Material Symbolism of De Dageraad: Brick Expressionism and Cultural Narrative in the North Sea Region

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Introduction

The Expressionist movement in Northern Europe is rarely given much thought as one of the foundations of contemporary architecture. Yet despite being sidelined and superseded by functionalist discourse, expressionism hides some deep insights and conversations about the meaning and power of architecture. In particular, what expressionism explored, perhaps more so and better than any other modern architectural movement, was the poetics and narrative power of material expressed in itself and through form, in ways both subtle and explicit. As we will see, Expressionism, and particularly the Amsterdam School, were speaking of deeply rooted cultural and social traditions and identities, while also exploring avant-garde theories and radical ideas. Their insights thus prove more valuable than many a functionalist or historicist manifesto. They did all this entirely through one simple material, molded and enhanced in accordance to the visions of the architects and craftsmen: the humble brick.

Historical Context

The history of brick expressionism in the North Sea appears to trace its roots primarily to the dominance of the Hanseatic league. Although brick architecture far precedes the Hanseatic league, it was the latter that established its cultural presence in three key ways. Firstly, it greatly increased the wealth of the North Sea region, secondly, it established a common cultural symbolism among its member states – One which would associate them with the league as whole – and thirdly, it enhanced commerce and industry along its domain (Hansemuseum).

The steady increase in trade in the North Sea region through the late medieval period brought about increasing wealth, particularly for the nascent merchant class. The increasingly prosperous citizens of Hanseatic cities naturally sought to capture and represent their wealth in the construction of their homes, markets, exchanges and public buildings. However, the limited natural and geological resources of the North Sea region, together with their still somewhat limited access to capital, would have limited their material choices: they could opt for increasingly sophisticated wood construction (a material of limited availability and structural prowess, and susceptible to fire and decay), or upgrade to brick construction. This coincided, of course, with increasing industrial and commercial activity, enabling the mass production and distribution of bricks, and constrained supplies of quality timber, used increasingly in construction, shipbuilding and industry. The fear of increasingly devastating city fires also

encouraged the adoption of brick construction among those who could afford it. It was thus that brick increasingly became the material of choice in the region, being both a superior material in the pragmatic sense, and a relatively accessible display of wealth (Hansemuseum). Furthermore, unlike other regions in Europe, the North Sea region was further constrained by the quality of its soils – a result of its lowland waterside existence – which could not safely bare stone construction and possessed only meager quantities or qualities of construction-suitable stone.

Adopted as much by the merchant class as by the Church and city governments, who were guided by much of the same forces, brick construction quickly came to dominate North Sea cities. The material thus became one of the ever-present elements of North Sea culture. The increasingly connected states along the North Sea began forming a shared cultural identity, which included brick architecture among its many common elements — ostensibly equal in importance as a cultural symbol as shipbuilding, banking and local sovereignty —. From Lubeck to Bruges, the great medieval trading ports of the North Sea would be built of brick.



Cities throughout the region are dominated by brick construction. Stade (top), Lübeck (middle), and Bruges (bottom) as examples.

However, with the dominance of brick as the universal material of choice, idiosyncratic individuals would have to find ways to distinguish themselves within the confines of such a material. Therefore, rather than finishing faces and hiding away the brick, architects increasingly exploited the expression and craft of masonry in order to distinguish and enhance buildings. They experimented with unique brickwork, unusual brick shapes and alternate clay compositions to produce elaborate, beautiful and expressive structures, ones which might demonstrate wealth, determination and artistic sensibilities. In a literal sense, this was the rise of brick expressionism, hundreds of years before it came to be redefined by the inheritors of such a culture. This practice was also quite befitting medieval society, where expression through brick was facilitated by the abundance of low-cost labor and the reduced costs of unfinished building envelopes.



Traditional houses in the region employ complex bonding patterns to distinguish themselves and present a unique character or artistic sentiment. This house likely would have been a prosperous but not exceptionally wealthy homestead.

Nonetheless, it is also important to consider that the rise of brick construction in the North Sea was primarily a product of bottom-up, rather than top-down forces, with the adoption of expressive brick architecture originating from the vernacular, rather than from aristocratic precedent, as with other materials and styles.

Brick, Economy and Labor

Despite its initial associations with wealth, industrialization and mass production dramatically drove its costs down over time. Instead, with new materials and styles becoming more amenable to the wealthy, brick became increasingly associated with vernacular and functional architectures, especially as most surviving pre-industrial architecture had been built of brick. Though a pragmatic material from the start, once freed from the economic limitations of a preindustrial society, brick became increasingly associated with functional, pragmatic connotations. Therefore, in the industrial North Sea region, brick became the material of choice for all architectures associated with the "lower" classes – industrial facilities, tenant housing, and the regional vernacular –, as well as the material associated with such conditions in collective imagination.





Industrial buildings throughout the region were often built of brick as a matter of practicality and economy. As seen here, despite the predominantly industrial program, great importance was given to expressive brick facades.

The mass production of brick facilitated low-cost construction, and its ease of use – not an accidental feature, as that is precisely what had historically made it such a compelling building material – enabled low-skill workers to fulfill the construction demands of a rapidly industrializing region. Despite this, brick construction – historically just as today – requires significant manual labor, large workforces, and careful coordination. Thus, brick not only became associated with the working class by image, but became tied to it due to its very nature. It was primarily the labor and craft of the working class that enabled the widespread presence of functional brick architecture, and the working class would push to also be the one to benefit most from it.

What De Klerk and Kramer did so remarkably in De Dageraad was to exploit these dual conditions – On the one hand, the pragmatic and functional nature of brick architecture in the industrial age, and on the other, the associations of brick construction with the working class – in service of the working class. On the pragmatic side, careful use of brick construction would enable mass production of affordable housing at a quality befitting the decent life the architects

wanted for the residents. But perhaps more importantly, the expressive brick construction would make De Dageraad a project by the working class, for the working class, where those same workers who placed the bricks could also live and prosper (Shymanski).

Identity in material expression

In pre-industrial North Sea culture, expressive brick facades were an effective tool to distinguish and represent oneself in a homogeneous urban image. Though historically often used as means to represent one's wealth, the more important impact of the expressive brick facades lies in demonstrating identity. In the case of the North Sea culture, due to the perpetual presence of brick architecture, personal, regional and national identities would almost inevitably become tied to the material and its expression. As such, the expression and use of the material became crucial in distinguishing one's identity from that of their neighbors, whether it be the family next door or the rival city. In this context, decoration and material expressiveness is not trivial, but rather an entire field of architectural exploration.

The association between North Sea cultural identity and brick architecture is heavily ingrained. Earlier forms of brick expressionism can be seen in all scales of architecture throughout the medieval and early modern periods. However, this brick expressionism is of a different character than the formalized version seen in the 20th century; rather than expressed through form and volume, it is expressed primarily through texture and material: bonds, colors, composition, etc. Within this context, the choice of brick in De Dageraad is not a trivial or purely pragmatic one; while brick facades allow for a great degree of expression regardless of historical context, by exploiting this expressiveness within such a context, the architects are also referring to a long and storied regional history, and associating their own work with the identity of the region, as well as creating an identity for themselves.





The expression of brick on a facade was a tool for representing a unique identity. At a small scale, the expression of brick distinguished oneself from their neighbors and others (top), and would also distinguish regional identities: for example, the well-known Flemish-Dutch architectural style with stone-reinforced brick facades and stepping roof profiles (bottom)

Beauty and brick architecture

Although brick is often thought of as a pragmatic material, North Sea culture, more so than others, seems to have a unique aesthetic appreciation for brick. Indeed, the expressionists and the Amsterdam School were the strongest advocates for viewing brick as a material of beauty. In De Dageraad, the hope was to elevate the lives of the working class through beautiful architecture and spaces. To choose conventional brick for these ends was a powerful statement that may well be questioned in other regions, but when weighted with its context is not only sensible, but all the more compelling.

The connotation of brick and beauty in North Sea culture once again traces back to the region's long history of brick expressionism. The universal presence of brick architecture would come to associate the material with North Sea landscapes, becoming integrated with idyllic landscapes – very often depicted in visual arts – and beautiful domestic moments. Brick would also become beautiful in its association with exceptional and monumental architecture, such as Churches and Town Halls, where it was expressed with remarkable craftsmanship and care. It is easy to see then how brick, being ever present and used with both creativity and care, would become a beautiful material. Thus, brick architecture becomes subtly associated with ideas of an idyllic past. This effect is enhanced by the loss of historic brick cities in the 20th century – We can compare Hamburg and Luebeck, or Rotterdam and Amsterdam, which once had very similar urban images and yet appear thoroughly contrasted in their postwar appearance –.



Idyllic Cityscapes containing brick architecture are a common subject of Dutch art. Ultimately, this may have helped cement beautiful brick architecture as an essential part of Dutch and North Sea culture.









The traditional urban images of Rotterdam (top) and Amsterdam (bottom) were historically composed of similar brick architecture. The tragic loss of Rotterdam's historic core and its subsequent ostensibly modern replacement reinforced the contrast of modern Rotterdam with the historic brick architecture of Amsterdam. (Images by Unknown, Hanselpedia via Wikimedia Commons)

The relationship of the beautiful urban image and the beauty of brick expression goes both ways. The undeniable beauty of many preindustrial North Sea cities – A product, indeed, of beautiful brick architecture, but also of natural features, waterways and urban character – would come to cement brick architecture as a fundamental element in the making of beautiful cities. De Klerk and Kramer reflect this in their approach to De Dageraad. Through the material expression – in combination with the scale and careful composition of the project – they harken back to a romantic urban image, one thought of as beautiful, comforting, and emotionally resonant. To these architects, it was important that even the poor had access to a beautiful and familiar urban space with a sense of place and identity, and the use of brick was as much a means to that end as any other design choice.

Brick and Craftsmanship

As touched upon, one of the key features of brick construction is its accessibility. Whereas stone masonry may require a considerable amount of capital, experience and expertise to be done effectively, brick masonry allows regular men to produce beautiful architecture, so long as they are coordinated effectively. In this way, brick is the working man's construction material, regulated primarily by labor, rather than capital. Thanks to this, De Klerk and Kramer were able

to reflect their vision of workers' emancipation not only in the final architectural product, but also in its construction. De Dageraad could only be built by the working class. Thus, in De Klerk and Kramer's vision, workers would build their own homes, and thus imbue their labor in it. Through its beauty and craft, the architecture would reflect the labor and craft put into it, in rejection of capitalist products detached from the workers that made them possible. On the one hand, investing workers in the architecture in this way would make them all the more dedicated to its care and quality, and on the other, the building would serve as a strong gesture towards a utopian socialist vision. For this reason, the dramatic and playful forms, textures and symbols of De Dageraad were absolutely essential, in that they created opportunities for the working class craftsmen behind the project to demonstrate their skill and craft, and to do so in the service of a beautiful and comforting space dedicated to their fellow working-class families (Shymanski).

Brick and the Vernacular

As previously described, brick's presence in North Sea architecture came about as a bottom up process that began with the Merchant class. Over time, as it became more universal and pragmatic, brick architecture became the North Sea's vernacular. As with the romanticized imagery of idyllic urban landscapes, brick architecture became associated with everyday comfort and domesticity. Thus, in De Dageraad, De Klerk and Kramer are not only engaging in large-scale urban gestures through the use of brick expressionism, but also towards small-scale everyday ones. By building in the vernacular material, they introduce comfort, domesticity and familiarity, and break up an otherwise large development into a human scale. By combining the material choice with playful curving forms, they also call back to the imperfect, organic, and yet intricate vernacular forms of the North Sea. Furthermore, it gives back a sense of place and domesticity to families who would otherwise be deprived of it in slum and tenement housing. The use of vernacular language also reflects the social democratic spirit behind the project. As a political gesture, it appears to come about from the lower classes, and in service of them, doing so by subtly adopting the architectural language familiar to them (Shymanski).



Domestic dutch seen with a brick building prominently features. Images like these help cement vernacular brick architecture as an essential part of North Sea culture (Painting by Pieter de Hooch).

The brick module and innovation

Brick as a module has two important ties to the Amsterdam School's philosophy. For one, as a mass-produced product, it is inherently associated with both industry and the working class. The Amsterdam School was thus taking a stance on both the material, and the social spirit of the age. On the material side, brick was a product of industry, the right material at the right time, whose mass production enabled cities to keep up with immense population growth. On the social side, its mass production was enabled by the labor of the working class, and should be of and for the working class (Shymanski, Wiedenhöver).

Secondly, brick gives the architects the flexibility to create expressive architecture. In De Dageraad, the module permits the creation of curving and organic forms in an economic fashion. The module also adds visual clarity and texture, reinforcing and enhancing the articulation of form. Furthermore, the module is exploited in order to create texture and add subtle, but important details. The subtle use of different color bricks near the ground creates a datum that distinguishes the ground floor, and organic rise and fall of the very same color change marks residential thresholds. Horizontal edges are capped with soldier bonds. This is all done without paint and only the most attenuated use of color. By doing this, the architects make it impossible to detach architecture and surface articulation, quaranteeing the beauty of the project, and improving the economics of the project by keeping raw brick exposed. These gestures extend on to the articulation of the roof, where terracotta tiles exploit the same properties of modularity, but with the added textural and geometric possibilities afforded by roof conditions and shingling. The three dimensional qualities of the brick module are also exploited with subtle changes in depth along the facade. All these details work in tandem with larger three dimensional moves in creating important moments, defining spaces, and establishing the language of the project. Ultimately, the surface expression of the brick module is just as rigorous and important as the more obvious and dramatic massing gestures.



Subtle material and surface gestures enhance the larger formal gestures of De Dageraad. Soldier courses around thresholds, alterations in brick depth, and data marked by changes in brick color are essential gestures in the project.

As a point of comparison, a similar rigor to the module is seen in the Berlage's Beurs. Berlage, both a rationalist and an expressionist (Rovinelli), began exploring the possibilities afforded by the precision manufacture of brick. In the Beurs, the calculated and precise alignment and coordination of bricks with all other elements of the composition reinforces the rational order of the design while producing expressive form and texture. With this approach to brick, both Berlage and the Amsterdam School established brick not merely as reflection of the past and the North Sea cultural heritage, but - upgraded through industrial production - a new and innovative material whose precision enabled new design opportunities. They saw brick as finally introducing the possibility of a total design, achieved through combination of the precise manufacture of brick as material, and the calculated composition of the brick facade per the architect's designs (Wiedenhöver). Furthermore, viewing brick as an innovation in precision once again distinguishes North Sea brick architecture by aligning it with the industrious ethos that the culture prides itself on. While other cultures similarly adopted a language of brick construction, they did not approach it with such rigor. Catalan modernism, for example, though just as embracing of brick, instead explores material's organic qualities and rejects attempts to distill them. To the expressionists, layering a language of rationalism to brick expression was essential in achieving both a sense of identity and beauty (Rovinelli, Wiedenhöver).





The composition and expression of brick in the Beurs is incredibly precise. This can be seen particularly around thresholds and other critical moments. This rationality of the brick module contributed to the rationality of the project as a whole.



The Chilehaus in Hamburg is similarly highly expressive and exceedingly precise in its construction..





By contrast, Catalan Modernism employs brick in a much more care-free way, and exploits the organic and whimsical possibilities of brick construction.

De Klerk and Kramer were also interested in developing the techtonics of brick beyond conventions. Unlike Berlage, who remained rationalist and kept as much structural rigor as tectonic rigor in the Beurs, De Klerk and Kramer employed early forms of cavity walls and began detaching brick from structure, giving them greater flexibility in expressing brick tectonically. In Kramer and De Klerk's view, mass-produced and standardized brick offered not only the opportunity for precise control over surface expression, but a complete independence of the surface in the service of a total design (Wiedenhöver).

Power of identity and narrative

By understanding the narrative power of brick architecture and its specific cultural connotations within the North Sea region, the Amsterdam School – and its equivalents across the whole of the North Sea – helped create and support a narrative of its own. The Amsterdam School was part of larger forces in turn-of-the-century Dutch society. In many ways its advocates were involved in broader socio-cultural issues in industrial Europe: the emancipation of the working class, dealing with increasing industrialization and its impacts on the built environment, the pursuit of new visions and identities of architecture in a modern society (Shymanski). At the same time, they also tied themselves to a uniquely regional approach to these issues; they strove to reflect a national identity and spirit – in this case through architectural language –, in a time in which national and class identity lead the zeitgeist. Working with these larger forces, the Amsterdam School established a narrative in line with both global and local prerogatives. Their position was progressive, pro-socialism and pro-working class; it also called for a unique regional identity; it was innovative in spirit, yet always careful to root itself on history. They strove to create an architecture that could only exist in its time and place and therefore to establish ownership of the time and the place, to be shared with those whom they built for.

Parallel Currents

The Amsterdam school was, of course, not the only answer to the questions of its time and place. The contemporary De Stijl movement rejected the materiality that forms the foundation of brick expressionism and stood in direct stylistic opposition to it. De Stijl was determined to end the historical associations and decorative elements that expressionism relied on. It also embraced new materials, seeing improvements in the ancient material not as opportunities but as limitations. This lay right in line with Bauhaus principles, and would ultimately become reflected in the architectural avant-garde. In a sense, the dialogue between De Stijl reflects the eventual dialogue between *critical regionalism* and the *international style*, and can perhaps be seen as an early example of exactly that.

Yet, by establishing a narrative through material, the Amsterdam School integrated itself into a common cultural and historical thread. Brick Expressionism was intentionally made to fit into the culture and spirit of the North Sea Region. It calls to a common past as much as it aspires to a common future. It is impossible to detach it from the culture. Thus, contemporary brick buildings in the North Sea region are able to establish a dialogue with their city – Operating at the urban and the architectural scale – that is deep, complex and enduring. The social housing projects in KNSM island, for example, call back to De Dageraad – And thus to the whole history of brick architecture – through their program and their materiality, despite being stylistically very distinct. The familiarity of material subtly demonstrates the intentional integration of projects with the city and culture to both the layman and the architect. This is something projects De Stijl movement –Though no less architecturally valuable – cannot hope to achieve. Instead, De Stijl can only really associate itself with the modernist period, and struggles to engage in the rich cultural dialogue found in expressionism.



More modern projects in Amsterdam set themselves up as parts of larger whole in Amsterdam by using brick as the main finish material..

Legacy

Observing contemporary Amsterdam, it is clear that the Amsterdam School has made a significant impact on the architectural language of the city, by integrating local culture into their design language and innovating upon so as to make brick, the material of history and culture, also the material of progress. On the one hand Amsterdam School setup the understanding of brick as the material of Amsterdam, of its implicit cultural symbolism – Even in the absence of explicit symbolism –, and on the other hand, helped form a clear continuity between the rich history of brick architecture going all the way back to the medieval period, and the subsequent use of brick architecture in modern and contemporary architecture. It would not be a stretch to claim that the architectural language of today's Amsterdam is very much indebted to the Amsterdam School, indeed more so than to the international style, or historicist and postmodernist movements. And beyond Amsterdam, the same can be said of brick expressionism in relation to the North Sea region in general.

The extensive and sophisticated use of brick architecture in modern Amsterdam can be, in large part, attributed to this legacy. Throughout modern Amsterdam, from the islands of the eastern docklands and IJBurg, to the highrises of Amsterdam Zuid and the cultural complexes of the central district, and to the suburbs that surround the city, we see brick as a consistent material of choice. The creativity and care with which the city employs brick architecture reflects an understanding of material that is clearly both a product of its long historical legacy and of the experimentation driven by the Amsterdam School.









Brick architecture throughout the Docklands of Amsterdam demonstrates a deep understanding of the importance of brick in North Sea culture inherited, in part, from the Amsterdam School.

Conclusion

Brick expressionism is an essential part of North Sea culture. It is a product of historical forces unique to the North Sea region and a strong cultural symbolism that came about as a result. Expressionists architects were essential in creating and promoting the narrative power of brick expressionism, in such a way that would drive the continued and enduring use of brick even into modern times. Ultimately, the Amsterdam School and its contemporaries helped reveal that there is so much depth and possibility in the way the architect uses material. In this way, as we look at De Dageraad, we see not only a beautiful piece of architecture, but a conversation and a narrative – Centuries in the making and thoroughly unique – spoken through material and form.

References

Europaeisches Hansemuseum. *Die Hanse Erleben* exhibition. Europäisches Hansemuseum Lübeck gGmbH. Lübeck, Schleswig-Holstein, Germany.

Hanselpedia. "Cube Houses in Rotterdam seen from the Oude Haven". Wikimedia Commons, 2011, https://commons.wikimedia.org/wiki/File:Kubuswoningen_in_rotterdam.jpg

Unknown. "Nederlands: Rotterdam - Delfsevaart". Wikimedia Commons, 1890-1905, https://commons.wikimedia.org/wiki/File:Rotterdam - Delfsevaart 1900.jpg

Pieter Den Hooch. *Figures in a Courtyard behind a House*. Rijksmuseum, image from Wikimedia Commons, 1663-1665, https://commons.wikimedia.org/wiki/File:Rotterdam - Delfsevaart 1900.jpg

Laura Wiedenhöver. "BERLAGE'S TECTONICS: A REFLECTIVE STUDY ON THE ORIGIN OF DR. H.P. BERLAGE'S DESIGN PRINCIPLES, SYSTEMS OF MEASUREMENT AND THOUGHTS ON MASS PRODUCTION". TU Delft. Downloaded from https://repository.tudelft.nl/islandora/object/uuid:d9ba4770-fdea-4336-8e6c-d9f315638fdb/datast ream/OBJ/download

Genevieve Shymanski. "De Dageraad, 1918 - The Social Housing Complex and the Amsterdam School Style". McGill University School of Architecture. Hosted on ISSUU, https://issuu.com/genevieveshymanski/docs/genevieveshymanskidedageraadarch355

H. Paul Rovinelli "H.P. Berlage and the Amsterdam School, 1914-1920: Rationalist as Expressionist" in Journal of Historic Preservation. Oct. 1984, Vol. 43, No. 3 (Oct., 1984), University of California Press