

## The Nordic Order<sup>1</sup>

Jonathan Foote

### THE FIVE ORDERS

Vitruvius established the Greek column *genera* - later known in various languages as *orders*, *ordnungen*, *ordini*, *ordener* - following two primary criteria: their differing proportions and their place of origin. The Doric order, proportioned six heads high to one in diameter, as in the body of a man, originated in the temples of the Dorian states; while the Ionic order, said to stem from the body of a woman at eight heads to one (plus a shoe), was established in the construction of a temple to Diana in the region of Ionia. A final column *genus* - the Corinthian - is a nod to "a citizen maiden of Corinth" who died young and was immortalised by the artist Callimachus. It was his pen that captured the ad-hoc arrangement of her funerary basket, placed at the tomb by her nurse and covered in a roof tile, and which had sprouted leaves from an unsuspecting acanthus root located underneath. This vegetal-mineral assemblage would endure in perpetuity as a representation of the column capital for the Corinthian order.<sup>2</sup>

Following the scheme described by L.B. Alberti in *De re aedificatoria* (1452), Sebastiano Serlio in 1537 summarized the five column types for wider dissemination: Vitruvius' original three plus a *Tuscan* order, previously identified by Vitruvius not as a separate column order but as part of Etruscan temples, and a *Composite* order, also known as *Italic* from its invention by Roman builders and architects.<sup>3</sup> Relying on the new technology of the printing press, he canonized the column orders as a reproducible graphic system for the first time, ensuring a widespread impact [fig. 1]. Thus, while the specific proportions and ornamental systems of the five orders would be widely debated for centuries, the system itself and its relation to somewhat mythical places of origin would remain resolutely fixed.

Once codified in late 15th century, it is curious that no new column orders emerged in the West to seriously challenge or expand this rather rigid system. Some variants were implemented where particularly symbolic expressions were demanded. Among these one could point to the tree-like, twisting Solomonic column, invoking the ancient authority of the Temple of Jerusalem and employed extensively for its stylistic energy throughout the 17th and 18th century. Or the Caryatids, columns

sculpted as slave women from Caryae, made to bear the literal and figural weight of their betrayal against Athens. Eclectic architects of the 19th and early 20th century would occasionally employ orientalist column references, such as Egyptian or Persian motifs, often to announce exotic design taste or mythical activities behind the facade.<sup>4</sup>

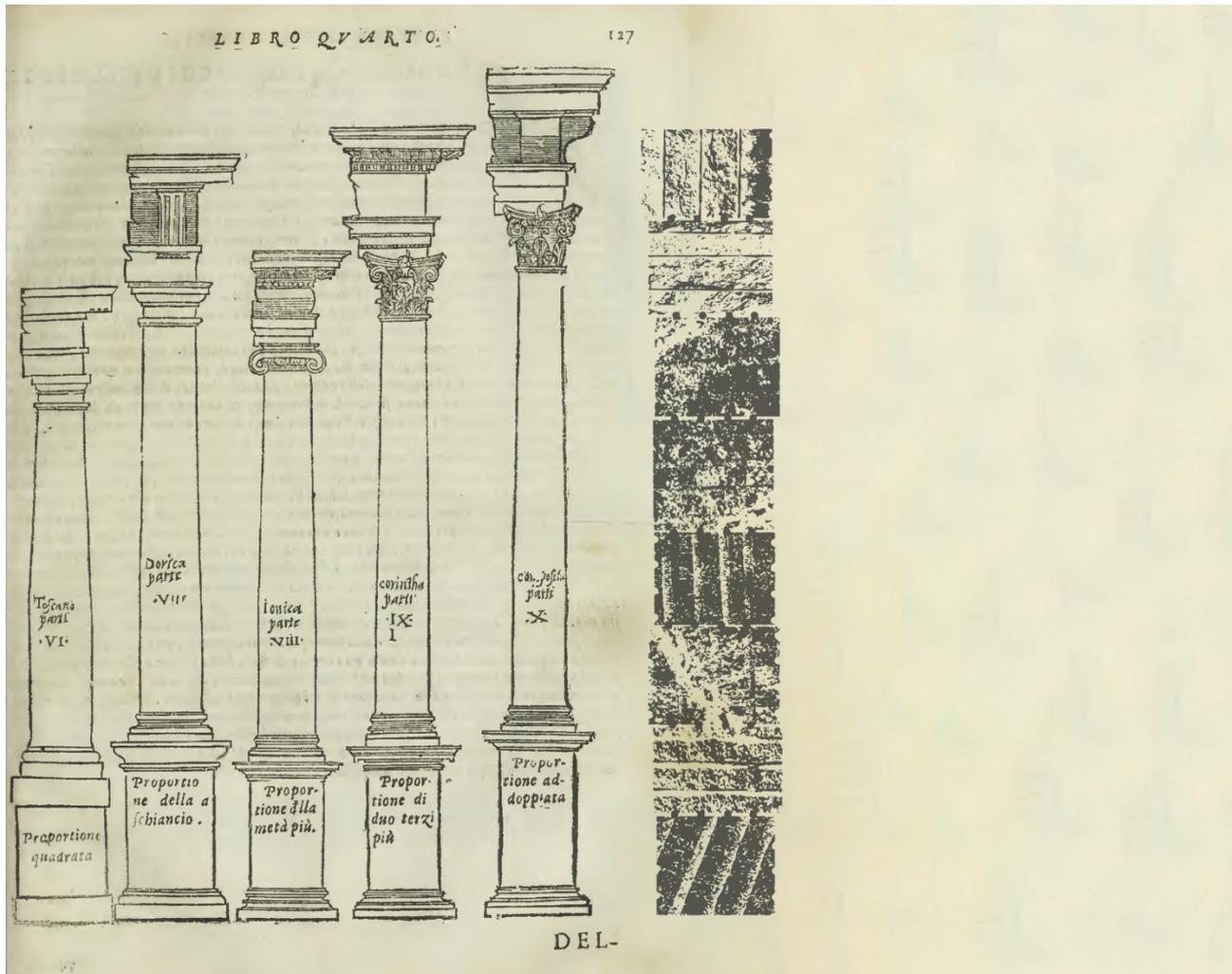


Fig. 1. The Nordic Order in relation to the classical system of five column orders. Original image from Sebastiano Serlio, *Tutte l'opera d'architettura* (Venezia, 1618), fol. 127. Modified by author.

Vitruvius wrote that columns should be fit to bear a load and also of a satisfactory beauty of appearance (*in aspectu venustatem*).<sup>5</sup> In this regard, the column as both structure and representation is baked into the history of architecture. It is important to recall that the Vitruvius' concept of *venustas* was not yet a disinterested conception of beauty, as in modern aesthetic theory, rather it was an erotic beauty embodied in Venus/Aphrodite "that seduces the user/observer and creates a significant space of participation."<sup>6</sup> In other words, columns acted both structurally and meaningfully as

allegorical/seductive actors - they were embodied, gendered, narrated, and culturally identified.<sup>7</sup> This representational aspect, completely disregarded today, in fact provided the basis for one of post-modernism's most iconic statements against the poverty of meaning in contemporary architecture. At the entrance to the inaugural Venice Biennale in 1980, Hans Hollein's fabled *strada novissima* displayed a series of figural columns, each one alluding to the symbolic role of the column found throughout architectural history. And even recently in 2025, the American artist Germane Barnes explored the African Diaspora by proposing three new column orders exploring labour, migration, and identity.<sup>8</sup>

In spite of the codified system of the five classical orders - or perhaps precisely because of it - there have been no shortage of bizarre variations appearing throughout the ages. One of the earliest protagonists was Michelangelo Buonarroti, who famously "broke the chains" of antiquity by treating the Vitruvian lexicon as a formal grammar to be stretched and recomposed according to his artistic "license (*licenzia*)".<sup>9</sup> Serlio himself introduced even more outlandish examples in his *Extraordinario libro*, where thirty speculative door designs, "mixed together with various column orders," treated the orders as a completely flexible system open to the most variegated inventions.<sup>10</sup> Following these Mannerist experiments of the mid-16th century, the footnotes of architectural history are full of curious and exceptional experiments in column-philia, such as Giulio Romano's corpulent and roughly hewn column shafts at the entrance to the Palazzo del Te, or animal motif columns masterfully imagined by Jean-Jacques Lequeu, or Adolf Loos' iconic use of the Doric order as an inhabitable tower for the Chicago Tribune, to name only a few.

Ever since Johann Winckelmann placed the Western ideal in Greek art and architecture<sup>11</sup>, apologists for the merits of an architecture without the five orders had justify the use of 'other' vertical support solutions. In these arguments, developed throughout the nineteenth century, the column sheds its representational value to become increasingly void in terms of symbolic content and instead understood by its principal function - bearing weight. Heinrich Hübsch in his famous essay, *In welchem Style sollen wir bauen?* (1828), despaired at the pointlessness of the antique orders for contemporary needs. He instead pointed to "techno-static conditions (*technostatischen Verhältnisse*)" and their conformity to principles of *Zweckmäßigkeit*, or "fitness for purpose", as design principles.<sup>12</sup> Gottfried Semper was perhaps the first to theorise the column as a structural member alone, arguing in *Der Stil* (1863) that the Greco-Roman, stone-based orders were nothing but historical

constructions: "All the vertical supports, otherwise so different, that art has dressed in its formal garb are derived from the same beginnings and morphological ideas."<sup>13</sup> Across time, cultures, and functions, both ritual and practical, vertical supports complied with the basic requirements of structural necessity, namely, "receiving, carrying, and distributing a load".<sup>14</sup> Describing middle-age wood constructions throughout Germanic regions and Scandinavia, Semper sidestepped any discussion of narrative or mythical origins and focused squarely on how the cultural and material conditions of these tectonic systems (plank work, half-timber, and log construction) brought their "functional-dynamic expression to life".<sup>15</sup>

Viollet-le-duc, a contemporary of Semper in France, argued for the superiority of the Gothic style based on a cohesive stylistic analysis of Gothic construction systems.<sup>16</sup> In these complex "elastic" systems, he saw the perfect synthesis of structure and reason, where each moulding and ornamental detail was considered to be endowed with functional/rational value.<sup>17</sup> Viollet-le-duc's theory was complemented later by John Ruskin's moral reflections on the Gothic, presented as "rude and wild" and in stark contrast to the "luxury" of the classical orders where craftsmen were "slaves" to rote execution. In Gothic ornament, on the contrary, the craftsman was free to create from his own imagination, released from inherited rules and conformities.<sup>18</sup> By the end of the 19th century, the elevation of the Gothic as an expression of structure, reason, technical mastery and uninhibited, creative energy had sufficiently challenged the previous ideal of Hellenistic art and architecture to the point where the figural and allegorical role of columns was no longer taken for granted. Emphasizing the structural condition of columns has endured to the point where in contemporary practice, a column ought to be explicitly void of any representative value whatsoever and is often deliberately tucked away or relegated to only the most necessary structural roles.

Semper contrasted the technical arts and decorative schema of Teutonic tribes with that of Hellenic building culture and, while speculating on a common origin, noted some key differences.<sup>19</sup> Due to a primary reliance on wood rather than stone, he wrote, northern ornament related more to surface, texture, and binding, whereas the stereotomic building culture of Greece developed more vegetal, organic forms. As the 19th century progressed, the question of a 'Nordic' ornamental style became the subject of more psychological concern. Alois Reigl, writing in his influential *Stilfragen: Grundlegungen zu einer Geschichte der Ornamentik* (1893), argued against Semper's theory of technical-material morphology and instead proposed the concept of "*Kunstwollen*", artistic will or volition, as

the foundation for artistic production. This is what accounts for differences in art and ornament among cultures, he wrote, leading to a tendency toward abstract, geometric, and pattern motifs in northern climates versus organic and naturalistic motifs in Greece.<sup>20</sup> The torch was carried forward by Wilhelm Worringer in his famous dialectic between abstraction and empathy, two poles along the spectrum of *Kunstwollen*, spanning from north to south. The Northern artistic will, characterised by "inner disharmony and unclarity ... situated far before knowledge and living in a harsh and repellent nature " is psychologically distant from the natural world and therefore "attaches to the animation of the inorganic."<sup>21</sup> This would culminate, he would later argue in *Formprobleme der Gotik*, in the most mature expression of the northern artistic will - Gothic architecture.

### **THE NORDIC ORDER**

With some irony but also a few provocations, this project breaks open the five-order system of antiquity and proposes a new column order known as the *Nordic Order* [fig.2]. In a nod to the Nordic countries' leading role in environmental reform, the Nordic Order is a formal, material, ornamental, and constructive program for the crisis of ecology. As in the classical, five-order taxonomy, it functions as both representation and structure; and yet, following in the tradition of northern theorists, its representation is abstract, related to material-technical conditions, and is driven by a formal expression from the material surface itself rather than an applied or sculpted figure. From this, new principles are introduced from the ecological mandate of the circular economy: natural materials, local materials, the use of waste or left-overs, re-use, reversibility and design-for-disassembly, low-energy processing, durability.<sup>22</sup> Like the classical orders, we imagine that many possible column expressions are possible within this system of principles, although for this project we demonstrate the Nordic Order in fractured stone.

Just as in antiquity, the Nordic Order is active in establishing the relation between cultural meaning and architecture, albeit on a much different level. Rather than rote applications of formal proportion systems, previously subsumed under matters of 'good taste' or 'abuse', the Nordic Order generates cultural meaning by asking the onlooker to critically reflect on the very definition of regional identity and material expression within the Nordic context today. In a moment where architecture's representational value often derives from its link, both symbolic and literal, to dubious definitions of 'sustainability', we need to re-establish the potential of architecture to be not only resource aware but also desired (recalling Vitruvian *venustas*).



Fig. 2. The Nordic Order in relation to body, gender, and material ecology. Collage by author based on images from: P.S. Krøyer, *Sommeraften ved Skagen. Kunstnerens hustru med hund ved strandkanten* (1892), in the collection of Skagens Museum; background photo of stone waste pile at larvikite quarry in Larvik, Norway by Robert B. Trempe.

The structural mandate is also timely, recalling Vitruvius' second mandate for columns, which is that they should be "fit to bear weight".<sup>23</sup> Working within the recent revival of massive stone as a sustainable alternative for structural purposes, known colloquially as *The New Stone Age*, the Nordic Order column is able to substitute for high-carbon materials such as concrete to bear the weight a potential building.<sup>24</sup> This version of the Nordic Order utilizes left-over stone blocks of larvikite from Larvik, Norway, assembled with minimum processing in a post-tensioned, structural system. The structural integrity of the column relies on a joining system that takes advantage of tooling from the process of fracturing rather than conventional use of saw or wire cutting, resulting in a lower energy consumption.

And yet, while Nordic countries have led the way in environmental reform - becoming something of a global brand - high-income, Nordic citizens also continually rate at the top of worldwide per capita material consumption and carbon emissions.<sup>25</sup> To challenge this contradiction, the Nordic Order works anachronistically to propose a link between style and cultural character that can be purposely contested. What does it mean to be Nordic? How is the ecological age expressed in architecture?

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## Bio

Jonathan Foote, Ph.D, is an architect and Associate Professor at Aarhus School of Architecture, Denmark. He leads the research group, *Ecologies of Stone*, a transdisciplinary research group that examines stone extraction and massive stone construction as an interconnected, cyclical process. He has chaired conferences and published widely on stone and marble in the humanities, including work in Michelangelo's stone template drawings and a recent, co-edited book, *Imaginary Matter: Tools, Materials, Origins* (AADR). He has led multiple, exhibition-based research projects using Nordic stones and marble and is currently completing a book *Sense of Scale: A History of Full-Size Drawing in Architecture* with gta Verlag.

## Notes

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- <sup>1</sup> The Nordic Order project is a collaboration with Robert Trempe, Aarhus School of Architecture. We collaborated with Webb Yates Engineers for engineering support and Lundhs and Larvikitblokke in Larvik, Norway for the supply of stone. Thomas Brodersen has acted as a research assistant. We have had financial support from Boligfunden Kuben and Aarhus School of Architecture.
  - <sup>2</sup> Vitruvius, *De architectura*, Book IV.1.ix. Joseph Rykwert, "The Corinthian Order," in *The Necessity of Artifice* (New York: Rizzoli, 1982), 33-43.
  - <sup>3</sup> Sebastiano Serlio, *Tutte l'opera d'architettura* (Venezia, 1619), fol. 126-127. Vitruvius describes the three principal orders in books III and IV, including measures of proportion.
  - <sup>4</sup> A characteristic example is One Hundred Thirty West 30th Street in New York City by architect Cass Gilbert (1927).
  - <sup>5</sup> Vitruvius, *De architectura*, Book IV.1.vi.
  - <sup>6</sup> Alberto Pérez-Gómez, *Built upon Love: architectural longing after ethics and aesthetics* (MIT Press, 2006), 16.
  - <sup>7</sup> Joseph Rykwert, *The Dancing Column: On Order in Architecture* (MIT Press, 1996), 96-115.
  - <sup>8</sup> Exhibition at the Art Institute of Chicago, *Germane Barnes: Columnar Disorder*, Sep 21, 2024–Jan 27, 2025.
  - <sup>9</sup> Giorgio Vasari and Gaetano Milanese, *Le vite de' più eccellenti pittori scultori ed architettori* (Firenze, 1906), VII, 193.
  - <sup>10</sup> "mista con diversi ordini", from the frontispiece of Sebastiano Serlio, *Extraordinario libro di architettura di Sebastiano Serlio, architetto* (1551).
  - <sup>11</sup> Johann Joachim Winckelmann, *Geschichte der Kunst des Alterthums* (1764).
  - <sup>12</sup> Heinrich Hübsch, *In welchem Style sollen wir bauen?* (Karlsruhe, 1828), 3-8. Translated in Wolfgang Herrmann, *In What Style Should We Build: The German Debate on Architectural Style* (Getty Publications, 1992), 64-68.
  - <sup>13</sup> Gottfried Semper, *Der Stil* (1863), Band 2, §135. Translations from Gottfried Semper, *Style in Technical and Tectonic Arts; or, Practical Aesthetics*, introduction by Harry Francis Mallgrave (Getty Publications, 2004), 642-643.
  - <sup>14</sup> Semper, *Style*, 642-643.
  - <sup>15</sup> Semper, *Der Stil* (1863), Band 2, §149-§153.
  - <sup>16</sup> Viollet-le-duc, "De la construction des édifices religieux en France," *Annales Archéologiques*, vol. 2, 1845, 136; Kenneth D. Whitehead, *The Foundations of Architecture: Selections from the Dictionnaire Raisoné*, introduction by Barry Bergdoll (Goerge Barziller, 1990), 242.
  - <sup>17</sup> Martin Bressani, "Viollet-le-duc's Rationalism," in *The Companions to the History of Architecture*, Harry Francis Mallgrave, ed. (Chichester, West Sussex: John Wiley & Sons, 2017), 227-242.
  - <sup>18</sup> John Ruskin, *The Stones of Venice* (New York: Lovell, Coryell & Company, 1889), vol. 2, 152-163.
  - <sup>19</sup> Semper, *Style*, 674.
  - <sup>20</sup> Alois Riegl, *Problems of Style: Foundations for a History of Ornament*, translated by Evelyn Kain (Princeton University Press, 1992), 4.
  - <sup>21</sup> Wilhelm Worringer, *Abstraction and Empathy, A Contribution to the Psychology of Style*, translated from the German by Michael Bullock (Elephant Paperbacks, 1997), 77.
  - <sup>22</sup> David Cheshire, *The Handbook to Building a Circular Economy* (RIBA Publishing, 2021).
  - <sup>23</sup> Vitruvius, *De architectura*, Book IV.1.vi.
  - <sup>24</sup> Steve Webb, "Stone Age: A new architecture from an old material", *Architectural Review*, Stone Issue, April 2022.
  - <sup>25</sup> United Nations Environment Programme, *Global Resources Outlook 2024: Bend the Trend – Pathways to a liveable planet as resource use spikes* (International Resource Panel. Nairobi, 2024), 34.