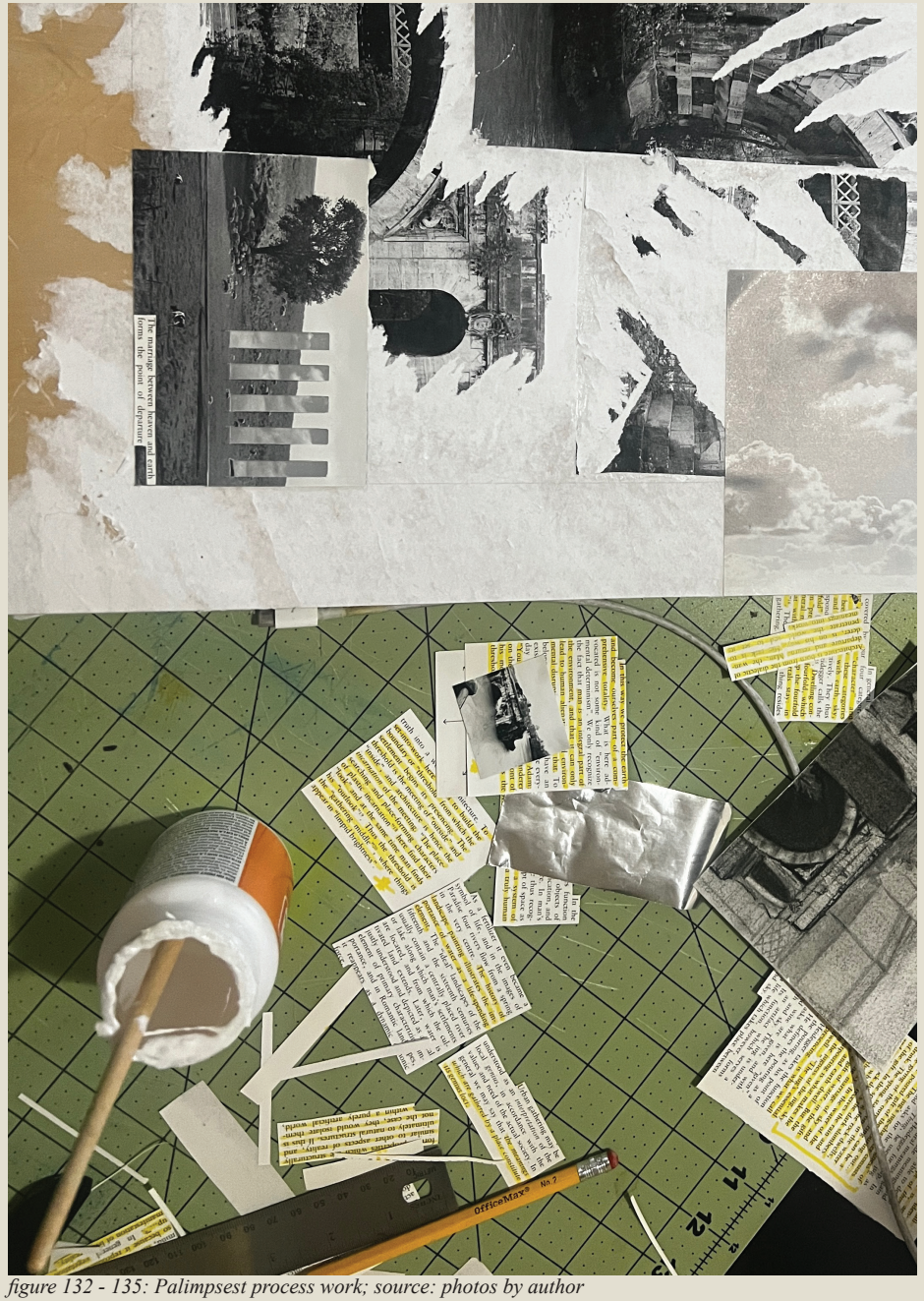
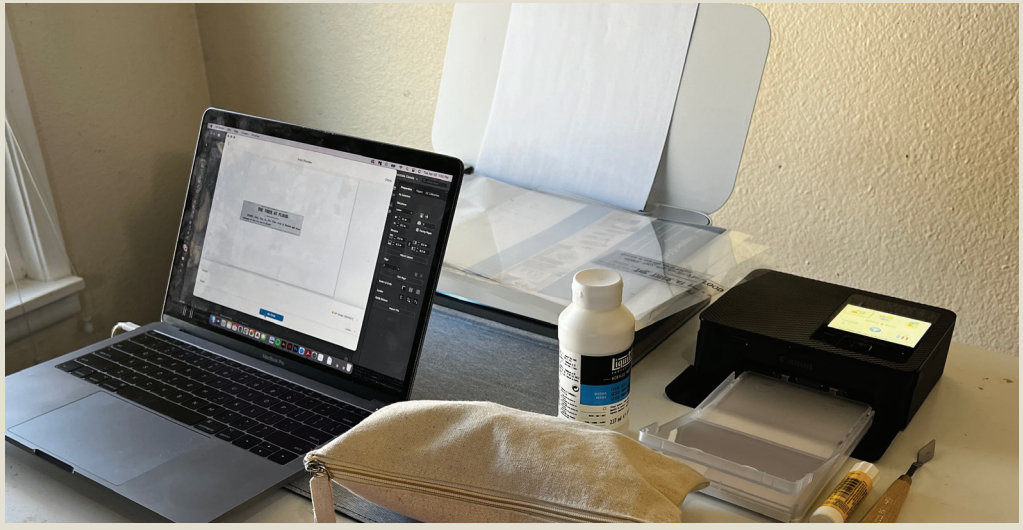


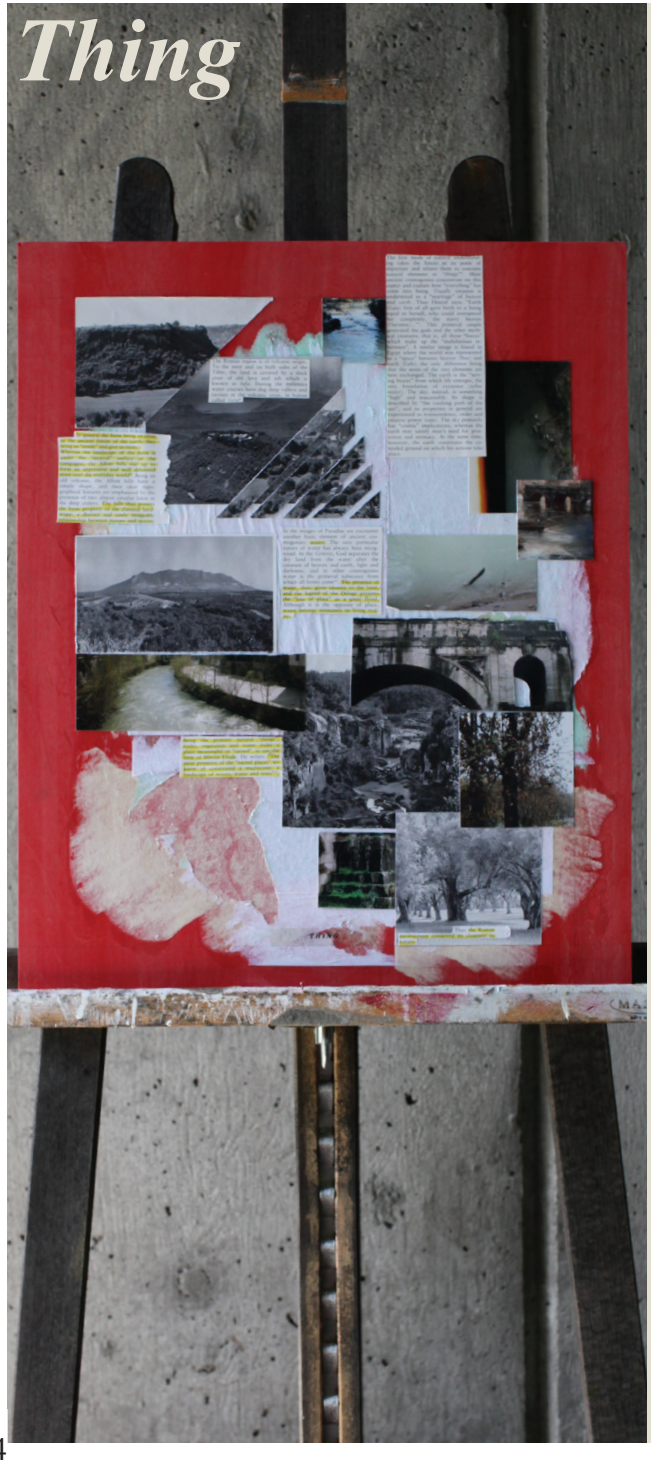
figure 132 - 135: Palimpsest process work; source: photos by author

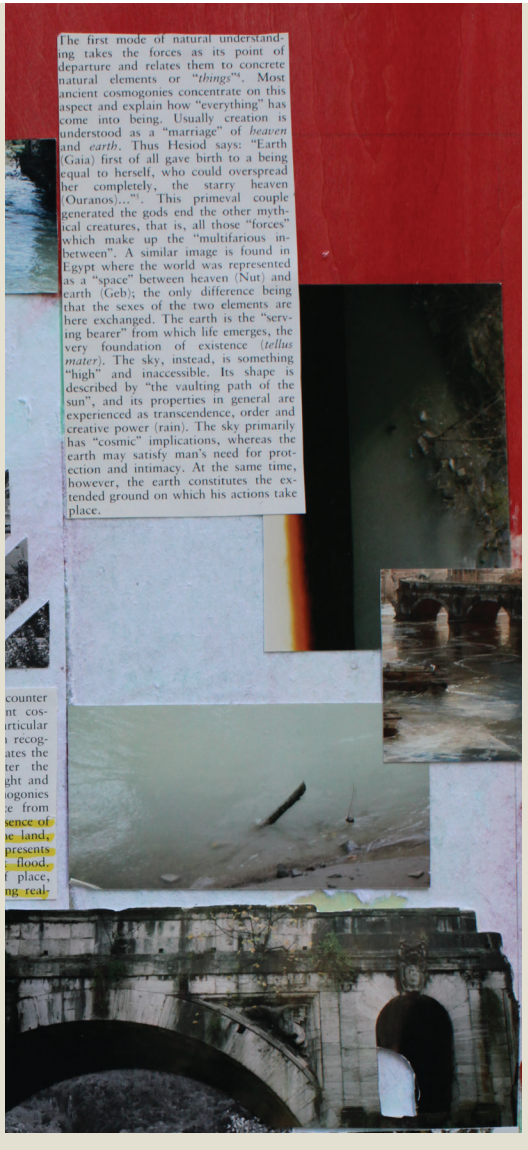

brother
FISKARS



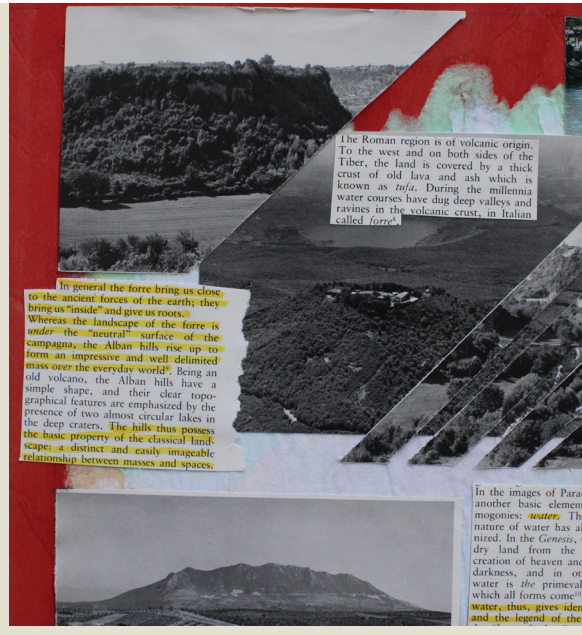


Thing





The first mode of natural understanding takes the forces as its point of departure and relates them to concrete natural elements or "*things*"[4]. Most ancient cosmogonies concentrate on this aspect and explain how "everything" has come into being. Usually creation is understood as a "marriage" of *heaven* and *earth*. Thus Hesiod says: "Earth (Gaia) first of all gave birth to a being equal to herself, who could overspread her completely, the starry heaven (Ouranos)..."[5]. This primeval couple generated the gods end the other mythical creatures, that is, all those "forces" which make up the "multifarious inbetween". A similar image is found in Egypt where the world was represented as a "space" between heaven (Nut) and earth (Geb); the only difference being that the sexes of the two elements are here exchanged. The earth is the "serving bearer" from which life emerges, the very foundation of existence (*tellus mater*). The sky, instead, is something "high" and inaccessible. Its shape is described by "the vaulting path of the sun", and its properties in general are experienced as transcendence, order and creative power (rain). The sky primarily has "cosmic" implications, whereas the earth may satisfy man's need for protection and intimacy. At the same time, however, the earth constitutes the extended ground on which his actions take place.



The Roman region is of volcanic origin. To the west and on both sides of the Tiber, the land is covered by a thick crust of old lava and ash which is known as *tufa*. During the millennia water courses have dug deep valleys and ravines in the volcanic crust, in Italian called *forre*".

In general the forre bring us close to the ancient forces of the earth; they bring us "inside" and give us roots. Whereas the landscape of the forre is *under* the "neutral" surface of the campagna, the Alban hills rise up to form an impressive and well delimited mass *over* the everyday world[8]. Being an old volcano, the Alban hills have a simple shape, and their clear topographical features are emphasized by the presence of two almost circular lakes in the deep craters. The hills thus possess the basic property of the classical landscape: a distinct and easily imageable relationship between masses and spaces.

In the images of Para
another basic elemen
mogonies: *water*. Th
nature of water has a
nized. In the *Genesis*,
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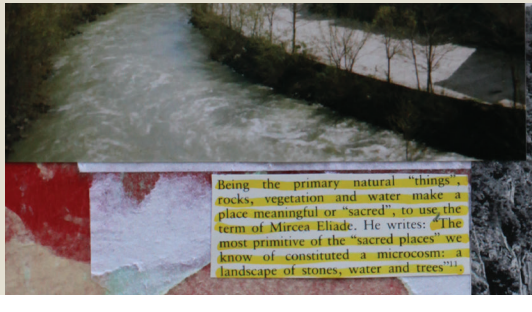


Being the primary natural "things", rocks, vegetation and water make a place meaningful or "sacred", to use the term of Mircea Eliade. He writes: "The most primitive of the "sacred places" we know of constituted a microcosm: a landscape of stones, water and trees"[11].



"The first mode of natural understanding takes the forces as its point of departure and relates them to concrete natural elements or "things" (Norberg-Schulz 1980, 24). Throughout this thesis, I struggled with the word "thing". When I first encountered the characteristics of natural meaning, "thing" seemed both the simplest to grasp and the hardest to accept. To me, the word "thing" felt empty—it holds no concrete meaning; it is everything and nothing. Surprisingly, this is where I began to understand it: "thing" encompasses all—the elements of our physical world, the stuff of our existence, the matter we are immersed in. As I delved deeper, it all clicked into place. I began to apply this concept to the bridge: What are the "things" that form the foundation of its connection to the earth? What elements brought the Ponte Rotto into being, from the abstract to the tangible?

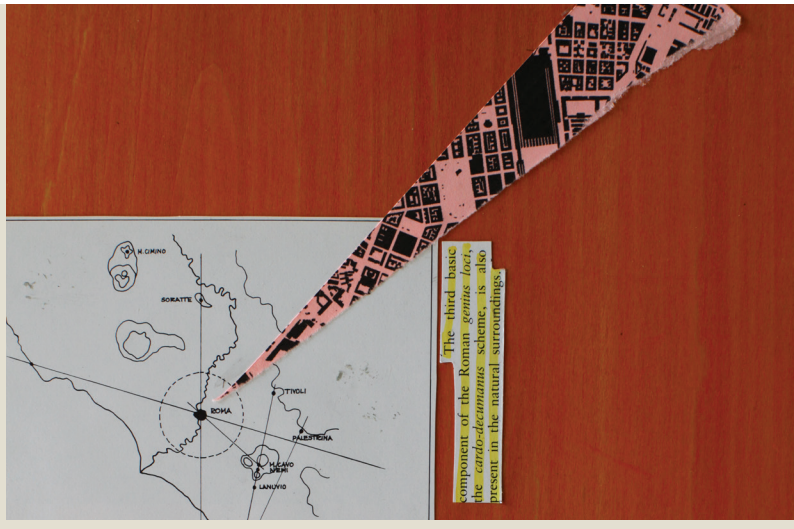
This part was straightforward—I had all the tools right in front of me. The geology of Lazio, the tufa deposits, the travertine mines, the fertile soil that brought the ancients to settle in Rome, the flowing Tiber River, the wooded forests of the Campagna—so many elements contribute to the unique characteristics of this bridge. Reflecting on this, questions naturally arise: Why was the bridge built? To cross the Tiber. Where does the river originate? Mount Fumaiolo. How did the travertine reach Rome? It was carried down by the active volcanic field millennia ago. Who planted the London Plane trees? Their seeds were carried by the river from all around Rome. The answers spiral, intertwining back to the notion that this quality of natural closeness defines Rome and its monuments. The impact of the environment is starkly evident in the ruins of the Ponte Rotto, ravaged yet reborn through active engagement with nature.

In creating a palimpsest to encapsulate "thing," I started with simplicity. I collected photographs of the hills, the water, and the trees. I juxtaposed these with my own photographs of the site to bring viewers back to our subject. The goal is to remind us that we are never far from the "things" that give our existence meaning—perhaps just a river away. I also gathered excerpts from *Genius Loci*: *Towards a Phenomenology of Architecture* that describe "thing" and Rome's relationship to it. My intention was to curate this relationship in one place, making it clear how connected they are. The relationship to the site itself is visually depicted, and with the addition of clips showing vegetation, the river in flood, weathered stones, and mossy overgrowth, you can see the "things" that tie the Ponte Rotto to the broader Roman relationship with the environment.

figure 136 (left): Close up of "Thing" Palimpsest; source: photos by author

Cosmic Order









Considering cosmic order in relation to Rome inevitably leads us to examine the cardo, a north–south street in Ancient Roman cities, and decumanus, east–west street in Ancient Roman cities. “On the urban level, the Romans visualized the cosmic order by means of two main streets crossing each other at a right angle; the cardo running north-south, and the decumanus east-west” (Norberg-Schulz 1980, 52). The ancient Romans used these cardinal axes to plan their towns, a system they took with them as they built cities across the globe. “To gain an existential foothold, man [sic] has to be able to orient himself; he has to know where he is. But he also has to identify himself with the environment, that is, he has to know how he is in a certain place” (Norberg-Schulz 1980, 19). This identification stems from our relationship to the cosmic order of our universe, the rhythmic systems that dictate our lives, and how our civilizations amplify this.

In ancient civilizations, it was common to plan your town around the axis of the sun or the directions on a compass (Norberg-Schulz 1980). The lives of the ancients were imbued with cosmic meaning; they tied every aspect of their daily lives to the gods and the stars, finding answers in the rhythms of the universe. We still follow many of those rhythms in our cities today, even if the spiritual meanings have faded. This cosmic order is glaringly evident in Rome, where even modern revisions adhere to an organized structure centered around the Vatican and its relationship to God.

This structure is palpable from the streets of Rome, and in my exploration into the cosmic order of the Ponte Rotto, I used these structures to inform my artistic choices. I employed overlays of maps and grids to create a cohesive composition. The figure-ground of Rome meets the bend of the river; the star map overlaid places the Ponte Rotto at the center. I made deliberate choices in selecting images that reinforced this order, and by cutting passages from my book, I was able to evoke a higher purpose to the placement and function of the Ponte Rotto.

Many engineers view the treacherous crossing at the bend of the Tiber as a mistake, but this location directly aligns with the cardo and decumanus, providing the most efficient connection between Trastevere and the Forum Boarium. The ancient planners had a reason for placing the Ponte Aemelius in the rapids of the Tiber, and time has tested that cosmic alignment is negligible against the swift changes of nature.

In this palimpsest, my aim was to layer these orders to convey an intrinsic meaning behind the Ponte Rotto’s placement. However, I have shown once again that it all falls back to the city versus the environment, and only by submitting to these forces may the relic find peace.

figure 137 (left): Close up of “Cosmic Order” Palimpsest; source: photos by author

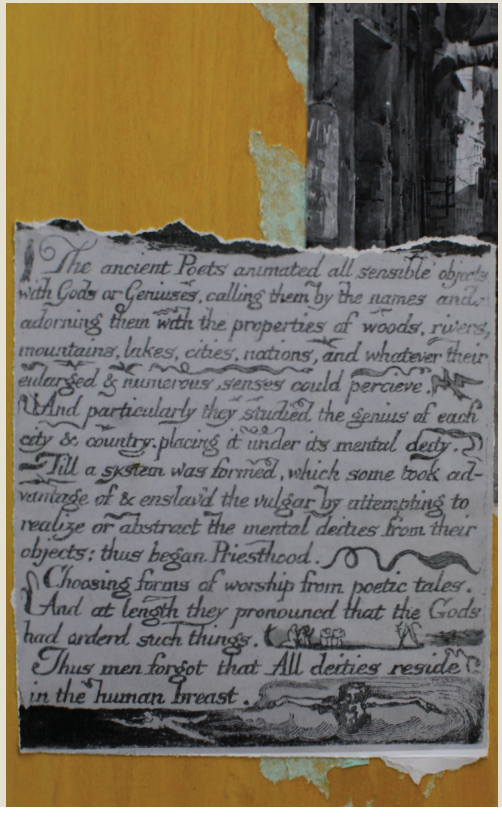
Character



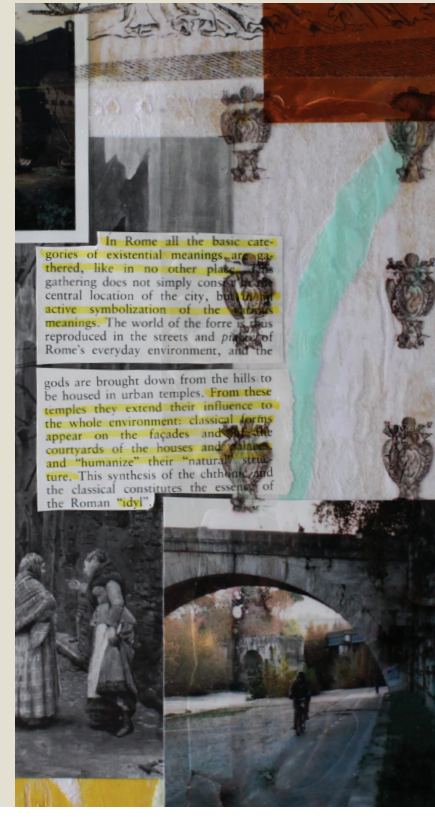


In some places the surroundings appear to offer protection, in others they menace, and in others again we feel at the centre of a well-defined cosmos. In some places there are natural elements of a very particular shape or function, such as horned rocks, caves or wells.

In Rome all the basic categories of existential meanings are gathered, like in no other place. The gathering does not simply consist in the central location of the city, but in the active symbolization of the existential meanings. The world of the forre is thus reproduced in the streets and piazzas of Rome's everyday environment, and the gods are brought down from the hills to be housed in urban temples. From these temples they extend their influence to the whole environment: classical forms



The ancient Poets animated all sensible objects with Gods or Geniuses, calling them by the names and adorning them with the properties of woods, rivers, mountains, lakes, cities, nations, and whatever their enlarged & numerous senses could perceive.
And particularly they studied the genius of each city & country, placing it under its mental deity.
Till a system was formed, which some took advantage of & enslavd the vulgar by attempting to realize or abstract the mental deities from their objects: thus began Priesthood.
Choosing forms of worship from poetic tales.
And at length they pronounced that the Gods had orderd such things.
Thus men forgot that All deities reside in the human breast.



In Rome all the basic categories of existential meanings are gathered, like in no other place. The gathering does not simply consist in the central location of the city, but in the active symbolization of the existential meanings. The world of the forre is thus reproduced in the streets and piazzas of Rome's everyday environment, and the gods are brought down from the hills to be housed in urban temples. From these temples they extend their influence to the whole environment: classical forms appear on the façades and in the courtyards of the houses and palaces and "humanize" their "natural" structure. This synthesis of the chthonic and the classical constitutes the essence of the Roman "idyl".

I've explored the solid and tangible characteristics of natural meaning through "thing" and delved into the broader relationship with the universe through cosmic order. Now, it's time to consider a more intangible subject: the character of a place, which emerges through symbolic articulation (Norberg-Schulz 1980). This character is derived from our innate desire to view our reality through a human-centric lens, personifying and imbuing symbols onto every abstract phenomenon we encounter. The ancients excelled in this practice, seizing every opportunity to personify their surroundings with symbols left by visiting gods and deities. Although we have moved away from the spiritualization of our environment, we still find opportunities to impart characteristic charm onto everyday places and objects. Paradoxically, a place may offer protection or menace, depending on one's interpretation of it.

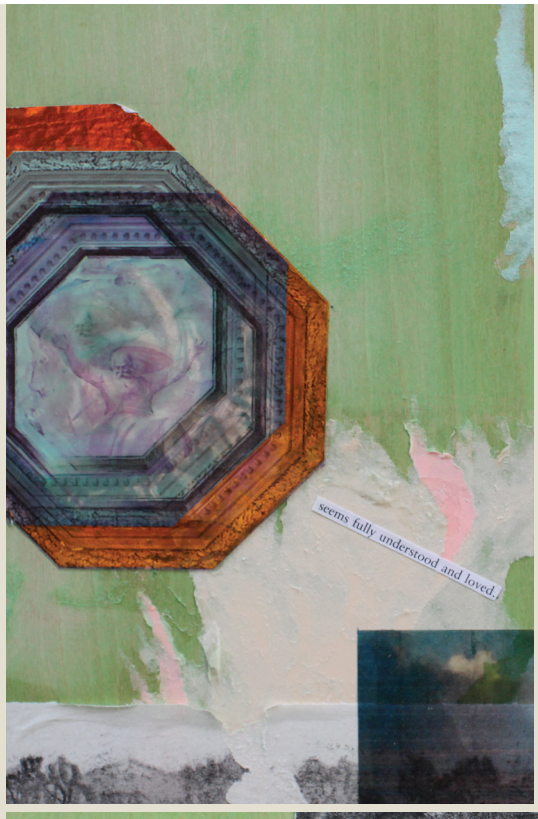
In my depiction of this phenomenon, I searched for symbols already embedded at the site, such as the crest of Pope Gregory XIII or Tiburinus, the god of the Tiber River. These characters are obvious, but the subtler ones require personal definition, such as comparing the sides of the Tiber embankment walls with the massive, enclosed streets of Rome, both offering an "urban interior" setting. The creation of this palimpsest was intended to be straightforward, aiming to clearly portray the symbolic nature of the Ponte Rotto and its surroundings.

In hindsight, I think including additional imagery that depicts the character present at the bridge, like the overgrown wildness, could have strongly emphasized the bridge's symbolic character. Further, the concepts of *betweenness* and liminality, which I have explored throughout this investigation, would have been well-served by a visual representation of that metaphor. If there's one thing I've learned through this process, it's that every move counts; in the moment, it's easy to overlook a crucial concept that is central to the idea. With practice, this method will become more intuitive, and the connection between what is thought and what is shown will become more apparent.

figure 138 (left): Close up of "Character" Palimpsest; source: photos by author

Light




seems fully understood and loved.




Light is not only the most general natural phenomenon, but also the less constant. Light conditions change from morning to evening, and during the night darkness fills the world, as light does during the day.
"Facts become art through love, which unifies them and lifts them to a higher plan of reality; and, in landscape, this all embracing love is expressed by light"[3].

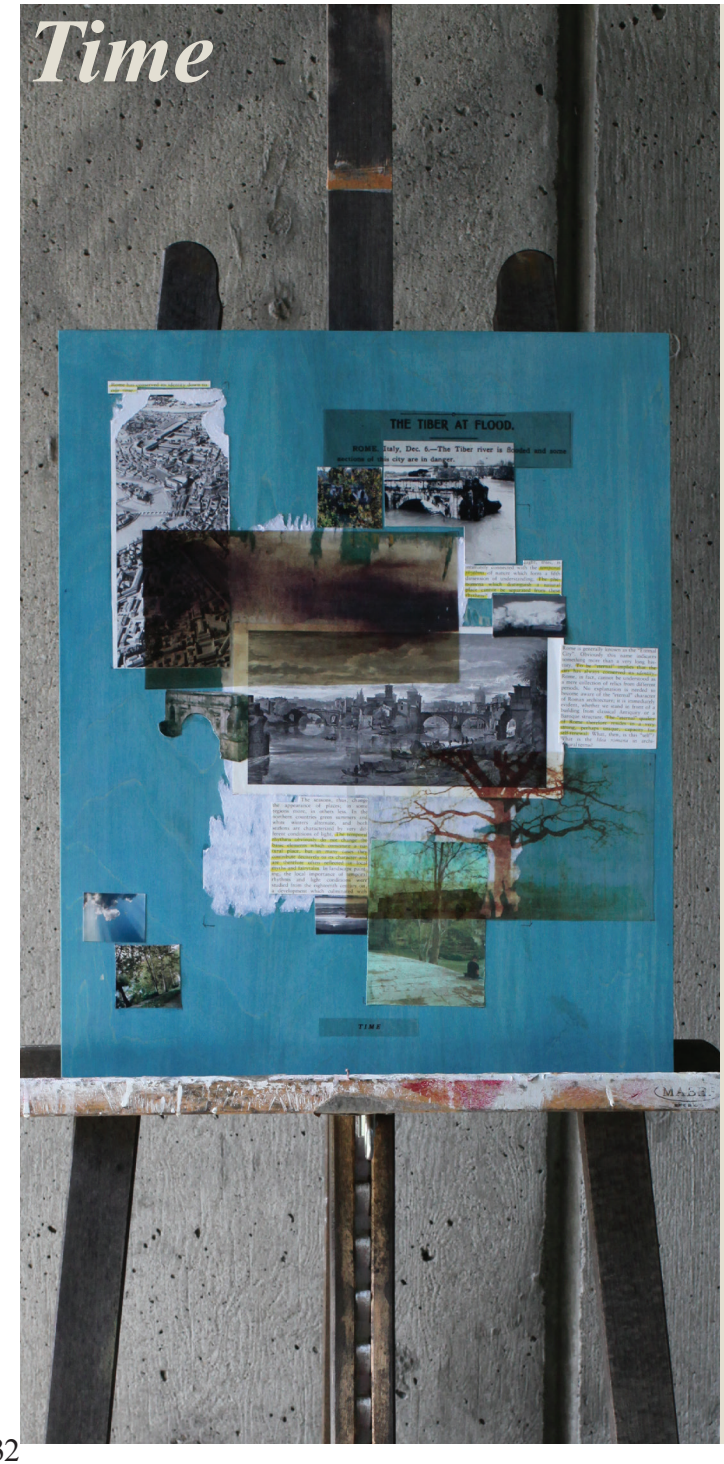
One of my favorite quotes from Norberg-Schulz's (1980) *Genius Loci: Towards a Phenomenology of Architecture* is, "Facts become art through love, which unifies them and lifts them to a higher plane of reality, and, in landscape, this all-embracing love is expressed by light." (32) I have referenced and paraphrased this sentiment several times, and I reiterate it here because this statement beautifully captures the relationship between light, art, and meaning, which I directly explore in this palimpsest. An artist takes their interpretation of reality—a fact—and transforms it into art through love and dedication. Similarly, in the landscape, nature achieves this transformation through light. Light has the power to fill an empty space with sacred meaning, turning darkness into beauty and void into substance. This is why divine light plays such a significant role in religion, with God often perceived as visiting mortals through beams of light, communicating on a frequency we cannot hear.

In my depiction of light and the Ponte Rotto, I selected images that capture the essence I witnessed there. I included stained glass from the nearby cathedral on Tiber Island and sunset images from my evenings by the river. I used an image of the Pantheon enveloped in clouds to convey this portal of divinity, alongside my own charcoal sketch, which was an attempt to contemplate the light at the Ponte Rotto's location in Rome. By layering reflective paper and heavenly cloud bursts, I captured the ever-changing quality of the Roman sky. I also added a painting of the Ponte Rotto with a pink sunset fading behind it.

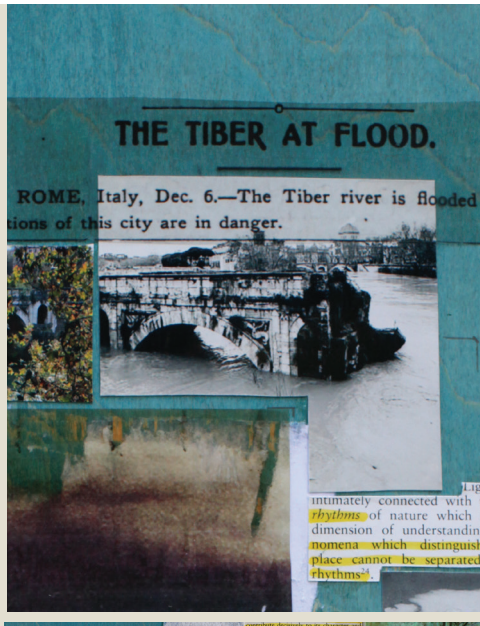
Light is fleeting, and this transient quality makes it all the more precious. While time creates its own palimpsest, the temporal quality of light cannot be ignored. It is this temporary feature of this natural characteristic that allows things to change and grow. Without the temporal fluctuations in the sun's rays, our earth would not thrive, our lives would not evolve, and the expression of art would cease to exist.

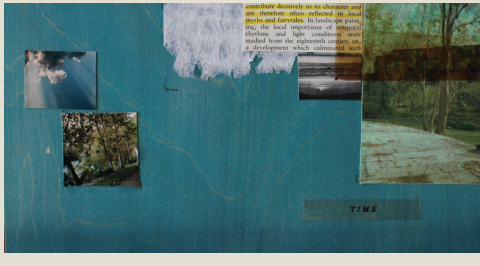
figure 139 (left): Close up of "Light" Palimpsest; source: photos by author

Time


THE TIBER AT FLOOD.
TIME


Rome has conserved its identity down to our time.


THE TIBER AT FLOOD.
ROME, Italy, Dec. 6.—The Tiber river is flooded
tions of this city are in danger.
intimately connected with
rhythms of nature which
dimension of understandin
nomena which distinguish
place cannot be separated
rhythms.


TIME


The seasons, thus, change the appearance of places; in some regions more, in others less. In the northern countries green summers and white winters alternate, and both seasons are characterized by very different conditions of light. The temporal rhythms obviously do not change the basic elements which constitute a natural place, but in many cases they contribute decisively to its character and are therefore often reflected in local myths and fairytales. In landscape painting, the local importance of temporal rhythms and light conditions were studied from the eighteenth century on, a development which culminated with

Time plays a crucial role in all elements of natural meaning and existence. It is the ticking of a clock, the span of a lifetime, or a moment flashing before our eyes. One could argue that none of the "characteristics of natural meaning" (Norberg-Schulz 1980) would exist without the role of time. It is the foundation of life and existence itself and is the source of all my existential dread. But there is more to the character of time than just the beating of a heart; it is the reason for seasons, growth, weather, destruction, and rebirth. As creatures, our temporal rhythms are intertwined with the movement of time, ceaselessly propelling us forward into the depths of entropy.

Time's relationship with the Ponte Rotto is evident. It is the oldest bridge in Rome, weathered by natural disasters and crumbling in the decay of a modern dystopia. Or perhaps the more obvious temporal element of the Ponte Rotto is its preservation, its ability to withstand storms rather than being eroded by them, serving as a marker of the Eternal City's cycles of expansion and contraction. Maybe that's it—it's the Eternal Bridge, a microcosm of the macrocosm, symbolizing the importance of Rome and its enduring presence on Earth. Neither at the whim of time nor evading its entropic decay, the Ponte Rotto stands steadfast. I could muse forever, but it's clear that the Ponte Rotto has defied something significant here, standing strong against the relentless march of time and anchoring its monolithic legs into the bedrock of existence. It makes me think about all the things we leave behind when our time is up, our creations fated to outlast us. Before this project, I wouldn't have thought about the bridges of my life enduring millennia beyond my own timeline. But now, I can't stop thinking about the people in those paintings, blissfully unaware of the enduring stones beneath them. It's a bridge between me and them, a connection to a past I had no part in, and a meaning I can carry forward in the story of the Ponte Rotto.

In my depiction of time, I chose to focus on the bridge as it was, compared to the bridge as it is now. I included images of the Tiber's Renaissance banks and a model of the bridge in ancient Rome, spanning the river's length. I also sought out temporal elements that represent time on a comparatively micro scale: a leafless tree, a thunderstorm, and the Ponte Rotto submerged in a flood. This juxtaposition illustrates the relativity of time—it could signify thousands of years or mere minutes. To further emphasize this point, I incorporated video projection to add a dynamic element to this layered palimpsest. The video, which I took in November, shows leaves from the plane trees floating down the river and passing under the arch of the Ponte Rotto. I projected this video while defending my thesis, demonstrating that the representation of time cannot be captured in a static art piece but rather through a multimedia exploration into the nature of our existence.

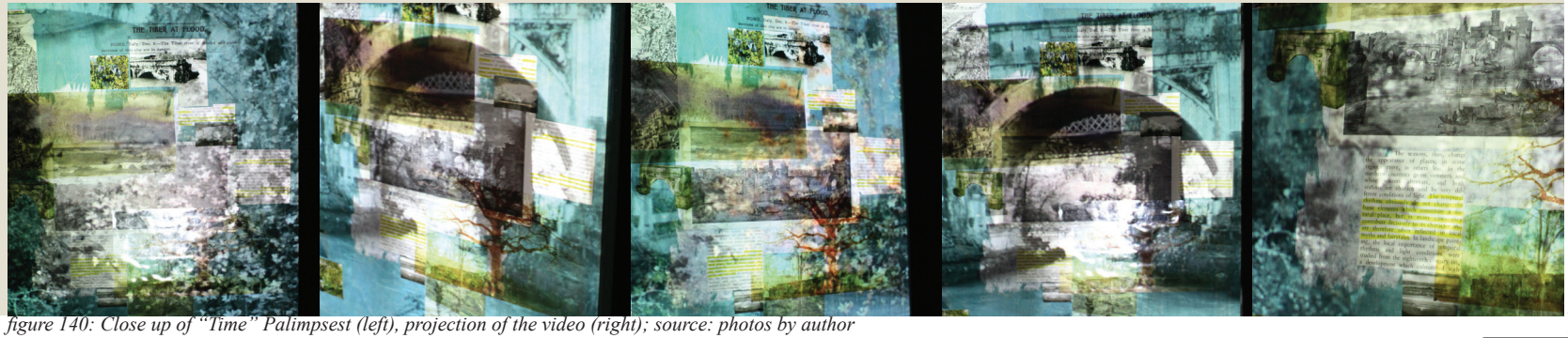
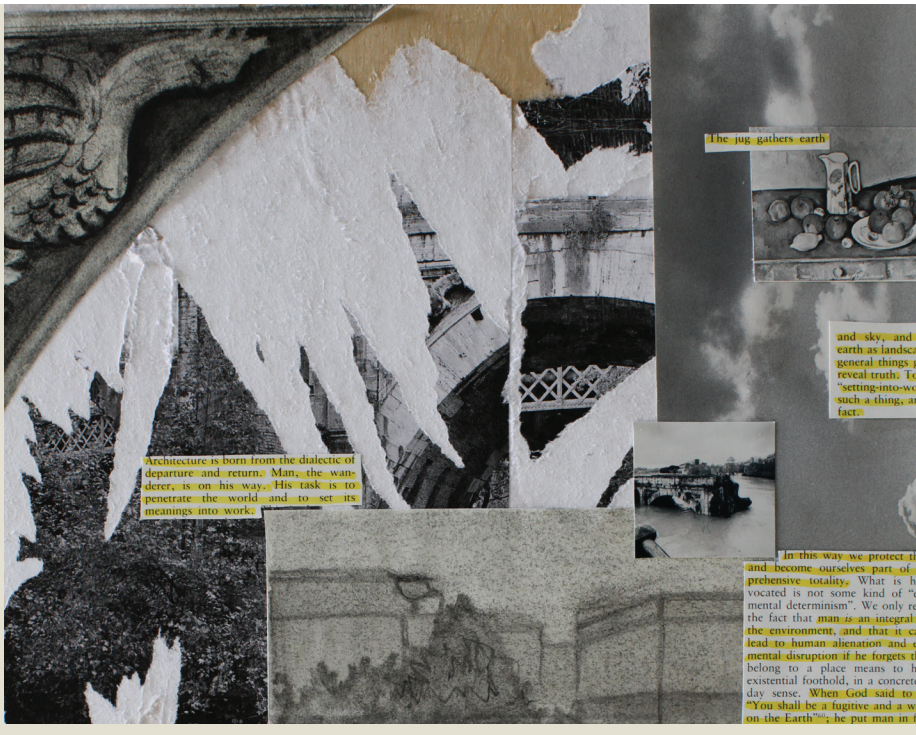


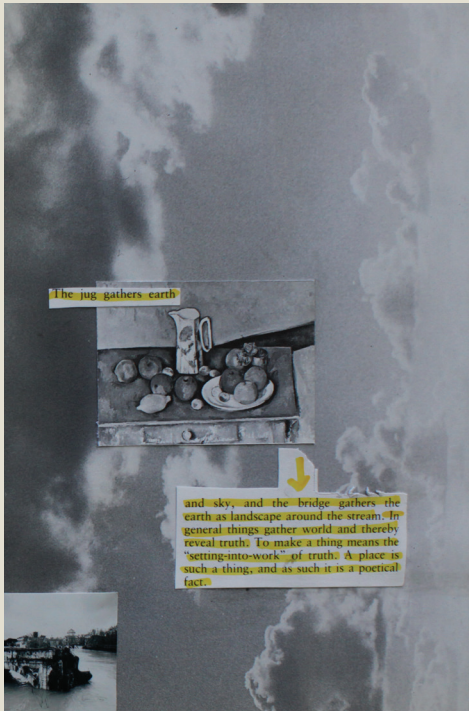
figure 140: Close up of "Time" Palimpsest (left), projection of the video (right); source: photos by author

Meaning


MEANING


The jug gathers earth
Architecture is born from the dialectic of departure and return. Man, the wanderer, is on his way. His task is to penetrate the world and to set its meanings into work.


MEANING


The jug gathers earth
and sky, and the bridge gathers the earth as landscape around the stream. In general things gather world and thereby reveal truth. To make a thing means the "setting-into-work" of truth. A place is such a thing, and as such it is a poetical fact.

As I wrapped up what I had intended to be my last palimpsest, "Time," I found myself still driven by a persistent curiosity, flipping through *Genius Loci: Towards a Phenomenology of Architecture* in search of an answer. I'm not sure what the answer was, but I landed on a recurring theme in both the book and my own writing: The concept of "meaning." This isn't just a characteristic of natural understanding, but rather a phenomenon that constructs a relative totality. "Man's [sic] most fundamental need is to experience his existence as meaningful," (Norberg-Schulz 1980, 182)

This search for meaning can be personal, or it can be something abstract from us. Objects and places hold meaning. Whether we are attuned to this meaning is entirely subjective. Norberg-Schulz (1980) notes children's ability to distinguish the psychic from the physical, finding meaning in their everyday environments through this psychic channeling, which he argues is dependent on identification. This identification, in turn, creates a sense of belonging, which constitutes meaning. Dwelling, belonging, and meaning are all exemplified by our relationship to our environment. Without a psychic connection to place, we have nothing anchoring us. This thesis and subsequent explorations were a means for me to practice identifying this meaning in my life. It started with subtle curiosity and grew into an explorative dive into the depths of my perceptions, weaving together my reality with the foundations of the concept of *genius loci* and leading to a newfound appreciation for the psychic interpretations of my understanding.

I wanted to create a palimpsest that encapsulated this new understanding of meaning. So, I let myself be guided by my own inspiration, moving away from Norberg-Shulz's framework simply to enjoy the act of creating. I used images and quotes to construct a narrative, juxtaposing phenomenological principles with the dreamy image of a sky. My own charcoal sketch of the bridge became the focal point, with torn remnants of my photography filling the background. At the center of it all is the threshold below the arch of the Ponte Rotto, inviting us to float underneath on the current of the Tiber.

I realize now that the most powerful takeaway from creating these palimpsests isn't what ended up on the board, but rather what I chose to leave out, take away, or sift through. Reflecting on this, it's the act of searching that makes this exploration so profound. Searching for an answer I might not even recognize if I found it. I think that's the point of it all—the search for meaning. Whatever the answer may be, it might be irrelevant; it's the process of seeking that gives us all we need.

figure 141 (left): Close up of "Meaning" Palimpsest; source: photos by author


INTERLACING PURPOSE AND VOID



CONCLUSIONS: INTERLACING PURPOSE AND VOID

My research into *genius loci* focused on the subjective capacities of spaces and their profound impact on human perception and experience. The Ponte Rotto bridge, with its rich history and cultural significance, served as a compelling case study for this investigation. I delved into the enigmatic essence of the Ponte Rotto, examining how its physical presence and historical context converged to create a unique sense of place. Through meticulous analysis of art, archives, and personal observation, I aimed to uncover the inherent value of the bridge that might otherwise be overlooked. Reflecting on the interconnectedness of human destiny and the natural environment, I sought to contribute to the field of landscape architecture by emphasizing the importance of embedding cultural narratives and environmental consciousness into design. The exploration of the Ponte Rotto's *genius loci* underscored the multifaceted nature of places and their ability to serve as thresholds between past and present, memory and meaning, and human and natural worlds.

I began this thesis driven by curiosity, without a distinct direction, just a hunch. Six months later, I'm looking back, trying to discern the takeaways. There are still some questions that need answers. Did I ever discern a distinct *genius loci* of the Ponte Rotto bridge? How can this exercise serve the landscape architecture field? Does this work reveal an inherent value at the Ponte Rotto, one that should not be overlooked or forgotten? For most of these questions, my answer remains: maybe. I'm still not sure. However, I don't believe that this uncertainty diminishes the value of the work or suggests that the exploration was unworthy of documentation. On the contrary, this thesis has shown that the inherent value of investigating our reality lies in the process, not just the outcome.

In my attempt to uncover the *genius loci* of the Ponte Rotto Bridge, I immersed myself in its characteristics and history. My perception of time and history has been stretched and warped in ways I can't fully articulate. Through the analysis of art and archives, I was transported back in time, sharing moments with civilizations from an alternate reality. My understanding of humanity's deep connection to the natural environment has been fortified, culminating in a perspective I will carry with me as I go forward as a designer. This realization—that our destinies are intricately linked to the natural world—reminds me that everything has a lifespan, whether 100 years or 4,000, like the Ponte Rotto, or even millenia. If we are fortunate, our objects will outlast us, and as designers, we should aim to create with the environment in mind, embedding stories of our culture into our designs.

This project consistently highlighted the importance of considering our impact on the world. While I focused on deciphering my own perceptions of the Ponte Rotto Bridge, I also sifted through the interpretations of others, whether from the perspective of a 16th-century artist or through a friend's camera lens. This allowed me to see beyond my own interests and tap into the curiosity of others. In my future designs, it will be imperative to consider these external perspectives to ensure that my interventions serve the world in a meaningful way.

Public perception of the Ponte Rotto may not always be favorable; to some, it may seem like an overgrown eyesore. However, places and things contain multitudes, and this bridge may hold completely different meanings for different people. It embodies the concept of *betweenness*, allowing it to straddle many different concepts: past and present, time and space, river and earth, purpose and void. The *genius loci* of the Ponte Rotto lies in its ability to serve as a threshold between places, a crossing over between memory and meaning.



WORKS CITED:

Bachelard, Gaston. *The Poetics of Space.* Penguin Classics, 1957.

Cheramie, Kristi, and Antonella De Michelis. *Through Time and the City: Notes on Rome.* Routledge, 2021.

CIOBOTA, Alexandru, et al. "The concept of *genius loci* in relation to landscape changes." *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture*, vol. 72, no. 1, 29 May 2015, https://doi.org/10.15835/buasvmcn-hort:10529.

"Contemporary Art Theme: Palimpsests." YouTube, YouTube, 2 July 2016, www.youtube.com/watch?v=9WvBgSx8hW4&ab_channel=NicolaPrice.

Descombes, George. "The Swiss Way: Noticing as an Act of Re-Construction." *Recovering Landscape*, Princeton Architectural Press, New York, NY.

"Djawid C. Borower." *DJAWID C. BOROWER*, www.borower.com/works.html. Accessed 29 May 2024.

Doroftei, Iulia. "Photography as a means of depicting *genius loci*?" *Territorial Identity and Development*, no. 1, 1 Oct. 2016, pp. 59–74, https://doi.org/10.23740/tid120164.

"A Fragmented Beauty: The Ponte Rotto and Rome's Romantic Past." *Through Eternity Tours*, www.throughetternity.com/en/blog/history/ponte-rotto-rome-broken-bridge.html. Accessed 29 May 2024.

Heidegger, Martin. *Being and Time: (Original Edition)*. Must Have Books, 2021.

Heidegger, Martin. *Building, Dwelling, Thinking.* 2000.

Highet, Gilbert. *Poets in a Landscape,* New York Review Books, New York, 2010, pp. 1–1.

Hill, Dorothy Kent, et al. "Roman Domestic Garden Sculpture." *Ancient Roman Gardens*, Dumbarton Oaks, Washington, D.C, 1981, p. 81.

Hunt, John Dixon. *Genius loci an Essay on the Meanings of Place.* Reaktion Books, Limited, 2020.

Hunter, Marnie. "Bike Trail Cuts through Eternal City." *CNN*, Cable News Network, 11 Jan. 2016, www.cnn.com/travel/article/cnnphotos-rome-bicycle-trail-tiber/index.html.

"Insula Tiberina." *LacusCurtius • Rome - Tiber Island (Platner & Ashby, 1929)*, penelope.uchicago.edu/Thayer/E/Gazetteer/Places/Europe/Italy/Lazio/Roma/Rome/_Texts/PLATOP*/Insula_Tiberina.html#noteA. Accessed 29 May 2024.

Jackson, J.B. "The necessity for ruins, and other topics. by John Brinkerhoff Jackson. ." *Environmental Review*, vol. 6, no. 1, 1 Mar. 1982, https://doi.org/10.2307/3984061.

Jackson, J.B. "A sense of place, a sense of time." *Oz*, vol. 8, no. 1, 1 Jan. 1986, https://doi.org/10.4148/0888-7802.1111.

Jackson, Marie, and Fabrizio Marra. "Roman stone masonry: Volcanic foundations of the Ancient City." American Journal of Archaeology, vol. 110, no. 3, 1 July 2006, pp. 403–436, https://doi.org/10.3764/aja.110.3.403.

Jasiński, Jakub. "Legend of Horatius Cocles " Imperium Romanum." *IMPERIUM ROMANUM*, 26 Jan. 2023, imperiumromanum.pl/en/roman-art-and-culture/roman-legends/legend-of-horatius-cocles/.

Gordon, Alden. "Ancient Rome's Bridge to Nowhere." *Wall Street Journal*, 5 Sept. 2014, www.wsj.com/articles/masterpiece-ponte-rotto-in-rome-1409959743.

Murray, Martin A., et al. *"Genius loci: An Interpretation of the Idea of Place in City Design." Genius loci*: An Interpretation of the Idea of Place in City Design, Rice University, 1985.

Murray, Sheanna. "Tiber Island: Not Just a Crossing Point." *Walks Inside Rome*, 10 May 2022,

www.walksinsiderome.com/blog/tiber-island-not-just-a-crossing-point/.
Norberg-Schulz, Christian. *Existence, Space and Architecture*. Praeger, 1974.
Norberg-Schulz, Christian. *Genius loci: Towards a Phenomenology of Architecture*. Academy Editions, 1980.
"Palimpsest Definition & Meaning." *Merriam-Webster*, Merriam-Webster, www.merriam-webster.com/dictionary/palimpsest. Accessed 29 May 2024.
Pollett, Andrea. *Curious and Unusual - the Tiber Island*, roma.andreapollett.com/S1/roma-c8.htm. Accessed 29 May 2024.
"Ponte Sant'Angelo: History, Facts & Information." Sant, www.castel-sant-angelo-ticket.com/ponte-sant-angelo/. Accessed 29 May 2024.
Rinne, Katherine Wentworth. *The Waters of Rome: Aqueducts, Fountains, and the Birth of the Baroque City.* Yale University Press, 2010.
Seddon, George. "From the Archives: The *Genius loci* and Australian Landscape." *Landscape Australia*, landscapeaustralia.com/articles/from-the-archives-the-genius-loci-and-australian-landscape/#. Accessed 29 May 2024.
Sheehan, Jake. "Bridge Construction Methods: Why Are Roman Bridges so Stable?" *Machines4u Magazine*, Publisher Name Machines4u Publisher Logo, 31 Mar. 2017, www.machines4u.com.au/mag/bridge-construction-methods-why-are-roman-bridges-so-stable/.
Stewart, Susan. "Chapter 3." *The Ruins Lesson: Meaning and Material in Western Culture*, The University of Chicago Press, Chicago, 2021.
"The Story of the Tiber Island: Hidden Beauty of Rome Tour." *Through Eternity Tours*, www.throughetternity.com/en/blog/hidden-sights/story-of-the-tiber-island.html#. Accessed 29 May 2024.
Taylor, Rabun. *Tiber River Bridges and the Development of the Ancient City*,

2002, waters.iath.virginia.edu/Journal2TaylorNew.pdf.

There Once Was in Rome... - Broken Bridge,
roma.andreapollett.com/S6/roma2-04e.htm. Accessed 29 May 2024.

Thompson, Ian. "What Use Is the *Genius loci*?"
Constructing Place: Mind and Matter, Routledge, London, 2004.

"Tiber Island: History, Pictures, Useful Information, How to Get To." *Vision*, 11 Nov. 2016,
www.visionpubl.com/en/cities/tiber-island/.

A Tourist's Introduction to the Geology of Rome,
assets.press.princeton.edu/chapters/s8000.pdf. Accessed 30 May 2024.

Tsenova, Violeta, et al. "Designing with *genius loci*: An approach to polyvocality in interactive heritage interpretation." *Multimodal Technologies and Interaction*, vol. 6, no. 6, 24 May 2022, p. 41, https://doi.org/10.3390/mti6060041.

Tuan, Yi-fu. *Topophilia: A Study of Environmental Perception, Attitudes, and Values.*
Columbia University Press, 1990.

Ugc. "Pons Aemilius." *Atlas Obscura*, Atlas Obscura, 24 Sept. 2020,
www.atlasobscura.com/places/pons-aemilius.

Vecco, Marilena. "*Genius loci* as a meta-concept." *Journal of Cultural Heritage*, vol. 41, Jan. 2020, pp. 225–231, https://doi.org/10.1016/j.culher.2019.07.001.

Wheeler, Michael. "Martin Heidegger." *Stanford Encyclopedia of Philosophy*,
Stanford University, 12 Oct. 2011, plato.stanford.edu/entries/heidegger/.

Zusmann, Kate. "Ponte Sisto – the Most Lively Bridge in Rome." *Rome, Italy*, 29 May 2024,
rome.us/ancient-rome/ponte-sisto.html.