# *Baukunst*. Goethe's Notes for a Treatise on Architecture

Juan Calduch Cervera and Alberto Rubio Garrido

**Abstract** In Italy, Goethe's interest in architecture increased. Back, with reference to Winckelmann, he started a small treatise on architecture. Dated 1795, it's entitled *Baukunst*. It is a folder of 13 numbered pages, with some blank sheets and barely hinted pencil drawings that show its unfinished nature. Text on each page occupies the middle right of a folio and leaves the left side free to place corresponding drawings. The comparison between both text and drawings can give us a more complete view of Goethe's architectural theory as counterpoint to his criticism and analytical or descriptive comments of buildings.

Keywords Goethe · Treaty · Architecture

Goethe's "cultivated dabbler"<sup>1</sup> interest in architecture opted for the Palladian classicism after his journey to Italy (1786–1788), beating his youthful enthusiasm for the Gothic. Although he already hinted his limitations for the practice of the visual arts in the published text,<sup>2</sup> the truth is that he could internalize this deficiency when preparing its edition thirty years later. However, during his stay in Italy and

<sup>1</sup>Goethe differentiates between *vulgar dabbler*, *cultivated or authentic dabbler* and *professional artist*. If the *vulgar dabbler* only requires to the work of art to "look natural", *authentic dabbler* [wahre Liebhaber] seeks "truth of imitation" and "excellence of selection and ingenious of composition" (Goethe 1999, 126). To discover rules and laws of art printed by the artist in his work raises "the so-called dabbler [...] to the spirit of the artist" (Goethe 1999, 47). <sup>2</sup>*Italienische Reise. Auch ich in Arkadien!* [*Italian Journey. I, too, in Arcadia!*]. First edition, 1816/1817: final edition, 1829.

J. Calduch Cervera (🖂)

Escola Politècnica Superior, Universitat d'Alacant, Alicante, Spain e-mail: joan.calduch@ua.es

A. Rubio Garrido Facultat de Filosofia i CC. EE, Universitat de València, Valencia, Spain e-mail: alberto.rubio@uv.es

© Springer International Publishing AG 2018 E. Castaño Perea and E. Echeverría Valiente (eds.), *Architectural Draughtsmanship*, https://doi.org/10.1007/978-3-319-58856-8\_95 1205

beyond, he showed great interest in the study of architecture, surpassing a mere dilettante curiosity.<sup>3</sup>

### 1 Foundations of Goethe's Architectural Thought

His architectural ideas, matured during those years, were collected in *Baukunst* writing, which was left unfinished in 1795. This text, whose structure resembles that of a small treatise where both drawings and texts are combined and reinforced each other, reflects influences of his architectural education. Along with the visit, study and enjoyment of Ancient and Renaissance works during his journey, three parallel tracks outlined his background in these matters, and were finally reflected in the text: first, practice of architectural drawing; second, knowledge of theoretical foundations of architecture by studying texts, written and treatises; finally, exchange of ideas with architects, studious, archaeologists, academics and other professionals.

Goethe first task was to master architectural drawing with the practice of perspective and the knowledge of specific graphic systems. In Rome he attended some classes of perspective given by the architect Maximilian von Vershaffelt (Goethe 1991, III: 1294). There are some exercises from that time (Femmel [1958] 1972, III: 110; III: 111; III: 112; III: 113; III: 115; III: 116; III: 117; III: 118) and others dated during the years when he worked on *Baukunst* (Femmel [1958] 1972, IVb: 133; Va: 114). In some cases it is clear which models Goethe was using (Figs. 1 and 2).

Architectural drawings are generally freehand made, using the dihedral system (plans, elevations, sections and details) and then adjusted to exclusively technical images. There are drawings of this type made in Italy and years later representing bases, chapiters, columns, cornices, moldings and other elements, often copied from Palladio's, Scamozzi's, Serlio's, Galiani's, etc. treatises (Femmel [1958] 1972, II: 177 rs.; III: 66; III: 93; III: 94; III: 104; III: 105; IVb: 106; IVb: 112; IVb: 118; IVb: 204; VIa: 158 rs.). He made drawings of landscapes and views with architectural and ruins issues too (Femmel [1958] 1972, IVa: 2; IVa: 8; IVa: 9; IVa: 139; IVa: 140; IVb: 187), following, in this case, the tradition of *vedutisti* as Piranesi (Goethe 1991, III: 1342), Clérisseau (Goethe 1991, III: 1149) or Van der Neer (Goethe 1991, III: 1266) among others. However, there are no similar artistic drawings on *Baukunst*, showing that this text had for him an unquestionable theoretical nature (Fig. 3).

During those years, Goethe studied classic treatises. At the beginning of his journey, he bought in Padua an edition of Palladio's treatise (Goethe 1991, III: 1074) and, in Venice, bilingual text Latin/Italian of Galiani's *Vitruvio* (Goethe

<sup>&</sup>lt;sup>3</sup>Unlike *amateur*, who enjoys watching art, dilettante exercised it but not professionally as the artist does. There cannot be a dilettante architect attending the complexity of building. At best there may be, if anything, a dilettante designer. Goethe criticized dilettantism (Goethe 1991, I: 442), but he was also sympathetic with (Arnaldo 2012, 23; Goethe 1991, III: 1152).



Fig. 1 Johann W. Goethe, Treppenanlage, 1787/1788 (Femmel [1958] 1972, III: 118)



Fig. 2 Serlio (1537–1551, II: 19 obv.)

1991, III: 1100). Bombastic and academic sheets of this treatise exude a Palladian tone, assumed by his author. In Vicenza he visited "the elderly architect [Ottavio Bertotti] Scamozzi, who has edited Palladio's buildings" (Goethe 1991, III: 1071).

In the storytelling of the journey, he quoted him with admiration up to twenty times. He even interpreted Vitruvio through him. He wrote: "with his words and works, his way of thinking and creating, Palladio has brought me more the *Vitruvius* and helped me with better than its Italian translation" (Goethe 1991, III: 1100). In short, Goethe's learning through main treatises was heavily imbued with Palladianism. In *Baukunst* he used examples of Palladio, and, like him, he never employed perspective in its drawings.

But in the late eighteenth century, architectural theory of Renaissance treatises, which unified theory and practice, had exhausted its cycle. There was a split between different disciplines, which gave form to a plural and dispersed architectural thought in different areas such as history, archaeology and theoretical or philosophical essays. It opened the way to modern architectural thinking. Specialists in these fields



Fig. 3 Johann W. Goethe, *Piedestalund Säulenbasisprofile*, 1795/1797 (Femmel [1958] 1972, VIa: 158 rs.)

influenced Goethe's architectural taste, such as: the theologian, philosopher and critic Herder, who had excited the young Goethe for Gothic and from who he distanced himself, however, years later (Goethe 1991, III: 1253); the archaeologist Hirt (Goethe 1991, III: 1335); engravers, antiquarian, art theorists and artists as Lafreri, Lomazzo and Bellori (Goethe 1991, III: 1332); the historian Meyer (Goethe 1991, III: 1338); thinkers and philosophers like Kant (Eckermann 2005, 339) or Lessing (Eckermann 2005, 393) but, above all, Winckelmann (Goethe 1991, III: 1148), whose ideas were essential to its interpretation of classicism and his enthusiasm for Greek architecture. Especially his book *Remarks on the Architecture of the Ancients* [1762] was reflected in Goethe's *Baukunst*.

The complement to the study of treatises was the relationship with architects, artists and thinkers (Goethe 1991, III: 1139). He met in Rome the architect Arens. He then called him to work in Weimar when he was writing the first drafts of *Baukunst*.<sup>4</sup> Cassas' sheets awaked his interest in antiquities from Palmira and Egypt (Goethe 1991, III: 1308). He related to studious such as Moritz (Goethe 1991, III: 1308).<sup>5</sup> and painters and artists such as Hackert (Goethe 1991, III: 1175), Kniep (Goethe 1991, III: 1183) and Tischbein (Goethe 1991, III: 1128 and 1154) who accompanied him on his journey, during which he drew and make surveys of ruins and buildings. These relationships placed Goethe in the field of artistic practice and theoretical debates. However for the experience of building and construction it was important official positions he held at the court of Weimar,<sup>6</sup> which faced him directly with the technical, economic and management problems.

We find then Goethe divided into two parallel interests. On the one hand, theoretical reflections on fine arts and architecture; and, on the other, everyday issues of construction and civil engineering. Founded in this practical experience, he underlined in *Baukunst* differences between construction as technic and architecture as art. A professional architect like Palladio had never posed this dissociation; for him, theory made sense only as a support and justification for practice. This different approach with respect to professional architect is perhaps a telling sign of Goethe's stance regarding architecture.

This text about the "art of building" (literal translation) deals with two questions, which had focused his interest and scientific research; the quest for original plant [Urpflanze] (Goethe 1991, III: 1215), root of all flora, and the thesis of morphology,

<sup>&</sup>lt;sup>4</sup>The writing of *Baukunst* was delayed over several months. There is documentary evidence of two previous drafts: the first one dated in 10.29.1795 and the second one in 05.11.1795. Goethe worked on *Baukunst* at least until 25/01/1796, when he tells Meyer he renounces to finish it (Goethe 2004, 10: 5442). In addition, a previous essay entitled "Baukunst" was published in *Der Teutsche Merkur* in October 1788.

<sup>&</sup>lt;sup>5</sup>Goethe included in his book part of Moritz' text *On the plastic imitation of the beautiful* [Über die bildende Nachahmung des Schönen, 1788] (Goethe 1991, III: 1395–1400).

<sup>&</sup>lt;sup>6</sup>According to Cansinos, the Duke appointed Goethe in 1776 Director of Court Theatre; in 1777, President of the Commission for Architecture for the Reconstruction of the Palace (after the fire of 05.06.1774); in 1779, Director of Departments of War and for Civil Engineering; and in 1782, Director of the Treasury (Goethe 1991, I: 93).

understood as formation and modification of plants by metamorphosis.<sup>7</sup> Goethe believed that there should be an original type followed by all subsequent variants through metamorphosis.

*Baukunst* transfers these ideas to architecture. According to Goethe, *old Doric* [Altes] order, which emerged from primitive wooden buildings<sup>8</sup> and referred directly to nature, should be the undisputed origin of architecture, creating, through metamorphosis, all other orders.

In short, different interests emerge in Goethe's *Baukunst*. The document assumes implicitly the model of Renaissance treatises but, unlike them, it is not geared to professional practice in order to provide models and design solutions, but seeks a rational explanation of the origin of architecture and the transformation of orders.

## 2 Baukunst

The document is a folder with thirteen pages, written and drawn, where applicable, on both sides. Text on each page occupies the middle right of a folio and leaves the left side free to place corresponding drawings. There are uncompleted columns of text, some blank sheets and barely hinted pencil drawings that show its unfinished nature, but with an extension, structure and planned work.<sup>9</sup>

There are a total of seventeen drawings adjusted to the graphic conventions of dihedral system. The essay consists in two parts.<sup>10</sup> In the first part, Goethe deduces a theory of architecture with a conceptual deployment that, in the second part, is illustrated with various examples of architectural history accompanied by drawings. The text of the first part seems completed but the one of the second part was drawn up in fragments. In both cases, there are reserve spaces for possible drawings, although just in the second part, given written references, it seems likely that there are some missing drawings.

Following aesthetic of taste, Goethe assumes that every theory has to "determine in each art what is worthy of praise or blame" by way of "a rule of our judgments." Against classical treatises, which want to establish an objective corpus of architectural knowledge, Goethe postulates judgment criteria of art following paradigms

<sup>&</sup>lt;sup>7</sup>In 1790, Goethe published *The Metamorphosis of Plants* [Versuch die Metamorphose der *Pflanzen zu erklären*], where he exposed these ideas (Goethe 1991, I).

<sup>&</sup>lt;sup>8</sup>This theory was in those times very general and Goethe took it from Hirt (Goethe 1991, III: 1335), Winckelmann (1985) and Galiani.

<sup>&</sup>lt;sup>9</sup>Quotations from *Baukunst* proceed from an unpublished translation by Alberto Rubio Garrido coming from Goethe und Schiller-Archiv's original (GSA 25/XLV, 6).

<sup>&</sup>lt;sup>10</sup>The text is divided into several sections or chapters, although only first two are developed: *"Baukunst"* (from folio 2 obverse to folio 7 obverse) and *"Basen ganzer Gebäude"* (from folio 8 to 10 obverse, where text is interrupted and pencil drawings are unfinished). In folio 12 obverse there is an index of sections and subsections referring to chapiters, shafts and bases, according to orders (Doric, Ionic and Corinthian) and differentiating between old and new.

of aesthetics of reception.<sup>11</sup> Although he says that many of his observations in *Baukunst* should be extrapolated to every art, he focused his discussion on specific conditions of architecture. This specificity of architecture lies in the imposition of prior material<sup>12</sup> and its inevitable guidance to a purpose. Both questions influence architectural form. Architectural aim is threefold: the immediate purpose (the need or what is useful), the high purpose (sensuous harmony) and the highest purpose (poetic fiction).<sup>13</sup> This theoretical formulation binds and is coherently explained with examples he provides subsequently.

"Immediate" purpose [der nächste] attends the necessary as required by material, or useful when technology allows different alternatives solutions. Etruscan works exemplify this immediate purpose and, strictly speaking, they are no art for Goethe. He illustrates them referring to the evolution of wall from cyclopean (*opus incertum*) to the one coupled with regular blocks (from *opus pseudisodomum* to *opus isodomum*) (Fig. 4).

Only to become art architecture has to incorporate to functionality the "sensible harmony". From original form, which satisfies an immediate purpose, taking beauty as an endpoint it gives a central role to the doctrine of proportion. Synthesis between need and beauty lends character to the building and illuminates the idea of architectural type. But now, since character is not measurable, it cannot be reduced to specific numerical relationships, although laws of proportion are involved. Hence the idea of architectural type, foundation of character, does not correspond with matching proportions between different specific buildings. In short, immediate purpose refers to utility, while high purpose [der höhere] is the aesthetic symbol of functional necessity surpassing material requirements of architecture. Thus, the artist moves forward in the domination of material.

For Goethe an example of this progression is the evolution of crepidoma from Greek temples, which is developed in the second part of *Baukunst* with the title "Bases of buildings in full." Functionality of access to the interior of the temple led to the development of continuous steps around its perimeter. But to give them proportions according to overall dimensions of the building, and looking for beauty, they acquired an impracticable height, forcing therefore to add intermediate steps in main front<sup>14</sup> (Fig. 5).

<sup>&</sup>lt;sup>11</sup>Aesthetics of reception, different from aesthetics of production, converges with aforementioned Moritz's text.

<sup>&</sup>lt;sup>12</sup>For Goethe, "material" refers to physical-mechanical conditions of raw materials: strength, durability, mechanical behaviour of wood, of stone ... They have a negative character because of its resistance to take on new architectural forms if is not through "technical knowledge and insight" (Goethe 1795, 4).

<sup>&</sup>lt;sup>13</sup>This recalls the Vitruvian triad: where *firmitas* corresponds to an immediate purpose of architecture, *utilitas* to the high purpose and *venustas* to the highest purpose, as Cage (1980, 199), Salmeron in Goethe (1999, 77), Bisky (2000, 72) and Forssman (2000, 7–25) had point out. Despite this similarity, Goethe departed from that tradition and reached the orbit of the *harmony of the senses* [sinnlichen Harmonie] (Einem 1972, 103).

<sup>&</sup>lt;sup>14</sup>Winckelmann (1985) provided the same example.



Fig. 4 Johann W. Goethe, Antiker Steinverband, 1795 (Femmel 1958 1972, VIa: 153 rs. y 153)

This shows that harmony in the proportions of a building is linked to its functionality rather than to added ornaments. According to Goethe, this example anticipates Roman podium *in antis* enhancing frontal access and removing side ones. Functional drift leads then to a new type, which, in turn, led to other problems solved with new solutions as a "fully independent columns on pedestals" (Goethe 1795, 17).

Following his progressive approach, if beauty is derived from functionality, from high purpose emerges highest purpose [der höchste] through morphological intermediate steps. In this sense, for Goethe Temple of Minerva in Assisi, studied during his journey to Italy, is only a transitional example in appearance<sup>15</sup> (Fig. 6).

Out of necessity (because there is little space for its development), staircase penetrates beyond the line of columns. The effect is similar to columns on pedestals, when in fact they "are on the floor of the portico, which is only broken by the ladder" (Goethe 1795, 17).<sup>16</sup> There are also cases of isolated pedestals without stairs, i.e., not under purpose, unlike in Assisi. Goethe illustrated this with two examples from Palladian treatise: on one drawing resembling the Temple of Clitumno, "bases [are] clearly divided" (Goethe 1795, 17) (Figs. 7 and 8).

In the metamorphosis of base, an attempt to establish a kind of independent pedestal with divided bases beginning from continuous socle constitutes the starting point for progression to highest purpose. After the evolution in classical times, Palladio diversified solutions, enhancing the character of buildings and reaching its most evolved form. Although most of Palladio's buildings barely exceeded design of pedestals as projections of bases (similar to first figure in drawing below), Goethe gives an example of separate base "as ideal extending of base" (Goethe 1795, 18) (Fig. 9).

Not surprisingly, this second image is a villa—Villa Thiene (Palladio 1570, 2: 64)?—, where "he had more freedom" compared to his urban buildings. This nuance is crucial to the assessment of highest purpose. Architect ignores requirements of necessity and thus raises himself to a status of freedom that can illuminate the "poetic fiction" in architecture this art, last aspiration.<sup>17</sup> "At this point no one has surpassed Palladio, he has moved in this profession freely," says Goethe (1795, 12). If craftsman meets immediate purpose of usefulness and it is need an artist to make a building a work of art for the senses, a genius is required to reach poetic values. But some limits also arise, as we have seen and as Goethe illustrated (or so we can venture) in the following graphic examples, which he left without explanatory comments (Fig. 10).

<sup>&</sup>lt;sup>15</sup>See 25.10.1786 in his Italian Journey (Goethe 1991, III: 1113-1114).

<sup>&</sup>lt;sup>16</sup>This interpretation is correct and moves away from the one drawn by Palladio (1570, IV: 105). Goethe accuses him of "having drawn the temple just hearsay" (Goethe 1795, 17) giving thus rise to "an ugly Palmyrian monster" (Goethe 1991, III: 1114). See Ghisetti (2006-2007, 117).

<sup>&</sup>lt;sup>17</sup>Goethe is influenced here by Schiller's conception of "freedom in appearance." Schiller was, along with Meyer, a privileged interlocutor in the creation of *Baukunst* (Goethe 2004, 10: 2808 and folowing).



Fig. 5 Johann W. Goethe, Krepidoma des antiken Tempels, 1795 (Femmel [1958] 1972, VIa: 154)

They are: a portico of columns with a front staircase, which remind the type *in antis*, a pedestal and a column without base, an elevation façade with front columns on a continuous base (interrupted only by the gateway, which refers again to Palladian models) and a balustrade. They are all examples for Goethe of the



Fig. 6 Johann W. Goethe, Krepis an der Forntseite des Antentemples, 1795 (Femmel [1958] 1972, VIa: 154 rs.)

multiplicity of different ways to address the requirement of "poetic fiction". It is, in short, emergence of new forms of architectural language by transferring from one type to another, through imitation. Here, senses are mere intermediaries between object and viewer's intellect. It only may occur an improved aesthetic judgment on a spiritual level reached by a particular education, raising "over satisfaction of sense" thanks to the "poetic fiction" in architecture.



Fig. 7 Andrea Palladio, Templo de Clitumno (1570, 4: 100)



## 3 Conclusions

The comparison between text and drawings has allowed us to deepen in Goethe's architectural theory. Architectural drawings play in this theoretical system a central role, to the extend that it can be defended as means of knowledge and not just as mere illustrations. In this sense, text and drawings have similar value to that played in Renaissance architectural treatises.



Fig. 9 Johann W. Goethe, (no title), 1795 (Femmel [1958] 1972, VIa: 155 rs.)



Fig. 10 Johann W. Goethe, (no title), 1795 (Femmel [1958] 1972, VIa: 156)

## References

- Arnaldo, Javier (ed.). 2012. Goethe. Naturaleza, arte, verdad. Madrid: Círculo de Bellas Artes. Bisky, Jens. 2000. Poesie der Baukunst. Architekturästhetik von Winckelmann bis Boisserèe.
- Weimar: Hermann Böhlaus Nachfolger.
- Cage, John. 1980. Goethe on Art. Londres: Scolar Press.
- Eckermann, Johann Peter. 2005. Conversaciones con Goethe. Rosa Sala (ed. y trad.). Barcelona: Acantilado.
- Einem, Herbert von. 1972. Goethe. Studien. Múnich: Wilhelm Fink Verlag.
- Femmel, Gerhard (ed.). [1958] 1972. Corpus der Goethezeichnungen (10 Tomos). Leipzig: Veb. E. A. Seemann, Buch und Kunstverlag.
- Forssman, Erik. 2000. Von deutscher Baukunst. Goethe und Schinkel. In *Deutsche Baukunst um 1800*, ed. Reinhard En Wegner. Colonia: Böhlau Verlag.
- Ghisetti Giavarina, Adriano. 2006–2007. Palladio e le antichità dell'Umbria. Annali di architettura. Rivista del Centro Internazionale di Studi di Architettura Andrea Palladio di Vicenza, 18–19.
- Goethe, Johann Wolfgang. 1991. *Obras completas* (IV vols.), Rafael Cansinos Assens (trad.). México D.F.: Aguilar.
- Goethe, Johann Wolfgang. 1999. Escritos de arte. Miguel Salmerón (trad., int. y n.). Madrid: Síntesis.
- Goethe, Johann Wolfgang. 2004. Briefe, Tagebücher, Gespräche. Berlin: Digitale Bibliothek.
- Palladio, Andrea. 1570. *I quattro libri dell'architettura*. Venecia: Francesco de' Franceschi, Domenico imp.

- Serlio, Sebastiano. 1537–1551. *Tutte l'opere d'architettura et prospettiva*. Venecia: Francesco de' Franceschi.
- Winckelmann, Johann Joachim. [1764, 1762] 1985. *Historia del arte en la antigüedad* seguida de *Observaciones sobre la arquitectura de los antiguos*. Barcelona: Ediciones Orbis SA.

## Source

Goethe, Johann Wolfgang, Baukunst, 1795. Goetheund Schiller-Archiv (GSA 25/XLV, 6).

#### **Author Biographies**

**Juan Calduch Cervera** PhD in Architecture, Polytechnic University of Valencia (1987). Professor of Architectural Composition (University of Alicante) I have published articles (in reviews such as EGA, EGE, Palapa. Cuaderno de notas, etc.) and books (Temas de Composición Arquitectónica, 12 vol., Alicante 2000–2003), I have presented papers and conference papers, I campaigns conducted excavations campaigns in Pompeii with the University of Alicante's archaeological team, and I have taught and visited many universities in Spain and other countries.

Alberto Garrido Rubio Architect (Polytechnic University of Valencia, 2008). Master in Contemporary Philosophical Thought (University of Valencia, 2009) and PhD in Philosophy (University of Valencia, 2015). Specialized in theory and aesthetics of architecture, with particular attention to the century between the great social revolutions of the eighteenth and nineteenth centuries. Currently involved in the research project "Goethe: art of building (1795)", directed by Prof. Juan Calduch Cervera.