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**On the Placeness  
That Exists Before Place**

Uncovering a Sense of Place  
through Collective Architectural  
Practice on the Terp



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● Prologue

*In contemporary architectural discourse, discussions on locality and generic space often arise from a sense of crisis over the disappearing sense of place. Critics have long accumulated ideas about placemaking, or places embedded with memory, sense, and ritual (Relph, 1976; Norberg-Schulz, 1979); however, actual spatial production is dominated by capital logic, and there is a marked tendency for the sense of place to be reduced to mere symbols. Spatial structures focused on efficiency and speed lead individuals to immerse themselves in *Vita Activa* rather than *Vita Contemplativa* (Arendt, 1958), rendering life's equilibrium increasingly vulnerable. When space is no longer the foundation of existence but becomes a stage for functionality, we lose our 'sense of place' (Heidegger, 1971). Although individuals attempt to restore placeness and identity by turning to trivial objects or emotional entities, the physical environment does not support such efforts. As a result, communal sense of place gradually fades, and it becomes difficult to ascribe meaning to space solely through individual practices (Tuan, 1977). This paper is questioning on such circumstance and aims to examine past 'Architectural Practices' through which people constructed places for living together.*

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## Abstract

This thesis explores how shared architectural actions and material engagements contribute to the formation of a communal sense of place, using the Frisian terp landscape as a central case study. Drawing from archaeological evidence, historical maps, and theoretical frameworks from architectural phenomenology and anthropology, the research investigates the interplay between collective practices—such as layered earth construction, settlement rituals, and communal maintenance—and the emergence of place-bound identities. The study argues that the physical shaping of the terp, beyond being a response to environmental necessity, constituted a socio-cultural process through which people actively constructed their worldview. The research contributes to a broader understanding of architecture not merely as shelter but as a medium through which communal imagination and identity are cultivated.

## Introduction

This study begins with personal memories and emotions related to place. In my childhood, I realized that everyday space could attain a ‘sense of place’ through specific sensory experiences, leading me to another understanding that space and place are not identical. Later, upon studying architecture, I came to see that even the same space can bear entirely different meanings for different individuals, while conversely, the sense of a particular place can also be shared by multiple people. Prompted by these insights, this paper poses the question: In modern architectural spaces where sense of place is lost due to the expansion of generic space, how might we once again endow them with a “communal sense of place” and reclaim the feeling that we are living together? Accordingly, Chapter 1 outlines contemporary discourses on sense of place. Through this, I confirmed that numerous theories have already been proposed regarding the formation of place, yet most deal only with cases where communal sense of place is shaped through rituals or social norms (Augé, 1995). I judged that this scope, which deals only with sociocultural and ritualistic aspects, was limited, so I examined historical cases where a common sense of place was formed based on material experiences. There, I identified “shared architectural practice” as another possible condition. Thus, this thesis will revolve around the question:

*“How do shared architectural practices and experiences shape a sense of place?”*

In pursuit of a concrete answer, I chose the Frisia region of northern Netherlands as a case study in Chapter 2. In this area, where the risk of flooding was ever-present, an artificial terrain called a *terp* emerged as an architectural response for survival. “The *terp* was not a defensive structure built in response to a singular event, but an evolving landscape shaped by continuous habitation and adaptation to environmental uncertainty.” (Knol, 2004, p. 27) Yet, this structure went beyond mere flood defense, functioning as a locale that overlapped the community’s everyday life, symbolic systems, and labor culture (De Langen & Van der Valk, 2013). By analyzing the region’s physical environment and architectural activities, this study attempts to infer how the community established a sense of place through the process of building *terp*. Furthermore, it will examine how the place they formed came to hold meaning beyond mere space (Casey, 1993). Based on these findings, I seek to propose the conditions necessary for constructing place in contemporary architectural practices. On chapter 3, applying these architectural practice in contemporary architecture-construction process, I build a hypothetical scenario of a joint design and construction in the Frisian region. I explore possible pathways for institutional and practical implementation of the learnings from the *terp* case.

# Chapter 1. Framing Sense of Place: Theoretical Foundations and Positioning in This Paper

## 1.1 The Concept of 'Space and Place'

In the fields of architecture and urban studies, an effort to differentiate “space” and “place” began in earnest in the mid to late 20th century. Of course, there is a long tradition of reflecting upon the relationship between humans and the environment, stretching back to ancient philosophy, medieval thought, and modern empiricism and idealism. However, it was with the rise of phenomenology and humanistic geography that scholars began systematically examining how “space,” previously treated as a physical or geometric concept, comes to acquire meaning as “place” filled with human life and experience.

Thinkers like Bachelard and Heidegger emphasized how humans endow space with meaning through lived, bodily experience. Later, Tuan and Relph clarified that “place” emerges when physical space is enriched by memory, emotion, and interaction (Tuan, 1977; Relph, 1976). In architectural and urban theory, this understanding evolved into “placemaking,” which views space not merely as a backdrop, but as a medium shaped by social life. This viewpoint was concretized by Christian Norberg-Schulz in *Genius Loci* (1979) with the notion of the “spirit of place (Genius Loci),” although earlier discussions tended to narrow the understanding of place to symbolism or the exchange of cultural customs.

This paper expands upon that perspective by examining how shared material experiences, especially shared architectural practices, shape and circulate a sense of place. It also explores in concrete terms the principles by which a space is transformed into a “shared place” and the resultant sense of place.

## 1.2 Before Moving On: A Note on Placeness

Through a review of diverse literature in the introduction, we have examined the various uses and expanded meanings of “sense of place.” When attempting to link this sense of place to responses to external environments, we often encounter the limitations posed by environmental determinism. Is a sense of place truly formed in a one-to-one relationship with environmental conditions? Before moving on to the next section, which explores the concept of place through an expanded perspective rooted in environmental context, I would like to clarify two key points.

*First : What is my position on placeness?*

Although there are many different explanations and interpretations, for the purposes of this thesis, placeness is built upon the physical experiences of a group. In other words, I exclude “stories” about place that come from local legends, concepts, or symbols, as well as individual or subjective emotions. Placeness here refers to the special sense and feeling of a place that can be shared when people undergo a “material experience” together at a location. Naturally, individual experiences often serve as the starting point, but I do not focus on all the cultural (branches) variations that create subtle differences in personal interpretations or feelings. Instead, I look for the fundamental conditions that come to light if we center the discussion on “the human body,” which is at the root of all human experience (Tuan, 1977).

*Second : Is “communal material experience” an independent factor from the “external environment” in forming placeness?*

No. Here is where the definition of placeness grows richer. The starting point of placeness is the surrounding environment. Yes, One major axis of placeness is the surrounding environment, but the other is human choice. Human beings survive by choosing their own way to adapt to their environment in diverse methods. However, this is not an attempt to underestimate the influence of external factors such as the environment. This is because whether or not the environment facilitates “shared experience” has a significant impact on the emergence of “placeness” as defined in this thesis. Put differently, when the surrounding environment allows or encourages a communal experience, the community comes more possible to share in that placeness, and in doing so, this sense of place can carry the potential for long-term continuity of the community.

These two nuanced points are fundamental to this thesis. They differ clearly from ‘environmental determinism.’ Environmental determinism says that because the environment is some specific way, human experiences must be shaped accordingly—focusing on the “*will*”<sup>\*</sup> of the environment. In contrast, this thesis places the focus on “*human will*,” emphasizing that because human experiences unfold in certain ways, the environment is perceived and comprehended in a particular manner. In other words, humans could have chosen to respond to the environment in one way or another, but out of many possibilities, they have made certain choices—thereby grasping and structuring their environment in a specific, distinct way. While environmental determinism argues for a one-way influence from environment to humans, this thesis seeks to show that humans’ concrete experiences and forms of collective response (communal architectural practices) feed back and affect how external factors are received. In this sense, it tries to depict a cyclical interplay between environment and humankind.

Consequently, we can try to redress historical perspectives wherein humans merely “suffered” from environmental conditions, or we can move past a viewpoint that sees humans acting solely as aggressors, offsetting that imbalance and searching for points of equilibrium in between.

<sup>\*</sup> Will : Whether or not it possesses intention falls outside the scope of academic discussion, but the expression is permitted within the context of this thesis.

## Chapter 2. Inferring a Shared Sense of Place Based on Records of Frisia's Environment and Artificial Structures

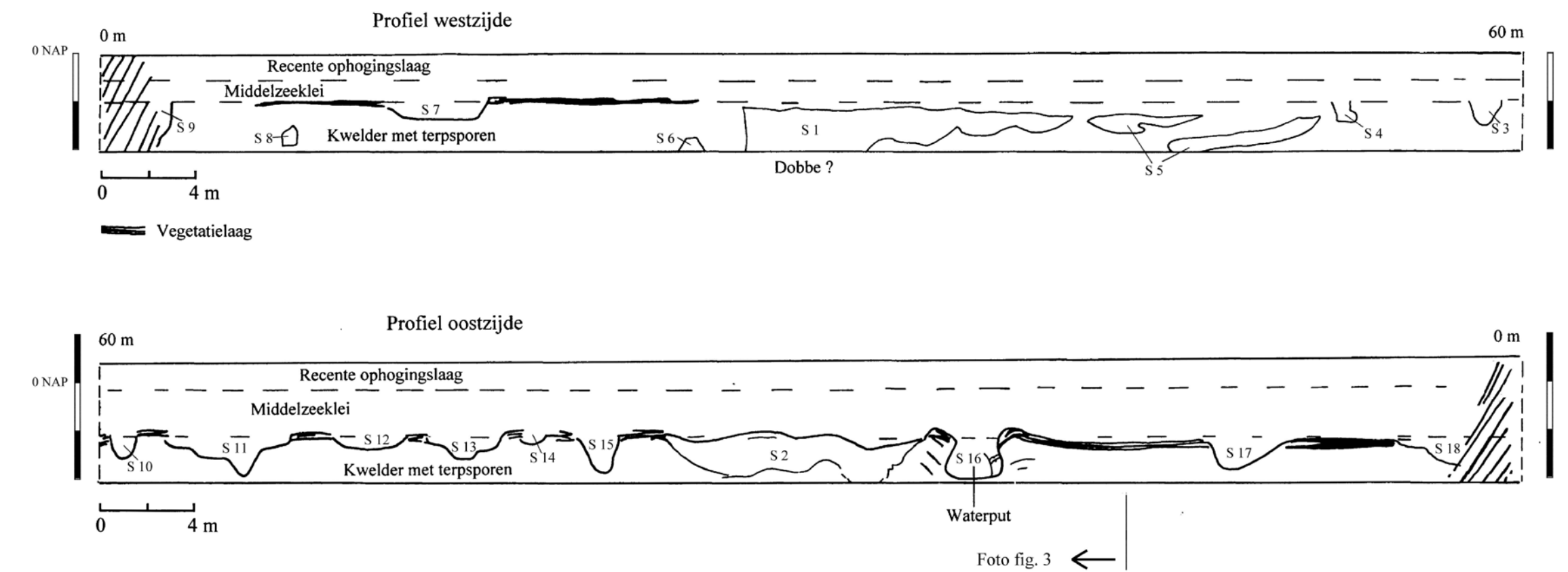


Fig. 2.1. Stratigraphic profile of both the western and eastern banks of a canal section at Nieuweschans, showing layered sedimentation, vegetation traces, and remnants of terp-related activity. The profile illustrates how Middle Sea clay (Middelzeelei) accumulated over former salt marsh surfaces (kwelder), within which distinct terp construction traces and peat-rich vegetation layers are embedded. This supports the view that terp settlements emerged directly on the fluctuating salt marsh landscape, offering physical strategies of elevation and drainage against rising sea levels. Source : Nieuwhof & Prummel (2004: fig. 4)

### 2.1 The Environment of Frisia

The region of Frisia, covering parts of the northern Netherlands and northwestern Germany, features a distinctive coastal landscape of wetlands and salt marshes. Because of tidal fluctuations and frequent inundations, early inhabitants settled on naturally elevated landforms but soon developed terp mounds—artificial elevations adapted to the unstable terrain. These mounds were constructed directly within salt marshes, as seen in the stratigraphic profile at Nieuweschans (fig. 2.1), where Middle Sea clay overlays former peat-rich marshes. The layering reveals how settlement was shaped by, and embedded within, a dynamic, sediment-rich environment.

Salt marshes formed as post-glacial sea levels rose, depositing clay over peat (Fig. 2.2, dense peat helped stabilization) and later stabilizing through barrier islands and sedimentation. From 2000 BCE onward, the land gradually rose and developed ecological zones—low, mid, and high marshes—each supporting different vegetation. Reeds and salt-tolerant grasses rooted and trapped sediments, elevating the land and enabling stable occupation. High-marsh species like silvergrass and white clover provided livestock forage (Fig 2.3), while their matted turf was repurposed for building mounds and embankments. Vegetation thus shaped not only ecology but also human use, dividing inhabitable and uninhabitable zones.

Fig. 2.2. peat : a dark brown fibrous material that is formed primarily by the partial decomposition of organic matter and especially plants in wet, oxygen-deficient areas (such as bogs or swamps) and that is harvested especially for use as a fuel for heating or cooking or as a soil amendment

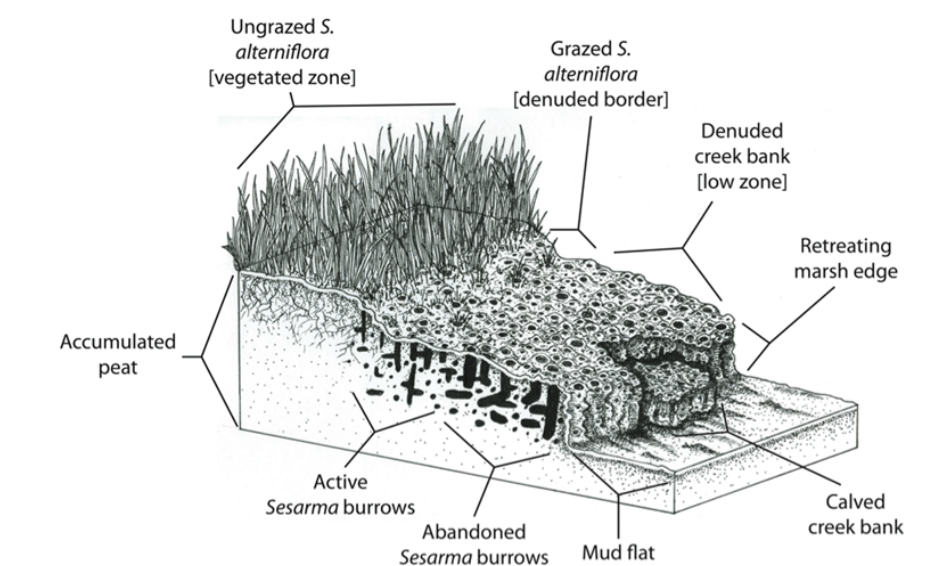


Fig. 2.3. Vegetation zones in the salt marshes of the northern Netherlands.

Vegetation in the salt marsh was not only ecologically stratified but also functionally differentiated. LEFT : While sea lavender (*Limonium vulgare*) and sea purslane (*Atriplex portulacoides*) of the middle marsh had limited economic use due to their high salt tolerance and low palatability,

RIGHT : species such as silverweed (*Potentilla anserina*) and white clover (*Trifolium repens*) in the high marsh offered valuable forage for livestock. Moreover, sods composed of salt-tolerant grasses and root-bound soil layers were frequently cut from these zones and repurposed as building material for terps, wells, and dikes frequently. Source : Nieuwhof & Schepers (2016).



Mixed-energy (wave & tide) barrier islands

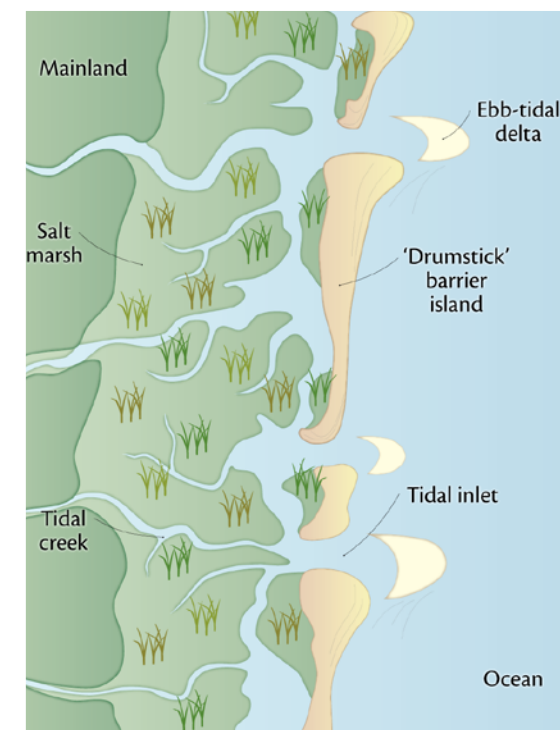


Fig. 2.4. Conceptual diagram showing the morphology of wave- and tide-dominated barrier islands, including features such as tidal inlets, ebb deltas, salt marshes, and drumstick-shaped barrier islands. Source: Dennison et al. (2009), *Shifting Sands*, IAN Press, University of Maryland Center for Environmental Science.

Tidal inlets and drainage channels further stabilized the terrain by facilitating water flow and preventing stagnation (Fig. 2.4). By the 1st century BCE, certain high areas supported seasonal farming and grazing. Without large dikes, inhabitants maintained natural hydrological cycles, using shallow ditches and small embankments. By the 5th century CE, more refined drainage systems helped expand settlements without undermining sedimentation processes.

Instead of resisting seawater entirely, Frisian communities built up soil at key points and adapted to periodic flooding. This strategy enabled continued use of wetlands and helped develop an architectural culture based on coexistence with water. The environmental setting was not only a challenge but also a formative ground for a communal sense of place, shaped through responsive material practices. The following section explores how terp construction emerged from this environmental logic and evolved into a shared architectural and social space.

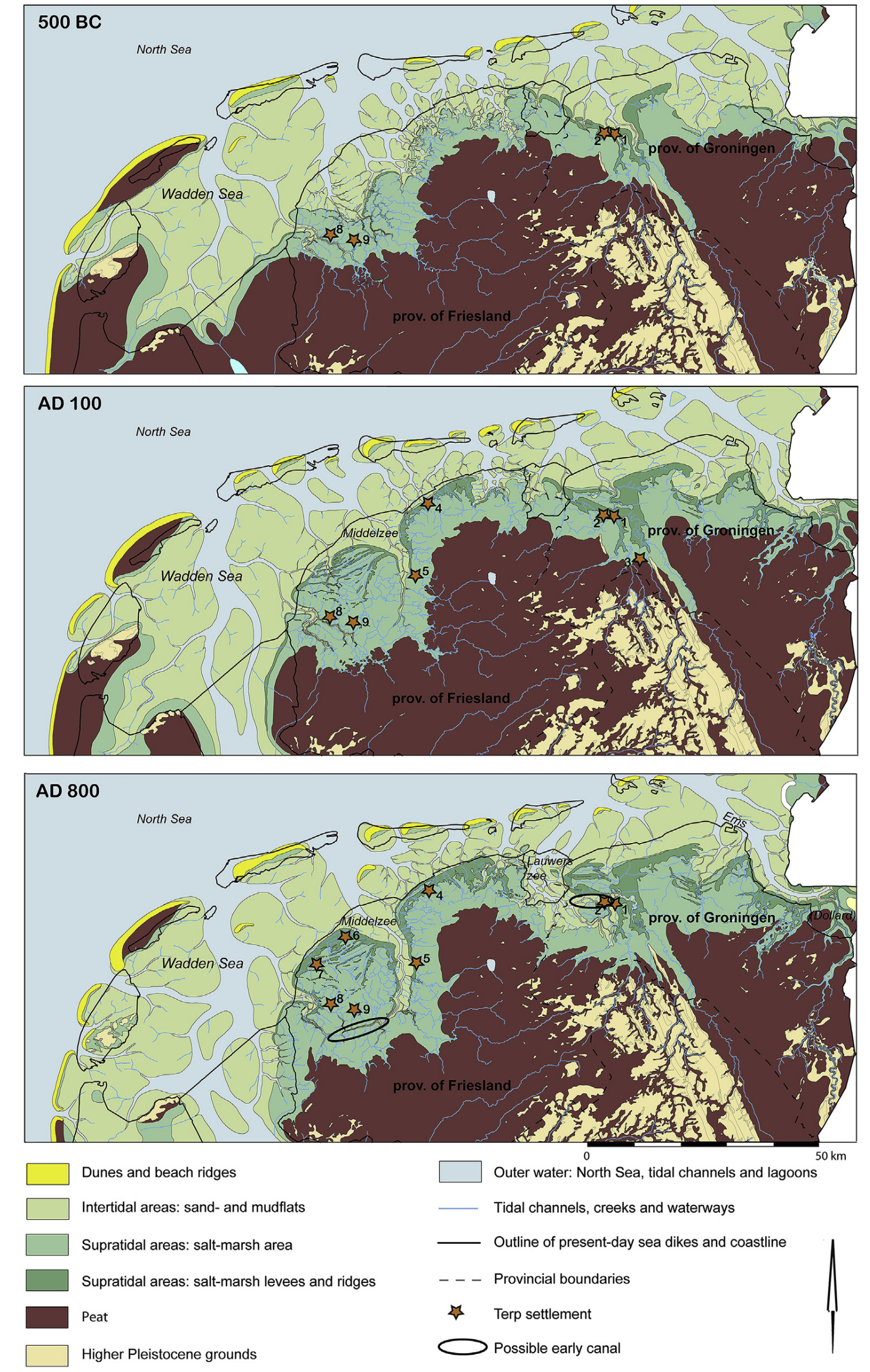


Fig. 2.5. The maps show how coastal sedimentation led to the gradual growth of salt marshes, creating habitable land for terp dwellers. They provide context for how early settlers managed water levels, controlled flooding, and expanded their living space before medieval dike-building began. Source: Nieuwhof (2019).

## 2.2 Materials, Structure, and Communal Construction of Terp

Terp was primarily formed through a layered construction method, stacking various organic materials such as sod, peat, moss, and livestock manure in alternating layers to achieve density and insulation, while also facilitating repeated maintenance and extension (Nieuwhof et al., 2019). These mounds were not randomly distributed or confined to specific areas. By 100 AD, terp settlements were widely distributed across salt marshes and high sand dunes in areas such as Westergoed, forming a distinctive settlement landscape pattern (Fig. 2.6) (Vos & Knol, 2005).

In particular, structures woven from branches or wood (wattle) were added to the periphery to prevent erosion or collapse (Knol, 2004; Bakker et al., 2003). This construction process was not merely about the development and accumulation of techniques. Because usable materials were limited, participating residents likely had to collaboratively search for and select soil made dense and suitably moist by the root systems of salt-tolerant plants (Nieuwhof et al., 2019). To evaluate soil quality and cohesion, they may have relied on embodied knowledge—tactile, visual, and olfactory assessments developed through shared experience.

According to a technical note published by the New South Wales Government, ‘Determining Soil Texture Using the Ribboning Technique,’ the ribbon test (Fig. 2.7) allows one to determine soil composition and moisture content by physically manipulating the material (New South Wales Department of Primary Industries, 2014). While not formally institutionalized in terp-building societies, we can assume that it is likely that a similar method was orally transmitted and practiced: forming a ribbon of soil between thumb and forefinger would help indicate clay content, with longer ribbons suggesting stronger cohesion—a vital property for stable terp blocks. This suggests that the development of turf was accompanied by a variety of sensory experiences.

In these ways, in the course of building and repairing terps, members of the community shared and learned practical knowledge about material moisture, layering sequences, and compression methods. Consequently, a construction culture emerged, rooted in collective participation, and these shared sensory experiences ultimately enabled the community to form a more concrete image of the land on which they lived.

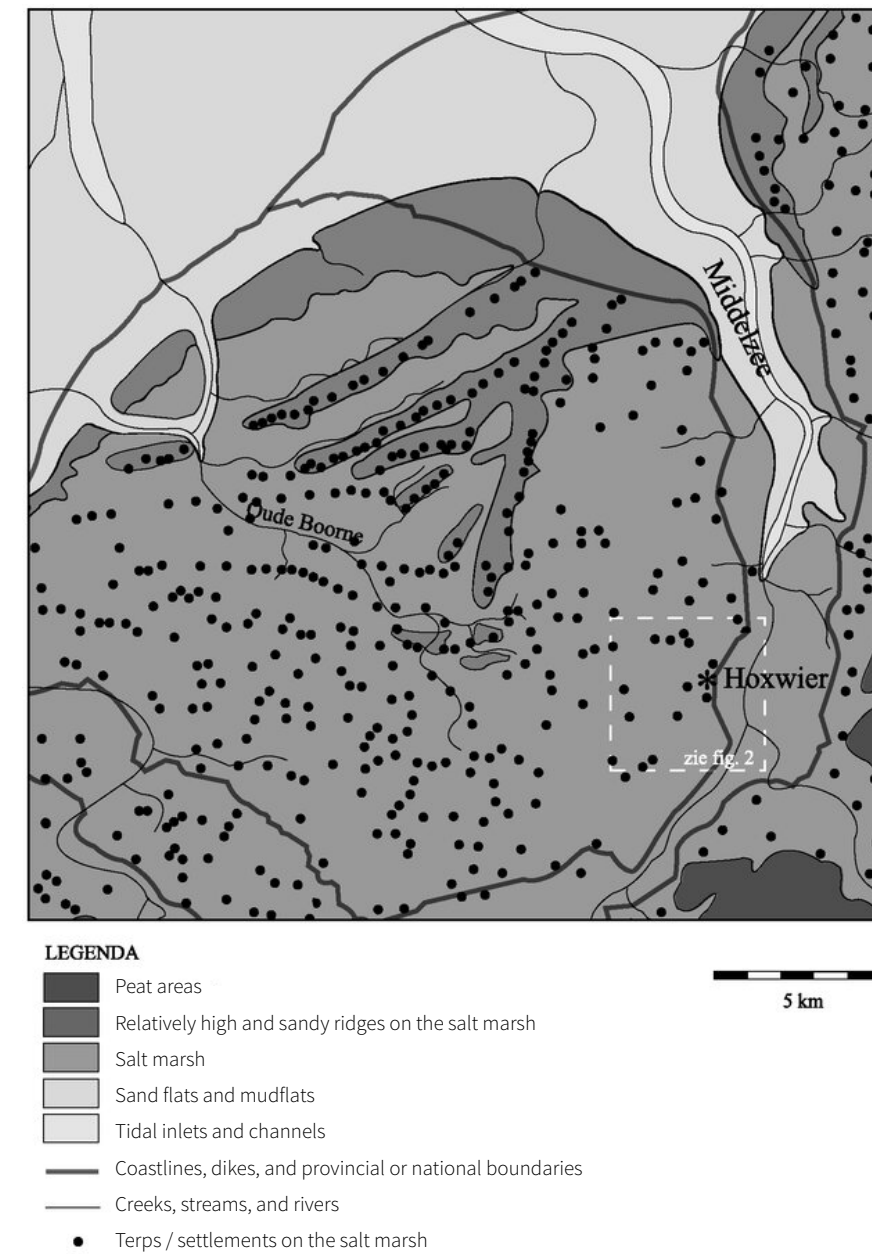
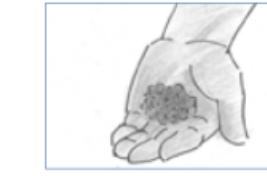


Fig. 2.6. Westergo and its immediate surroundings in AD 100, showing terp settlements (black dots) distributed across salt marshes and higher sandy ridges. Adapted from Vos & Knol (2005).

### Assessing soil texture

Carry out this ribbon test on a sample from each layer identified in the soil profile.

1. Take a small handful of soil.



2. Add enough water to make a ball. If you can't make a ball, the soil is very sandy.



3. Feel the ball with your fingers to find out if it is gritty (sand), silky (silt) or plastic/sticky (clay).



4. Reroll the ball and with your thumb gently press it out over your forefinger to make a hanging ribbon.



5. If you can make a short ribbon, your soil texture is loamy, a mixture of sand and clay.



6. The longer the ribbon, the more clay is in your soil.



Do this several times for confirmation and compare the average ribbon length with those in Table 1.

Fig. 2.7. Ribbon Test: Forming a ribbon by pressing wet soil between the thumb and forefinger helps assess clay content. Longer ribbons indicate higher clay percentages, which enhance block strength. Source: NSW Department of Primary Industries (2014).



Fig. 2.8. Top : A recently repaired turf wall made of clamped blocks at Tyrfinnsstaðir. Bottom : Experimental reconstruction of an early-medieval turf house on a turf platform in Firdgum. Photo © D. Postma.



### 2.3 Building-Ground Continuity: Cyclical Construction Methods and Temporality

From a contemporary perspective, the boundary between “architecture” and “site” was difficult to define for both the artificial landform known as terp and the residences built atop it. Because the same materials—peat, sod blocks—were used to construct houses, and when a house reached the end of its lifespan it was returned to the earth to further raise the terp, houses effectively became land and land became houses. This formed a continuous cycle in which architecture was not a one-time event but an ongoing process of readjustment to the land, repeated over generations.

For instance, archaeological excavations at Ezinge have uncovered three different phases of platform construction (Fig. 2.10): from an early corner structure enclosed in wattle and filled with sods and dung around 500 BCE, to later house platforms that reused structural walls as retaining edges for new platforms. These show how every architectural iteration not only reflected technical adaptation but also reinforced an accumulated ground memory—physically layering generations of habitation onto the landscape itself.

The layout of the logistical infrastructure necessary for life in Terp also shows overlapping construction processes. For instance, in figure 2.9, the multi-layered freshwater supply system in Hallig, northern Germany, used rooftop cisterns, livestock pits, and surrounding basins to survive in a salt marsh environment. A similar system was likely used in Frisian Terp settlements, where infrastructure developed through site-specific adaptations. Thus, vertical arrangements unified symbolic cosmology with survival needs.



Figure 2.9. Freshwater supply system on a Warft (artificial dwelling mound) in the Hallig region of northern Germany. The diagram shows a tiered water management strategy: Fething is a central livestock watering pit; Schetels are shallow peripheral basins for additional storage; and Sod is narrow, sealed cisterns collecting rainwater from rooftops for human consumption. This layered approach illustrates how freshwater was secured in salt-marsh environments, comparable to practices in terp settlements in the northern Netherlands. Source: Waddenacademie (2017), adapted from the Pitt Rivers Museum, University of Oxford.



Fig. 2.10. Three types of platforms from the first phases of habitation in Ezinge. 1: corner of the earliest platform in Ezinge, dated around 500 BC, consisting of turves and dung in a wattle encasement surrounded with turves (dug away for the photo). 2: consecutive house platform, early 5th century BC; the lower section of the building's wattle wall served as a retaining wall that was filled in with turves. The thresholds were placed in an elevated position when the walls were built. 3: a platform from around 400 BC, consisting of carefully placed turves. The part outside the posts of the house was dug away. Photo © University of Groningen, Groningen Institute of Archaeology.

Traces left on the walls of a particular house, or materials imbued with a family's distinctive way of life, might later be reused in another neighbor's foundation. This reuse of architectural remnants illustrates how buildings became integrated into the material history of the community and continued to support future construction—not just symbolically but structurally (Nieuwhof et al., 2019). Excavation photos further reveal this continuity: a longitudinal section of the terp at Ezinge (Fig. 2.11) shows a sequence of cattle stalls and structural posts embedded within successive layers of raised ground. Each new house was constructed slightly further outward, reinforcing not just the platform but also the layered temporality of communal life through continuous expansion of structural posts.

Moreover, the intertwining of life, dwelling, and terrain extended beyond “architecture” to “site” itself. Traces of family remains and animal bones have been found within multiple layers of the terp (Bakker et al., 2003). In some cases, once-inhabited spaces were reburied with the bodies of deceased family members and later rebuilt as new dwellings. These overlapping activities form a continuous cycle of inhabitation, memory, and renewal—a ritualized architecture that integrated life and death, the individual and the community (Tuan, 1977; Bachelard, 1994 [1958]).

Within this process of overlapping and reinforcing “house and land, individual and community, the living and the dead,” the boundaries between time and space were never clearly defined. Consequently, perceptions of identity—between the environment and humans, and among individuals—were also not sharply distinguished. Place was not something passively occupied by individual agents, but actively produced as the layered foundation of communal life (Casey, 1996; Ingold, 2000).

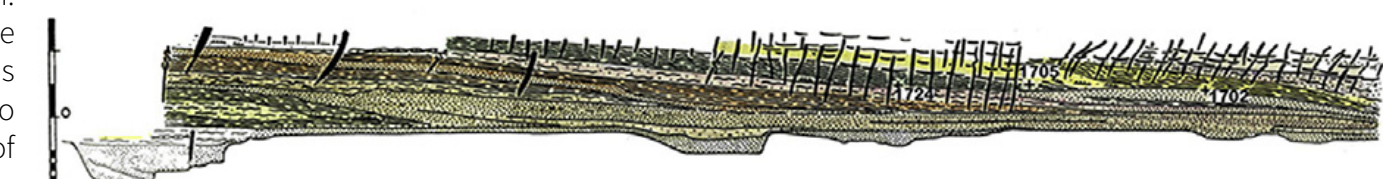
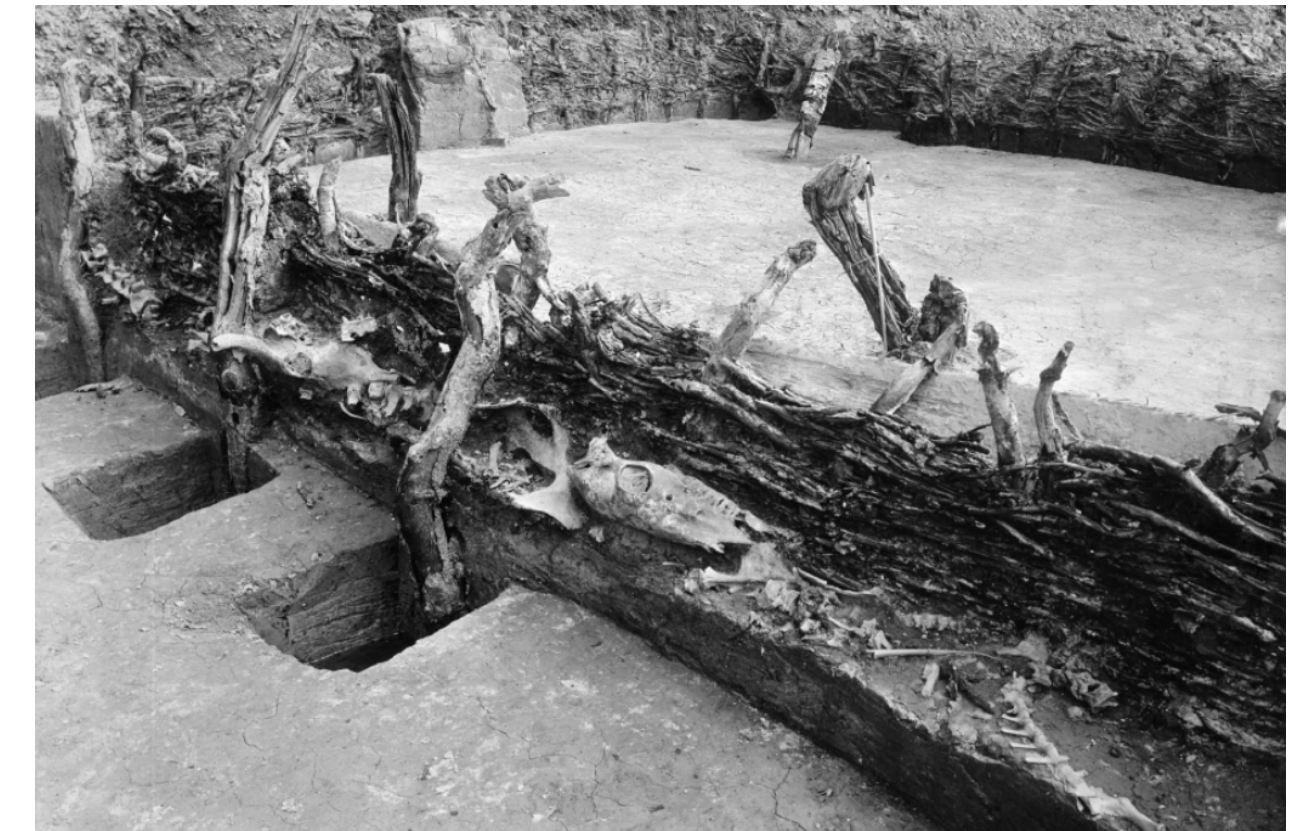


Fig. 2.11. A series of consecutive houses dated between the 4th and 2nd century BC on the terp of Ezinge. Top: Excavation photograph in longitudinal direction (1933), showing the remains of cattle stalls. Bottom: longitudinal section, showing stakes and poles of the consecutive house phases, with heightening layers in between. Each new house phase was further from the centre of the terp on the left. Numbers refer to finds. Photo and drawing © University of Groningen, Groningen Institute of Archaeology.

## 2.4 Vertical Extension as a Visualization of Time

Although Terp initially served merely as a flood-control measure, over time it evolved into a structure that, through repeated vertical extensions, embodied the layered traces of community life and labor. The Frisians gradually raised the height of the Terp as needed, which invariably required group construction efforts. Consequently, the height of the Terp came to symbolize not just a change in terrain but also the investment of time and resources, as well as the degree of communal cooperation.

This cumulative process is clearly illustrated in schematic reconstructions of terp formation. For instance, Figure 2.12.Top presents a cross-sectional diagram tracing the various developmental stages of a terp settlement—beginning on a low middle marsh ridge and progressively rising through cycles of flooding, habitation, and sedimentation. Although these layers were not necessarily symmetrical or uniform, the visual stratification testifies to a shared experience in which the ground itself continuously grew in response to both natural and human rhythms (Nieuwhof, 2019).

Further elaborating this principle as shared experience, Figure 2.12.Bottom shows how small house platforms—initially built for individual households—eventually merged through horizontal and vertical accretion to form larger communal terps. These schematic plans demonstrate not only the technical manners of amalgamation (e.g., core-to-core merging, layered lateral additions), but also suggest evolving spatial negotiations among households as settlements grew in complexity (Varwijk & Kaspers, with additions by A. Nieuwhof).

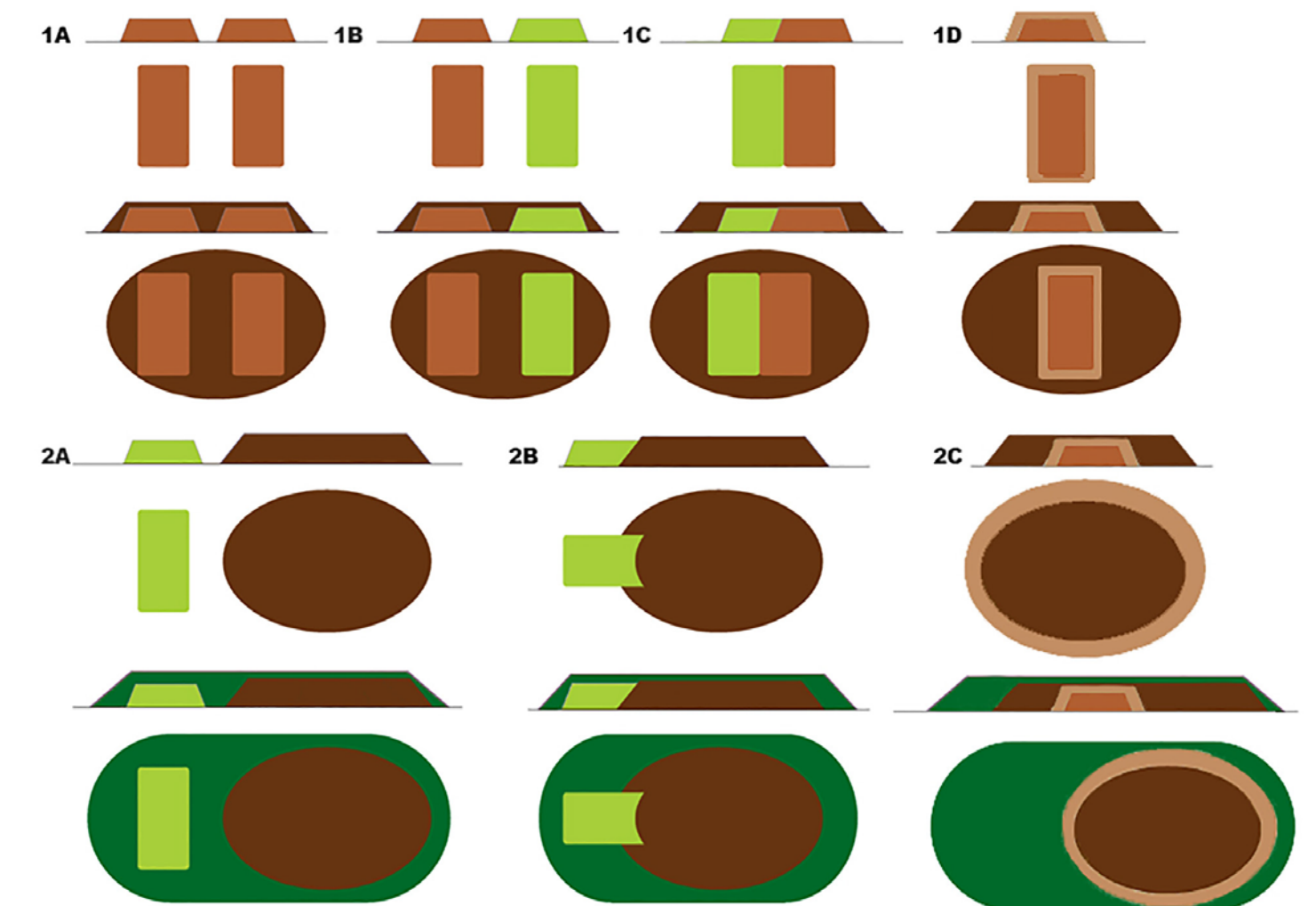
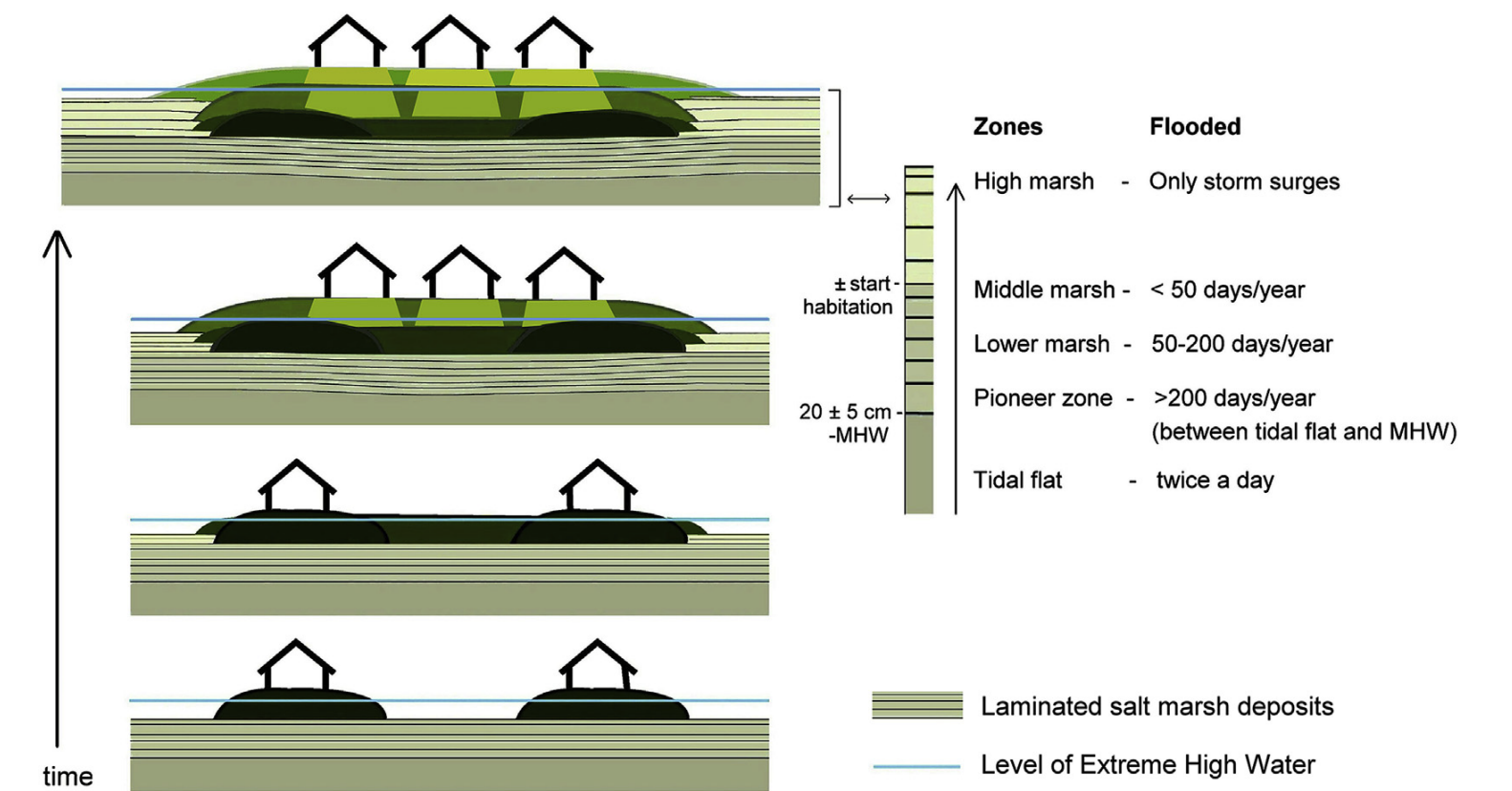


Fig. 2.12. Top : Schematic cross section through different phases of a developing terp, starting on a salt marsh ridge at the level of a low middle marsh. Flooding and sedimentation continue during habitation, at a diminishing rate. Not to scale. Drawing © A. Nieuwhof.

Bottom : Schematic cross-sections and plans of the various manners of development and amalgamation of house platforms (light/dark brown: oldest platform/terp, light/dark green: younger platform/terp, salmon pink: younger layers). Drawing by T.W. Varwijk, with additions by © A. Kaspers.

Archaeological evidence from the Wijnaldum-Tjitsma mound supports this interpretation. Stratigraphic cross-sections (see Fig. 2.14) reveal how terp construction involved a continuous process of vertical accretion across multiple centuries. For instance, Periods 0 through IV (ca. AD 175–650) demonstrate that the mound was not built in a single phase, but repeatedly raised in response to environmental and social demands. Each layer contains traces of occupation, construction, and abandonment, which together form a palimpsest of community life. Particularly in Period IV (AD 550–650), a shift in orientation and spatial organization also suggests evolving communal structures, with elevated areas increasingly used for central buildings or symbolic activities. How space is used differently will be explored in more detail in the following subsections.

This functional differentiation according to height, due to the labor and time invested in achieving the height as well as the function, became richer in symbolism and meaning than in actual function. In fact, one Terp site in Ezinge was built up to a height of 8 meters (Fig. 2.13)—significantly higher than the actual flood levels—reflecting a symbolic dimension beyond mere functionality (Nieuwhof et al., 2019). A taller Terp signified a greater accumulation of labor and collective memory, implying that a larger population and broader social influence were needed to expand its scale. Toward the upper parts of the Terp, key buildings and communal functions were more concentrated, reflecting not only physical stratification but also the centrality of community within the space (Knol, 2004).

This allows us to speculate on how the “positive values” associated with height in modern architecture might originate in certain architectural practices and responses to the environment. While it is difficult to draw definitive conclusions about an archetypal form from a single case, considering that the physical sensation of “height” in that era was achieved through accumulations of repetitive, intensive labor and time, such an interpretation might not be far from the truth.

Fig. 2.13. View of the terp in Ezinge, Groningen. This artificial dwelling mound, constructed to approximately NAP +8 meters, exemplifies the enduring legacy of terp-building practices in the northern Netherlands. Source: Wikimedia Commons, "Wierde van Ezinge.jpg"(n.d.).



## 2.5 Horizontal Expansion, Environmental Adaptation, and the Three-Dimensionality of Place

Though the central area of Terp gradually rose in elevation, the surrounding lower terrain was also an active arena for community life and architectural practice. After floodwaters receded, the marshland retained concentrated nutrients in the soil, creating favorable conditions for agriculture. The Frisians used these lower, sloped areas in multiple ways—for farmland, grazing, and freshwater storage. Because these terrains were always subject to potential flooding, they often housed reversible and mobile structures—such as movable livestock fences, temporary warehouses, and material storage areas—and sophisticated drainage systems were gradually developed to discharge accumulated water (Nieuwhof et al., 2019; Varwijk & Kaspers, 2020).

What is crucial here is that these low-lying zones did not merely serve auxiliary functions; rather, they were the primary sites where the community’s adaptive architectural responses to environmental changes were realized. When sea levels rose or the risk of inundation increased, the Frisians actively raised existing Terps further or built entirely new Terps farther inland, thus proactively expanding and reorganizing their space. In this way, the lower terrain was not simply “land vulnerable to flooding,” but rather a field of ongoing architectural intervention and production processes where the community’s way of life was reorganized in response to physical conditions.

The dynamic nature of terp construction is clearly illustrated in the cross-sectional stratigraphy of the Wijnaldum terp (Fig. 2.14). A longitudinal section (A–A’) shows a gradual southward shift in settlement over time. In early periods (0–I), habitation was concentrated on a northern dike-like ridge. By Period III (AD 425–550), occupation extended onto previously unused marshland. In Period IV (AD 550–650), settlement dispersed across multiple small platforms divided by ditches, while metalworking and bead production occurred on a separate platform. A livestock pond at the southern edge highlighted the integration of agriculture and animal care into the lower terrain. (Varwijk & Kaspers, 2020; Bos & Gerrets, 1999)

By Periods V–VIII (AD 650–950), settlement consolidated onto a larger southern platform, built over earlier remains. While habitation moved, wells and refuse pits in the north stayed active, reflecting the long-term layering of functions. This stratigraphy shows that terp was not a static structure but a flexible, adaptive landscape formed through continuous communal interventions. (Nieuwhof, 2020)

Ultimately, Terp functioned not as a singular structure but as an “architectural infrastructure” that repeatedly redefined its boundaries with the surrounding environment through vertical addition and horizontal expansion. This structural flexibility and the accumulation of repeated interventions enabled all members of the community to share a sense of “adjusting and living” in their environment, transforming Terp from a mere flood-control facility into a foundational structure that generated a “communal sense of place.”

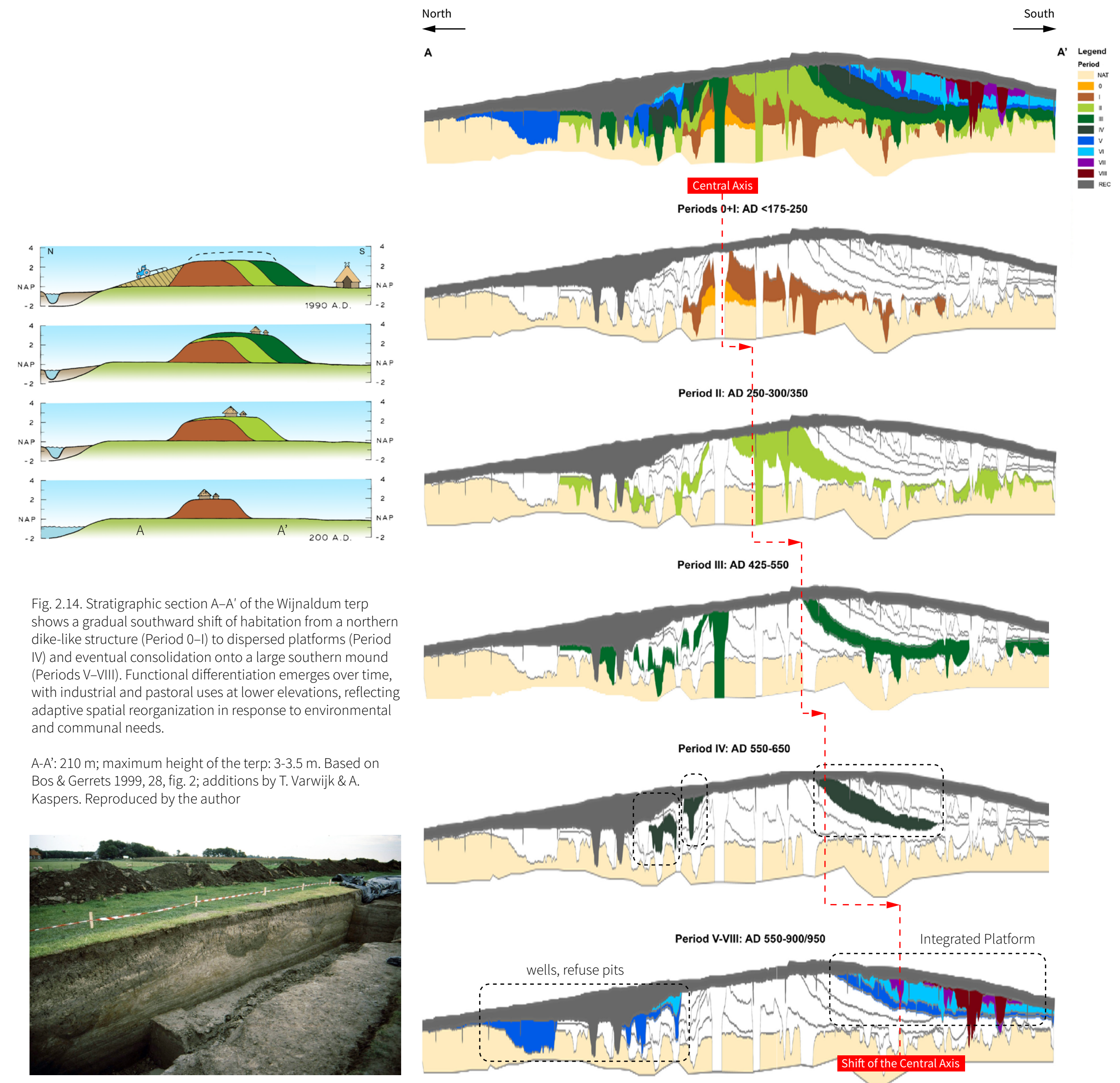


Fig. 2.14. Stratigraphic section A–A’ of the Wijnaldum terp shows a gradual southward shift of habitation from a northern dike-like structure (Period 0–I) to dispersed platforms (Period IV) and eventual consolidation onto a large southern mound (Periods V–VIII). Functional differentiation emerges over time, with industrial and pastoral uses at lower elevations, reflecting adaptive spatial reorganization in response to environmental and communal needs.

A–A’: 210 m; maximum height of the terp: 3–3.5 m. Based on Bos & Gerrets 1999, 28, fig. 2; additions by T. Varwijk & A. Kaspers. Reproduced by the author

## 2.6 Centrality and the Circle: Architectural Practice and Sense of Place Reflected in Spatial Layout

The circle is regarded as a “fundamental form” across various cultures, and the Frisians likewise constructed Terp predominantly in circular shapes. However, this circular form was not merely an aesthetic or traditional motif; it served as a framework organizing their spatial awareness and architectural practices. Particularly when combined with the sense of elevation, this circular form enabled the Frisian community to establish a clear hierarchy and functional differentiation within the space.

Typically, the highest point at the center of a Terp contained dwelling spaces and a fireplace. This center was not solely for practical or flood-defense reasons but held symbolic significance as well. Indeed, in some Terp archaeological sites, a circular wheel-shaped artifact was discovered beneath the central fireplace (Fig.2.17); this object was not merely a tool but has been interpreted as having a ritual or ceremonial meaning (Gerrets & De Koning, 1999, as cited in Nieuwhof, 2020).

Moreover, the reference to the circle was not limited to a single household. The spatial configuration, radiating outward from the central fireplace, was mirrored in the overall layout of external facilities, resulting in a sequence of house → well → farmland → warehouse → grazing area → dike from the center outward. This arrangement was not merely a practical division but a hierarchical order in which importance diminished with increasing distance from the center. It also represented a shared ritual and symbolic understanding that was implicitly reinforced through repeated communal participation in construction, maintenance, and repairs. (Nieuwhof & Schepers, 2016)

Recent excavations at the Wijnaldum terp site provide concrete archaeological evidence supporting not only horizontal expansion of terp but also this concentric spatial configuration. Central platforms were consistently used for dwellings, hearths, and communal activities, while outer zones were dedicated to specific and differentiated functions: industrial craftwork such as metalworking and bead production occurred on peripheral platforms, and farming activities—including livestock watering ponds and arable fields—were located farther out from the residential nucleus (Gerrets & De Koning, 1999; Nieuwhof, 2020). In some phases, previously inhabited areas on the terp’s northern edge were even converted into arable fields, indicating a fluid yet patterned reorganization of space over time.

This evidence reinforces the view that spatial layout was not arbitrary but functionally and symbolically zoned: domestic and sacred functions clustered at the highest, most protected point, while production, storage, and agricultural activities radiated outward, adapting to environmental gradients and communal needs. The spatial arrangement thus reflects a deeply ingrained understanding of physical centrality as both symbolic and infrastructural, one that was co-produced and sustained through material and social labor.

As a result, the circular-hierarchical form and structure was not merely a formal aesthetic but a practical device that embodied both the distribution of physical labor and the organizational roles within the community.



Fig. 2.15. Terps are shaping a round circular shape of mound. Wijnaldum-Tjitsma on the historical map by Eekhoff (1852).



Fig. 2.16. Reconstruction drawing of an early phase of the terp of Ezinge by Van Giffen (1936).



Fig. 2.17. A well with a lining made of salt marsh sods, excavated in Ezinge (1933). Date: Roman Iron Age or early Middle Ages. Photo © University of Groningen/Groningen Institute of Archaeology.

# Chapter 3. Placing Contemporary Interventions on the Linear History of Terp's Architectural Practices and Placemaking

## 3.1 Architectural Practices of Terp Construction and Shaping a Sense of Place

Faced with limited resources, Frisian communities collectively selected materials and built Terps. Through joint construction, they developed shared knowledge of soil and terrain, reinforcing a concrete mental image of their environment. The need to periodically raise Terps in response to sea-level changes required generational labor, deepening communal ties and a shared sense of place. Buildings made from sod could be dismantled and reused to elevate the mound, blurring boundaries between dwelling and landscape. This material continuity fostered a holistic place perception. Human remains and symbolic items interred within the Terp further anchored communal memory, emphasizing continuity over individual identity. Over time, certain Terps became visually and socially prominent, concentrating communal facilities at their highest points. Their circular forms and radial layouts reflected both practical and symbolic considerations—elevating essential structures, tolerating inundation, and expressing social centrality through form.

And a broader understanding of the environment and humans..

These architectural practices allowed people to form concrete impressions and sensory images of the place they inhabited. Importantly, such practices were not merely cultural traditions or autonomous choices, but responses to given environmental conditions. Therefore, the “shared practices” that shaped a sense of place cannot be understood in isolation from the conditions within which they emerged. For example, environmental factors such as rising water levels in the salt marshes invited—or at times compelled—cooperative responses. These external conditions limited the range of possible actions and oriented behavior in specific directions.

However, this did not eliminate human agency. Rather, within these constraints, people generated multiple possibilities, and through the selection and repetition of certain responses, they cultivated specific architectural practices. In this way, they began to interpret and regulate space in their own terms, even under limited conditions. In other words, the architectural practices that produced a sense of place were not passive results of external constraints, but rather active interpretations and responses selected from among the possibilities permitted by those conditions.

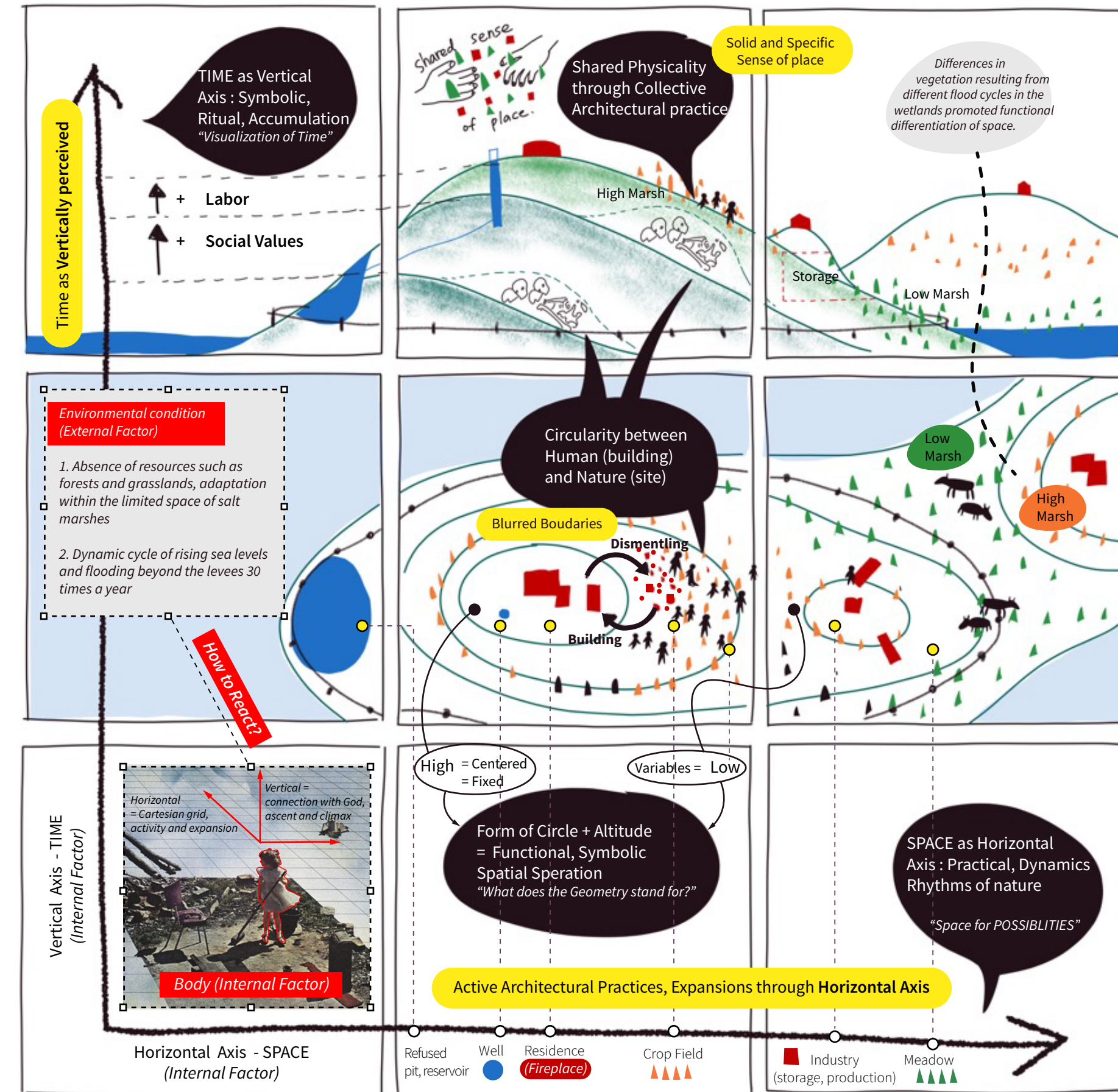


Fig. 3.1. Conceptual illustration synthesizing the spatial experiences of terp communities. The diagram explores how vertical and horizontal axes, circular layouts, and shared architectural practices embodied a collective sense of place and reflected the community's worldview. In conclusion, this illustration focuses on how they were willing to react physically in the rhythm of the nature. Illustration by the author

### 3.2 Interpreting Contemporary Terp Interventions through Historical Practices : Terp fan de Takomst

#### Reconsidering Terp through Contemporary Interventions

What can contemporary interventions into the landscape reveal when viewed through the lens of historical architectural practice? This study revisits how place was historically shaped through sustained, collective architectural action. These practices, unfolding over long timeframes, offer a lens to trace new inflection points in today's landscape.

As dikes and land reclamation reshaped the coast, traditional building methods and modes of coexistence with nature have gradually disappeared from both the physical and architectural imagination. Yet in 2022, residents of the village of Blije in Friesland partnered with a Rotterdam-based art collective to initiate "Terp fan de Takomst" (Mound of the Future)—a community-driven landscape art project in the salt marshes of Noard-Fryslân Bûtendyks. Their collaboration reconnected historical terp-making with present-day design and ecological reflection.

This chapter frames the project not as mere formal mimicry, but as a reinterpretation of shared lifeways. It examines how traditional building rhythms and ecological sensitivity were revived—not nostalgically, but as renewed practices of collective living and environmental engagement.

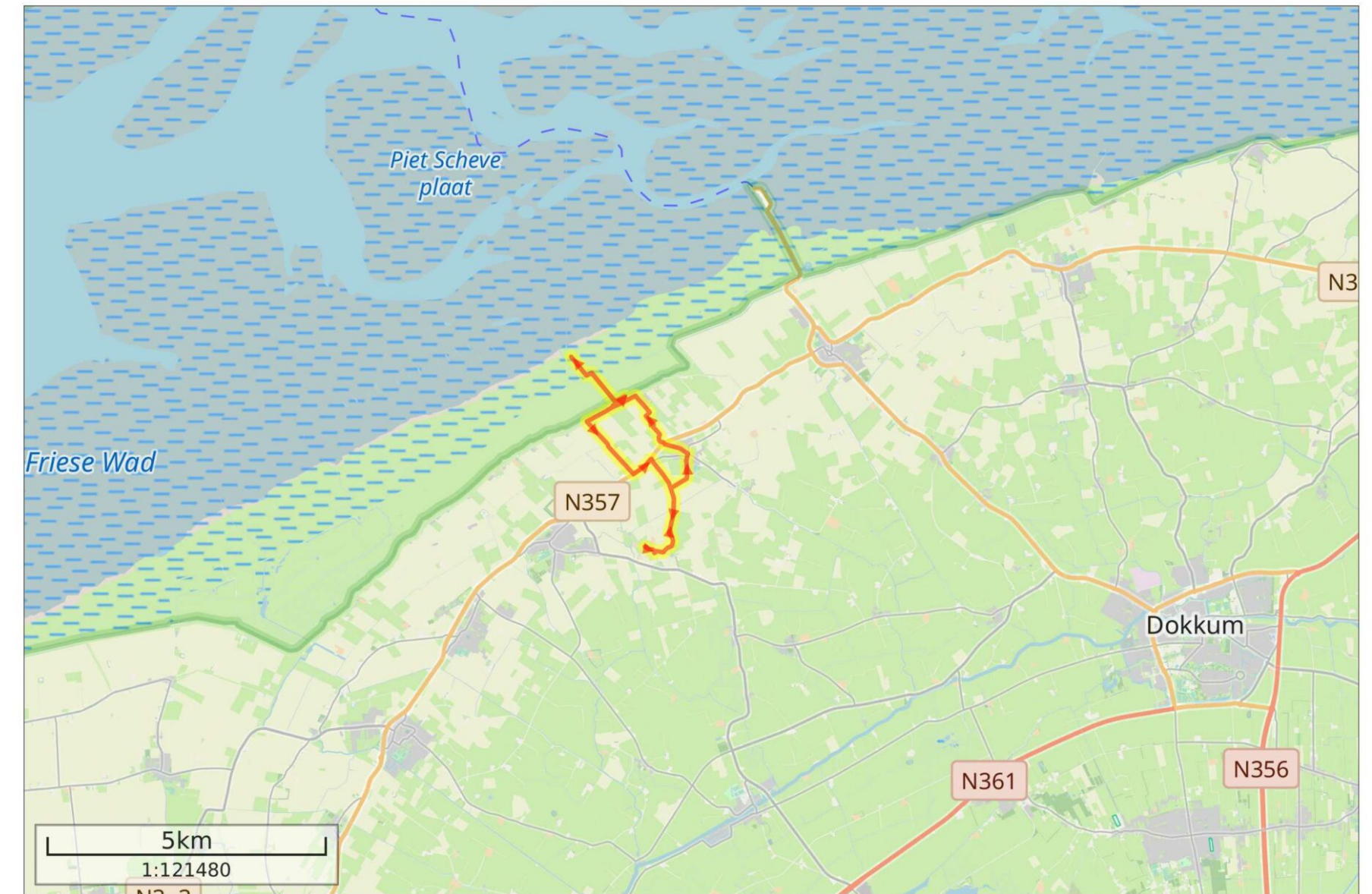


Fig. 3.2

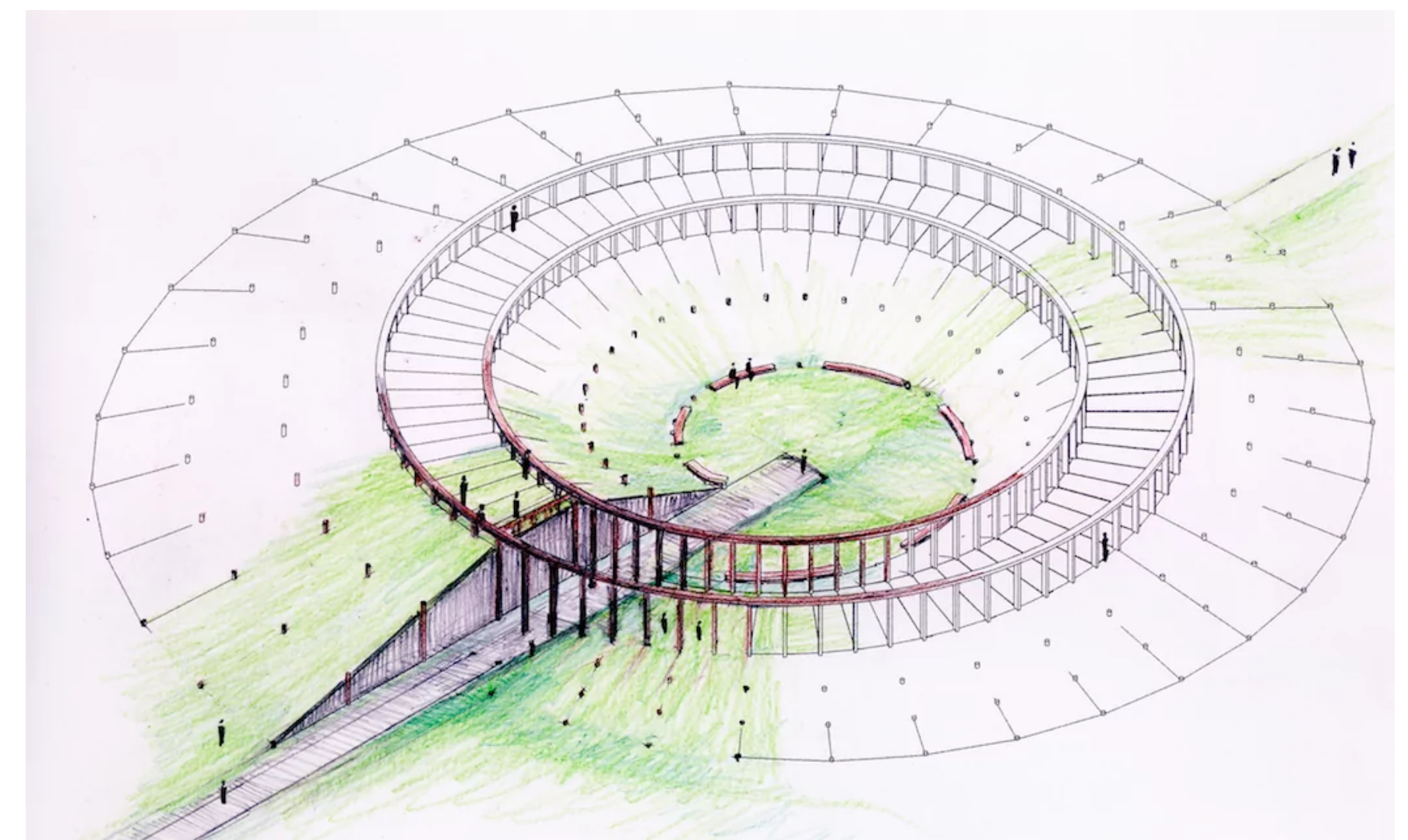


Fig. 3.3

## 1. Local Initiative: Sensing Coexistence

The project was initiated by local residents who sought to reconnect their village to the Wadden Sea and rediscover the original function of the terp. Their aim was to reenact the ways coastal communities once lived in rhythm with the tides and organized their domestic environments in accordance with periodic flooding. Interestingly, these residents had never directly experienced life on an actual terp. Yet they longed for the sensory and communal rhythms of a historical mode of living. This desire went beyond environmental concern or technical interest—it was an active gesture to reclaim a way of sensing and living with the sea. This reveals that the memory of coexistence with natural cycles, once embodied in the terp, still lingers in the community. The project was adopted by the cultural organization "Sense of Place" and designed by the Rotterdam-based firm Observatorium.

Their collaboration shows that reviving terp-related customs today holds meaning beyond formal or historical reconstruction—it points to an enduring affective and ecological connection.

## 2. Collective Architectural Practice

To build the mound, local residents gathered and physically contributed to its construction. Although technical soil surveys and design development were conducted by external groups, the project placed strong emphasis on community ownership. The residents participated in the planning process, worked alongside the construction team, and ultimately claimed the installation as their own. Through this participation, they were able to re-engage with the material and spatial practices of building. Locally sourced materials—including various types of clay and reclaimed soil—were used. This allowed residents to learn about the ground they inhabit in layered, concrete ways. One participant noted that they had gained a "tangible, multi-sensory understanding of the earth beneath their feet."

In this process, historical forms of collective construction were not merely recalled but actively practiced, allowing the community to once again share a situated sense of place rooted in ecological adaptation.

Fig. 3.2. Location of Terp fan de Takomst in the Frisian landscape.  
Fig. 3.3. Conceptual design diagram of the Terp fan de Takomst project.  
Fig. 3.4. The return of tidal flows after excavation, reintroducing intertidal dynamics to the salt marsh landscape as part of the project.  
Fig. 3.5. View of Terp fan de Takomst ("Terp of the Future") in Blije, Friesland. This landscape installation reimagines the traditional Frisian terp as a space for ecological awareness, water resilience, and cultural reflection. The project was initiated by the Sense of Place foundation in collaboration with local communities and artists.

Source: Provincie Fryslân  
(n.d.). <https://www.friesland.nl/nl/locaties/39207967/terp-fan-de-takomst>

Fig. 3.5



Fig. 3.4



### 3. Environmental Recalibration: The Role of Dynamics

Historically, terp structures embraced the dynamic conditions of low-lying landscapes. Flood-prone areas (low marshes) were utilized as fertile grazing lands or fields, and periodic inundation became a productive ecological rhythm. Today, however, modern dikes often prevent such natural flows, leading to stagnant soil and disrupted ecosystems. During this construction (intervention), excavation around the mound reintroduced space for tidal water. The salt marsh to the north of the mound now floods regularly, and monitoring programs are tracking its effects on fish, sediment, and plant life (Fig. 3.4). This shows that raising one part of the land can lower another, restoring the dynamism of the environment.

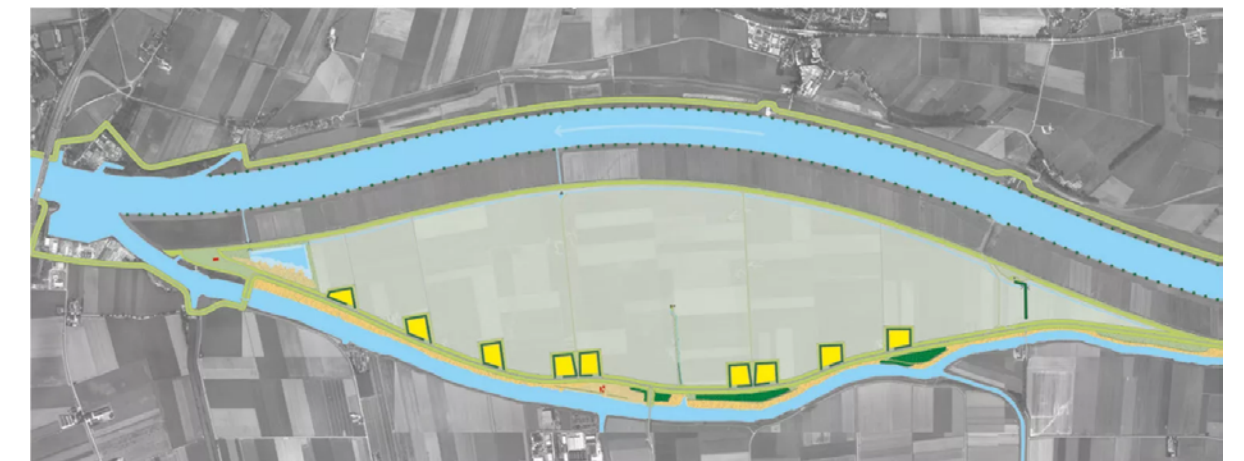
Thus, terp-building in the present is not only about elevation but also subtraction—strategically reducing terrain to re-enable ecological flows. This logic of dynamic environmental calibration may be especially relevant in sensitive regions like the UNESCO-designated Wadden Sea.

\* A compelling contemporary example of this approach (See Fig.3.6) is the Overdiepse Polder project in the Netherlands. Rather than resisting floodwaters, the design accepts periodic inundation by deliberately lowering embankments and relocating farmhouses to eight newly constructed artificial mounds (terpen) approximately six meters high. These elevated dwellings allow continued agricultural activity while enabling the polder to function as a flood retention basin during extreme high water events.

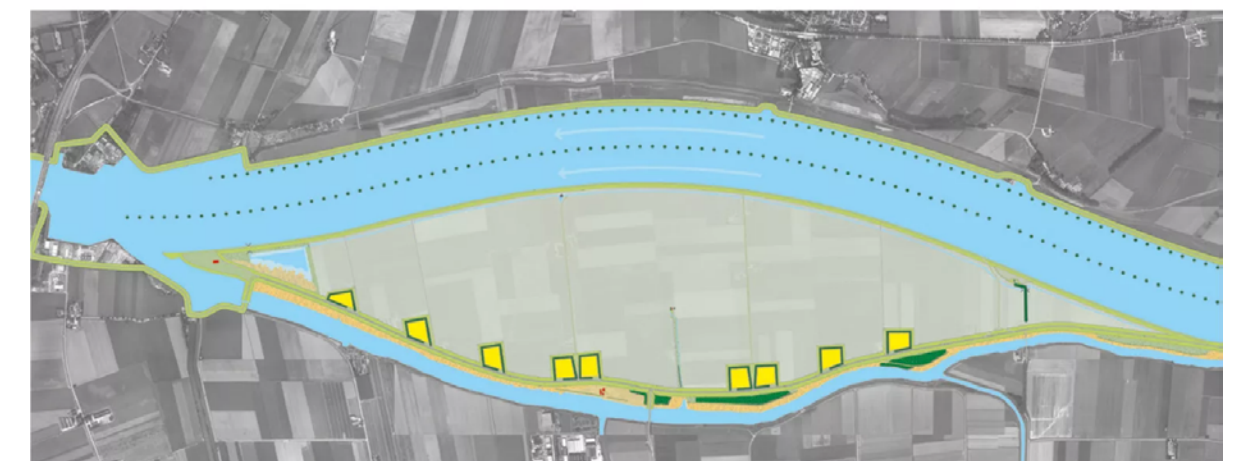
### 4. Design and Temporality

The mound was not intended as a residential platform. Instead, it functions as a spatial experience—encouraging visitors to walk slowly upward and reposition themselves above the horizon, reviving a bodily awareness of elevation. A series of wooden posts are embedded in a circular pattern, with their exposed height decreasing gradually as elevation increases. This design recalls the visual stratification of traditional terps, where vertical growth marked the passage of time. Here, the posts become a temporal indicator: starting at 6 meters in the lowest areas and tapering to 1 meter at the top. As the mound itself changes over time, the visible heights of these posts will continue to shift, offering a tangible index of transformation. Because the mound was never intended to be permanent, its changeability becomes part of the work.

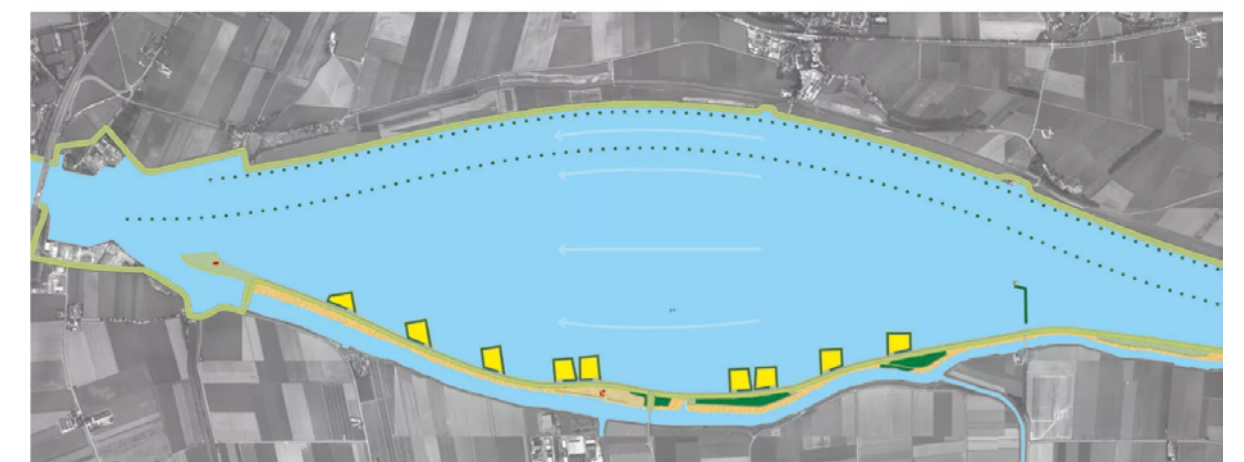
As a contemporary reinterpretation of terp-building, it not only revives historical memory but suggests a way forward: integrating ecological awareness, community participation, and architectural temporality into a shared sense of place.



*situation during normal water level*



*situation during average water level*



*situation during normative high water*

Fig. 3.6. Water level scenarios and terp positioning in the Overdiepse Polder. Adapted from BoschSlabbers Landscape Architects (n.d.), Overdiepse Polder. Retrieved from <https://www.boschslabbers.nl/nl/project/overdiepse-polder/>

# Conclusion

## Research Outcomes

This study examined the Frisian terp as a material and spatial expression of collective architectural practices in response to the complex environmental challenges of the North Sea marshlands. By analyzing the layered infrastructures—including residential zones, wells, livestock pits, vegetation distribution, and the interrelation between catchment areas—this research demonstrates that these systems were not based merely on symbolic representation or formal composition. Rather, they emerged as functional strategies devised through repetitive and communal acts of building. Furthermore, the terp settlements were not determined by a pre-existing environment; instead, they show how human communities have continuously adjusted to, adapted, and constructed their surroundings over time through selective shared actions.

Through this analysis, the study reconstructs the architectural processes by which a sense of place is formed. The terp is not a passive backdrop to everyday life but an active participant in shaping collective rhythms, social bonds, and spatial memory. The thick earth layers, reused bricks, and traces of repaired paths reveal a deeply entangled relationship between material selection and collective decision-making. Moreover, the ongoing adjustment of elevation and spatial boundaries, responses to flooding, and the development of visually encoded symbolic distinctions all show that the terp was not a completed or fixed landscape. It was a space that demanded ongoing interpretation and participation from its inhabitants—a dynamic process rather than a static result. In this way, the accumulated record of architectural labor ultimately took on the form of a concrete and specific sense of place.

## Limitations

While this study is grounded in spatial analysis and historical documentation, it faces several limitations. Relying primarily on records from the 19th and 20th centuries, it remains difficult to precisely trace the patterns of early communal labor and environmental adaptation. Furthermore, the specific ecological and geographical conditions of the Frisian marshland may limit the direct applicability of its architectural logic to other regions.

Most importantly, this analysis treats the community as a relatively unified actor. Future research may reveal the internal dynamics that shaped who could act, decide, and build within the collective—such as gendered divisions of labor, class distinctions, or specialized knowledge. Further studies could expand this approach by integrating microhistorical or ethnographic methods to closely examine how various actors perceived, negotiated, and enacted the shared practices involved in constructing and maintaining the terp.

## Place is the origin of Placeness, or Placeness is the root of Place?

At the heart of this study lies a fundamental question: how is a sense of place formed through shared architectural practices? The terp, as an evolving assemblage of layered decisions and lived experiences, offers a compelling answer to this question. The cases examined in this study demonstrate that human behavior was not solely determined by the harsh environment of the North Sea, nor were the resulting architectural forms mere reflections of climatic constraints. Rather, what this research emphasizes is the complementarity between environmental givenness and human choice. While floods, salinity, and a scarcity of freshwater imposed certain limitations, these were not irreversible destinies. Instead, the community responded through a series of judgments, inventions, and repairs—adapting to the environment while simultaneously redefining its possibilities and actively interpreting the landscape to inscribe symbolic meaning onto it.

*(Here, an intriguing question arises: even before the community consciously defined the concept of 'place,' might there already have existed a kind of sensory relationship between them and the environment? In other words, even before place was named, it was already being sensed.)*

Within this complementarity between environmental givenness and human choice, architecture becomes the very site of negotiation between constraint and choice. What is especially striking is that the user is already situated within the place even before the place is formally constituted. Contemporary spatial discourse often relies on a binary distinction between space and place, positioning the architect as the agent responsible for stitching the two together and injecting meaning into space. Within this framework, the user's role in conferring placeness is assumed to begin only after the walls have been drawn and the space delineated.

However, the places constructed on the top of terp had already acquired a 'sense of place' before they were formally 'made.' The spaces that the inhabitants sensed, chose, and built together were nothing more than material assemblies of what had already been interpreted and felt in their hands. 'Place', then, is not a property conferred upon a completed environment, but a prior sensitivity to 'space'—a sensory awareness that existed even before any walls were erected. Accordingly, the architecture built on the terp was not a fixed 'place' in itself, but rather a 'space' endowed with 'placeness'—a space in continual evolution and transformation.

If placeness is not something externally injected or retrospectively assigned, but something that emerges in the process of sensing the world and constructing it through material engagement, then the central question of this study becomes even clearer: long before shared architectural practices constructed the place, they first cultivated a sensation of place. Place is not the origin of placeness; placeness is the root of place. And from this root, the community becomes capable of interpreting and responding to its environment as an active subject.



## On the Placeness That Exists Before Place

Uncovering a Sense of Place  
through Collective Architectural  
Practice on the Terp

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Architectural History Thesis  
(2024/25 Q3)

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Fig. 2.15 Wijnaldum-Tjitsma on the historical map by Eekhoff (1852).

Fig. 2.16 Reconstruction drawing of an early phase of the terp of Ezinge by Van Giffen (1936).

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