ABSTRACT: Despite the number of internationally successful Danish architects like Jacobsen, Utzon and in recent years Ingels just to name a few, Danish architecture has always leaned greatly on international architectural history and theory. This is only natural for a small nation. However, since the beginning of Danish architecture as a professional discipline, there has also been a formation of a certain Danish vernacular.

This paper explores how the teaching of and interest in Danish historical buildings could have marked the education of Danish architecture students. Through analysis of the drawings of influential teachers in the Danish school, particularly Nyrop, this development is tracked. This descriptive and analytic work concludes in a perspective on the backdrop of Martin Heidegger’s differentiation between *Historie* and *Geschichte* – how history was used in the curriculum and what sort of impact the teachers had on their students. Such a perspective does not just inform us of past practices but could inspire to new ones.

KEYWORDS: Danish architecture education, National Romanticism, Martin Nyrop, Kay Fisker

**INTRODUCTION: WHAT IS VERNACULAR?**

Despite a long and proud tradition of Danish design, there has been very little research into Danish architecture and design education and it was discovering this lack that sparked my research. Through an investigation of different educational practices in the 20th century I am concerned with answering how knowledge is produced and transferred through the act of drawing. In my work I focus on drawings because students very rarely actually build anything and for the sake of comparability and methodological coherence in this paper, when discussing
teachers’ work I have also focused on drawings. In this paper I trace what I have called a Danish vernacular at the dawning of the 20th century and offer a view seldom available outside of Scandinavia into the school that was the cradle of Danish Design.

I should like to show how teaching of and interest in Danish historical buildings influenced drawing practices and marked the education of Danish architecture students. This descriptive and analytic work concludes in a perspective on the backdrop of Martin Heidegger’s differentiation between Historie and Geschichte – how history was used in the curriculum and what sort of impact the teachers had on their students. Such a perspective does not just inform us of past practices but could inspire to new ones.

Danish vernacular grew out of the Nationalist Romantic Movement and the purpose of this paper is to demonstrate how National Romanticism through two influential teachers was rooted in the Danish Royal Academy, Architecture School (hereafter referred to as the Academy). I would, however, first like to outline what I mean by Danish vernacular and indicate its existence. A vernacular usually refers to “the native language of a place”. Vernacular architecture is based on local needs and availability of construction materials and is often not designed by professional architects but is rather simple and self-grown. With my term Danish vernacular I mean to point to something slightly different, namely the Danish vernacular as an architectural dialect that professional architects adopted and used in their work.

In the history of the Academy, published in 1954, Knud Millech, one of the most knowledgeable scholars of the period, comments on the impact the Danish architect Martin Nyrop had at the Academy. Millech states that Nyrop as a teacher in the Academy was far less influential than he had been as an architect, but then adds the curious point that “It later became apparent that there was a line to the so-called domestic functionalism from Nyrop’s reflections on the artisan foundation of form and his care for materiality and sensuous qualities – in particular with regard to Danish building materials” (Millech 1954, 401). Millech does not comment further on the topic, but with this passage he indicates that the teachings of Nyrop influenced the later functionalist style. This is especially interesting as he gives Nyrop credit for influencing the areas that would become the hallmark of Danish Design.

The aim of this paper is not to herald that developments on the Danish architectural scene were unique, but rather to show how movements known also from Sweden, Norway, Finland and Germany developed in the specific Danish educational environment. Danish vernacular is thus not something radically different from other styles, but consists of traces, subtle features and choices of material that at least up until the 1950’s marked the design tradition to a noticeable degree.

Understandably these subtle traces are also difficult to pinpoint, but characteristics include: The use of red brick, red tile hip, half hip or gable roofs as well as the use of wood, though seldom in complete wooden structures, but very often in interiors and for furniture. The interest in working on a domestic scale has also been mentioned as a characteristic feature (Lane 2000). The question we are concerned with here is, however, not a detailed view of such specific features, but rather how these features through schooling came into the architectural vocabulary of young Danish architects. The root of this was the National Romantic Movement in architecture and we shall therefore explore briefly what National Romanticism is in a Danish context.

1.0 NATIONAL ROMANTICISM IN DANISH ARCHITECTURE

It is not a new thesis that National Romanticism in the early 20th century was linked to the Functionalist Movement that grew out of, for instance, the Bauhaus school and that it also had an impact on Scandinavian Functionalism. It is the central argument in Barbara Miller Lane’s book “National Romanticism and Modern Architecture in Germany and the Scandinavian Countries”. Here Lane argues that especially with the emphasis on home design and the home as a work of art, the individualism of National Romanticism fed into the social democratic ideals of the later Scandinavian functionals (Lane 2000, 312).
For Lane National Romanticism in the north is defined by the search for an original national architecture. National in this respect is defined as “home” or “homeland” and the search perhaps symptomatically starts out “at home” in small scale structures and with an emphasis on the lives of the “worker-peasant”. Other scholars, such as Dragsbo, 1999 have asked how regionalism played into these national agendas, without doubt a valid point but beyond the scope of this paper. As an overall movement National Romanticism in Denmark like elsewhere took hold in the beginning of the 19th century in the form of widespread interest in Danish history, culture and mythology. In architecture, however, the influence is only seen later in a period roughly defined as 1880 to 1915 (Lane 2000).

1.1. Hans J. Holm and the dawning interest in national building culture
The educational influence of National Romanticism can be said to have its beginning with the appointment of Hans J. Holm in 1883 as professor of Architecture at the Academy in Copenhagen. Holm had worked as an assistant at the Academy from 1866 to 1879 (Weilbach 1994), but as a professor he had the liberty to direct attention to one of his passions: architectural measurement and drawing of historical buildings. Holm was interested in European architecture, but was one of the first to take an interest in domestic architecture as his publications of “Drawings of older Nordic Architecture” (1872-1884) attest to. Holm’s own work cannot be uniformly classified as national romantic – although as the drawings demonstrate there are definitely parts of his oeuvre where nationalist motives were used.

In figure 1 above, the timber frame with carved wooden decorations, the dragon heads on the gable top and even the choice of red brick are used to tie this villa to Danish traditions and make it a natural fit in the landscape. It should also be remarked that the “nationalist features” in fact aren’t very different from what one could expect to find in the northern part of Germany. This underlines that although Holm was instrumental in fostering an awareness of Danish building culture, it was not his actual building works but his methods that inspired students. Holm taught his students how to accurately measure and draw historic buildings and took the students on trips throughout the country to measure and draw Danish architecture. The measuring of old buildings caught the students’ interest to the degree that they in 1892 formed Foreningen af 3. December, an influential society dedicated to the measuring, drawing and publishing of drawings of old Danish buildings.
Through the exposure to old Danish architecture and the diligently detailed, if sometimes probably tedious, work of measuring, the students' knowledge and understanding of traditional buildings rose and with it rose a growing dissatisfaction with what were deemed the dead classical styles. At this time in the Academy the education was of a beaux-arts type, where younger students trained drawing skills by copying classical fragments and column orders and older students were obliged to draw three projects – one in each of the main styles. Students as well as practicing architects sought after expressions that seemed to fit more naturally into the Danish climate, materials, culture and mood. Research into Danish cultural heritage seemed to provide an inspirational source for such expressions.

2.0 MARTIN NYROP – ARCHITECT AND TEACHER

One young architect that was inspired by Holm’s teachings - although he wasn’t a student of his but an assistant working with Holm at the Academy from 1883 to 1893 – was Martin Nyrop (Weibach 1994). Martin Nyrop, today renowned for his City Hall in Copenhagen, has been called the “father of Scandinavian National Romanticism” in architecture. A central agent in the Danish form of National Romanticism was the folk high school movement. As a young architect Nyrop was asked to put his ideas for a national architecture into the building of an exercise hall at Vallekilde, one of the prominent folk high schools. Nyrop, who had a background as a carpenter, designed a wooden structure, which would resonate through numerous subsequent works and in many ways pave the way for his influence. The exercise hall at Vallekilde with its characteristic decorated bargeboards on the front gable is very like the residential house Nyrop drew for Vallekilde later, but perhaps nothing epitomizes the Danish Vernacular quite like Nyrop's small residential house from 1895 (Figure 3, Right).

Figure 2: Student work by Kaj Gottlob, Kaufmanns Haus in Skærbæk, 1909

Figure 3: Left: Martin Nyrop, residential building Vallekilde, 1889. Right: Martin Nyrop, small residential building, 1895
The structure is simple and rural in outlook. The walls are of plain red brick with a single decorative band across the gable. The thatched roof signals a cozy cottage like atmosphere and the building sits comfortably on a slightly sloped site – note here both the difference and similarity to the project by Holm, where the slope is much more dramatic. In both cases though it has been of vital importance for them to set the building into the context of the landscape. The roof is half hipped, with return cornices and predominately with small paned double windows. Remarkable also is the broken symmetry in the gable and the roofline drawn almost to the ground on the west side of the house. These are good examples of Nyrop’s way of working individual details into a project.

2.1. Struggle over style
At the turn of the 19th century Nyrop was one of the most influential people in the Danish architectural world and in December 1905 he was appointed to one of the two professorships in architecture at the Academy in Copenhagen. This can be seen as something of a final victory of the “national movement” over the “European movement” that had long since ruled at the Academy. This was the same year in which Nyrop finished the City Hall in Copenhagen, considered to be his definitive work. Despite many stylistic influences – amongst others a strong Italian influence – Nyrop’s individualistic composition remains very Danish (Lane 2000, Millech 1954).

With Nyrop’s professorship the ideas of National Romanticism were institutionalized at the Academy. This was done first and foremost through a more pronounced individualism and a softening of the stylistic demands for student projects (Millech 1954, Schmidt 2004). An example of this can be seen in the register of final assignments. The prescribed style of the project was listed as a requirement, but Nyrop as a rule used phrases such as “based on” a certain style, and thus the stylistic requirement seems less rigid. An example from 1907 is an orphanage to be “carried out using renaissance motives suitably adapted to Danish conditions” (Protocol 1907). From 1916 the stylistic requirement in the assignment is removed and it never returns.

A further interesting development that can be read out of the protocol of the final assignments is the turn towards the more modest “homely” projects that comes with Nyrop. The Danish beaux-arts tradition did not, as in the case of the French and American variants, have a system of the esquisse, but students still did sketch-assignments. To be permitted to sit their final exam they had to complete two sketch-problems, a practical and an artistic. With Nyrop and Holm in charge the practical assignment was sometimes downright mundane, as when in 1910 the students were asked to design a henhouse. More typical would be the 1907 assignments of an orphanage and a kiosk.

Figure 4: Student work, Gerhardt Poulsen, Sketch assignment, 1907. Left: An Orphanage. Right: A kiosk
Typical for the assignment is a detailed description of what types of rooms and functions the building should contain. The similarities from the student Poulsen’s design and Nyrop’s cottage from 1895 should be noted.

It is said about Nyrop that he favored the students that struggled with their work and always was inherently suspicious of those whose excellent draughtsmanship he felt made things too easy for them (Millech 1954). The struggle with the material was valued because it was a sign that the student was using the drawing to think architecturally – to struggle with problems of the design, whereas the eloquence of the superb draughtsman could hide the problems under the shimmer of the aesthetically pleasing. This tendency shows, however, that Nyrop as a teacher was less interested in the technical prowess of the student and more interested in developing their thinking. This in turn gives a vital clue to what sort of influence Nyrop had on his students and in what way the features of National Romanticism were taken up by the students and marked the Danish strand of functionalism.

3.0. LESSONS LEARNED FROM NYROP
One of the most intriguing links between the Functionalist Movement and National Romanticism is in the establishment of the so-called “Danish Class”. When Holm was followed by Hack Kampmann as a professor in 1908, Kampmann split up the two-year long course in monumental architecture nicknamed “The Temple Class” into two sections and added the Danish Class (only officially from 1910) (Schmidt 2004, Millech 1954). The Danish Class was significant because it was the first time the students were taught to design “ordinary” buildings such as a worker’s home, a small farm house in the country or even multiistory housing units (something earlier considered too mundane for architectural consideration). Everyday life entered architecture school. These relatively simple curricular changes symbolize a watershed in architectural thinking. Stylistically the projects drawn in the Danish Class were far from functionalist, but as the Danish modernist Kay Fisker writes in a retrospective article, very little of the functionalist program was something new (Fisker 1964). Lane also has said that the roots of functionalism were closely connected to the home (Lane 2000).

The belief that architectural excellence needed not necessarily great scale or refined and expensive materials, but could be built by local craftsmen, in simple shapes suited to the landscape as modest homes to serve a democratic purpose became the focal point not just for the nationalists but also the functionalists. Fisker, who himself became an influential teacher at the Academy, was a student of Nyrop’s (1909-1920) (Weilbach 1994). Fisker in his student years was in open opposition against Nyrop’s nationalism (Weilbach 1994), and in his early practice he was purely neoclassicist. Later, however, many of Nyrop’s ideals can be found in Fisker’s projects, not just in the form of red brick, tiled roofs and wood, but also in his interest in residential buildings. If we compare for instance the 1942 project in the Copenhagen suburb of Vangede, it is easy to recognize the proportions used by Nyrop for gables in the cross-section of the house.

![Figure 5: Kay Fisker, Row houses Vangede, 1942](image)

Even pure modernists such as Arne Jacobsen sometimes returned to compositions and shapes that echo those of Nyrop. Compare for instance the two projects in figure 6. The project below is far from typical for Jacobsen, but it isn’t the only one among his works either. Nyrop was no longer a professor when Jacobsen studied, but the tradition of measuring historic buildings was kept up until at least the 1980’s and the example demonstrates how this
knowledge of architectural heritage - a construct of National Romanticism - still prevailed in the Copenhagen school even though other stylistic paradigms such as the revival of neoclassicism in the 1920’s arose.

Figure 6: Left: Martin Nyrop, House for Captain Brix, 1899. Right: Arne Jacobsen House for Solicitor Holm-Nielsen, 1942

4.0 HISTORIE AND GESCHICHTE: What This Story can teach us about History in the Architecture Curriculum

In a 2011 article in JAE, Randall Teal describes his experiences practicing an integrated approach to history and theory in design teaching. Teal argues the importance that design education be shifted “from the creation of particular objects toward cultivating practices that open up territories (…) where all the relevant elements and information can react with one another.” (Teal 2011, 38) He analyzes his approach through the distinction between Historie (history) and Geschichte (story) in Heidegger’s philosophy. Historie for Heidegger points to the descriptive linear and scientific recording of the past, whereas Geschichte mixes and consists of overlaps of historic time, bound together by a sense of meaning. Geschichte is linked to the present by having an affective presence and therefore an inherent nonlinearity.

What clearly happened for the students studying under Nyrop, Holm and Kampmann was that the historic became meaningful in a new way. It became part of a narrative of Danish culture and society and a social agenda aimed at creating better environments for the common man. What Nyrop, Holm and Kampmann did in their teachings was not concerned primarily with Historie. There were lectures in architectural history like there had always been, but the new approach was the way that students were trained in embodying the historic work through their drawings that put it into a then modern context.

The tool to achieve the affective presence of the old building culture was the faithful drawing of old structures, which gave the students not just knowledge of the history and an attention to detail, but literally a bodily memory of, for instance, proportions. To return to the topic of the Danish vernacular, one can hypothesize that the sensation of the drawing of old buildings was lodged in the students so thoroughly that it stayed with them even as they blossomed as architects and got new stylistic ideals. Fisker in 1964 assessed Danish architecture and concluded that in Denmark there might not be as many geniuses as in neighboring Sweden but that the average level of architectural skill was much higher (Fisker 1964). Fisker saw this as a desirable state because he perceived more value in designing the framework of “the good life” than in individual and exceptional masterpieces. The trained sensibility achieved through the measuring exercises more than just being one of the pillars in Danish architectural education was likely the foundation (if we take Fisker’s word for it) of the high average quality.

5.0 CONCLUSION

For most of us, characters like Nyrop and Fisker are but glimmers from a long past architectural reality, so what can we take from these musings to modern day architectural education? Firstly I think the notion of vernacular is beneficial to illustrate the kind of influence teachers have on students: a sort of dialect in their work, a subtle pattern that doesn’t interfere with personal style or limit new waves of influence. Like we saw in the case of Nyrop, he had little direct stylistic influence but was very influential in the way individualism and interest for tradition and materials played into the Danish Functionalist Movement.
The case also demonstrates how history was used in the teaching of architecture, not in a descriptive dead way but more akin to Heidegger’s notion of Geschichtete. The use of historic national motives was based on thorough and extensive research, but it came alive and was given an affective presence in the students’ work. This happened through the measuring and drawing of old national architecture, which suggests that it was an underlying belief that students could learn something about historic building culture, not by reading about it, but by embodying it through their drawings. It demonstrates the strong link that still exists between the practice of drawing and the cognitive process of understanding and creating architecture.

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ENDNOTES

i English translation of Millech 1954 from Danish is my own.
ii All images are from the Danish Art Library Online collection: www.kunstbib.dk
iii See for instance *The Oxford Companion to Architecture*, 2009
iv The “Europeans” had had the architect Ferdinand Meldahl as a leading figure since the mid 19th century and Meldahl ran the Academy with an iron fist until his retirement in 1905. There has been criticism from some scholars of the terms nationalist and Europeans (Schmidt 2004). Indeed the names may oversimplify the difference between the two factions, but the fact remains that there were two factions at the Academy and in the architectural community and calling them Europeans and nationalists here is purely to mark a distinction between them.
v The final assignment was fixed and given by the professors - until 1906 only Meldahl wrote the final assignments.
vi Records of the Royal Academy. Protocol for Hovedopgaver (Final Assignments) 22nd of January 1907 in The Danish National Archive.
"The system of the esquisse as described by, for instance, Harbeson 2008 meant that students independently drew a sketch at the beginning of an assignment that they then had to adhere to throughout the project. In the Danish system this was not the case. The sketch assignments weren’t linked to the main assignment, but were simply just drawings made without guidance in a short space of time – usually 9 hours – and where the students were allowed to hand in drawings in pencil."