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Le Tableau Vivant as an Educational Device

THERESA BANDMANN

The literary theorist Roland Barthes describes the vignette published in the plates of Diderot and D'Alembert's *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers* (1751–1772), as a "*tableau vivant*."[1] By this concept, Barthes means a carefully constructed description of a particular situation under investigation. In some cases, the vignette is written, while in other cases it is portrayed by means of drawing. In general terms, the *tableau vivant* is "*vivant*" in the sense that it attempts to depict a scene in which people are involved in the performance of a particular task. As noted by Soyoung Lee, Barthes's essay highlights the concept of *tableau vivant* to contextualize the encyclopedic objective of showing the procedures of practical making: from the choice of raw materials to the achievement of a finished product.[2] Full of symbols and references, the vignette can be interpreted as a visual text summarizing a sequence of movements in a single image (or illustration).

The vignette can also be an important reference for contemporary educational tools related to experimental architecture and material culture. To develop this hypothesis, we can refer to the practical guide on clay architecture developed by Gustav von Bodelschwingh (1872–1944).

Gustav von Bodelschwingh "Der Dünne Lehmbrotebau"

Bodelschwingh was a German pastor who undertook missionary work in Tanzania at the beginning of the twentieth century. During his stay in Africa, he studied the traditional technique of clay loaves[3] and later brought this back to his home country, under the name *Lehmbrotebau*.[4] He studied the clay loaves technique and improved it through new tools in the early twentieth century. In particular, Bodelschwingh is known for being the author of a handbook entitled *Der Dünner Lehmbrotebau* (1924).
In this book, he extensively employed the vignette (as a kind of still frame), with the assistance of his daughter Adelheid Weerts, to depict the making of clay loaves in a construction site.[5]

1. See Barthes 1980 [1972]: 24.
2. See Lee 2020: 2.
3. Unfortunately, only a few hundred houses that were built using this technique still exist today in west-central Germany. See Schröder 2013.
4. See Schroeder 2013: 357.
5. See Belitz 2007: 180–184.

These vignettes show an impressive amount of detail and reveal the social dimension embedded in the process of manufacture. We see groups of people preparing the clay using only their human strength and with the help of shovels and watering cans [Fig. 01, 02]. The clothing of the characters and the absence of shoes suggests a rural setting in which peasants and farmers are at work.[6] Interestingly, we see young girls watering a pile of clay with jerry cans and also women involved in preparing the clay loaves. The act of shoveling wet clay from one pile to another is portrayed as a collective activity involving all members of the community regardless of age (old and young), gender (female and male), or species (humans and animals).

In addition to identifying the actors involved in the construction phase, the vignette also offers specific information about the actions, materials, and tools used in the act of building. Basically, it works like a timeline of the building process: in the foreground it shows the preparation of the clay loaves while in the background one can already see a sample of the clay building in progress. We can see details of the wooden scaffolding and the foundations of the building (about one meter high) made of clay bricks on top of which are arranged clay loaves.

The technique described by Bodelschwingh is also interesting as evidence of a technology that has disappeared over time. In Germany it was not practiced in the last century, because of the high labor intensity and long dry seasons.[7] Most of the people who have been practicing this technique passed away and only a few preserved buildings, along with documents like Bodelschwingh's handbooks, provide a precious witness to its historical presence.[8] On the contrary, in the African context—the context from which von Bodelschwingh originally derived his knowledge on the subject—the clay loaves technique is still relevant and in daily use, due to the constant transmission of knowledge over time between old and young generations.[9] In fact, what allows this technique to exist in the contemporary African context is most likely the presence of communities that build sustainably with locally available materials and crafts.[10]

Another interesting detail in Bodelschwingh's illustrations concerns the presence of animals, which shows a desire to replace human labor and save time and effort through the use of animal power. This is particularly well illustrated by one of the vignettes in which two craftsmen are shoveling clay around a clay mill, one of the earliest tools used in the procedures of crushing large clods of clay into smaller pieces using the movement of a horse chained to a wooden bar that is connected to the core and the wheel [Fig. 03]. The two craftsmen are wearing shoes and, in a way, symbolize an update that has taken place in the technological approach to the construction site. In fact, not only are human labor and time saved but also water, as suggested by the fountain with buckets in the background.[11]

In general, we can claim that Bodelschwingh's *Der Dünne Lehmbrotbau* is not only a handbook providing instructions for construction, but also gives a representation of clay as a social device. The vignettes demonstrate the significance of clay architecture for people and communities living in the German countryside in the first decades of the twentieth century. At the same time, they provide intuitive knowledge

6. See Schroeder 2013: 136.
7. Ibid.: 357.
8. See Belitz 2007: 109–123.
9. See Schroeder 2013: 359.
10. See Belitz 2007: 25–30.
11. See Schroeder 2013: 136.

and instructions on how the self-built clay structures were made and what tools had to be used. Some of this intuitive knowledge is transmitted by Bodelschwingh through rhymes that allow people who cannot read to memorize the building instructions. By means of drawings, a layperson can easily understand how things work and can identify with the actors and the community atmosphere that was involved in the development of the building process in a sense similar to that which Barthes found in the plates of the *Encyclopédie*.[12]

Therefore, Bodelschwingh's vignettes do not merely provide technical instructions, but show the actors involved in the manufacturing procedure, from beginning to end. And, in doing so, they show how clay is transformed from a natural object into a social object conditioned by technological development.

From Vignette to Video Tutorial

Nowadays the production of vignettes—like Bodelschwingh's–is apparently no longer carried out by those who wish to build and spread knowledge about architecture in clay. The rapid development of social networks that began in the twenty-first century, facilitated by a now global access to the Internet (which is increasingly faster and more capable of storing user data) has seen the video tutorial become the educational device par excellence. Easy to understand and easy to create, video tutorials (provided by platforms such as YouTube or Vimeo) are undoubtedly the most widely used contemporary tools for these purposes. However, the following question needs to be examined: does the video tutorial end the vignette or is the video tutorial an extension of the vignette?

A big difference concerns the medium itself. While the vignette is drawn with pen on paper, the video tutorial is usually shot with a camera and the recording is digitally post-produced to be eventually archived or published.

The vignette produces a concise view of the construction phases, but it's not for this reason (as we have seen) that it is devoid of detail. A detailed study of such illustrations (like the one attempted above on Bodelschwingh's *Lehmbrotebau*) reveals the possibility of an interpretative effort (and to some extent a constructivist approach) undertaken by the observer. As Barthes notes, the vignette focuses on the essence of making and its illustration is not a replica of a situation but rather the representation of a staged performance.[13] In short, the vignette offers a filtered perspective on the act of building and employs graphic fictions to contextualize the activity of building in its social and historical background.[14]

In contrast to the vignette, the video tutorial is a live documentation (supported by the presence of an audio track) of the construction process that gives the viewer the feeling of being there [Fig. 04]. The audience can follow a video tutorial step-by-step and try to imitate the gestures undertaken by the tutor. Compared to the vignette, the video tutorial implies a higher level of involvement, and at the same time reduces the interpretative effort required from the viewer. In short, it replaces the effort of *interpretation* (required by the vignette) with a demand for *imitation*. In this way, it fills in the semantic misunderstandings embedded in the vignette.

12. See Barthes 1980 [1972]: 33.
13. Ibid.
14. To this end, it is also important to refer to the work of André Leroi-Gourhan. See Leroi-Gourhan 1980 [1965]: 263.

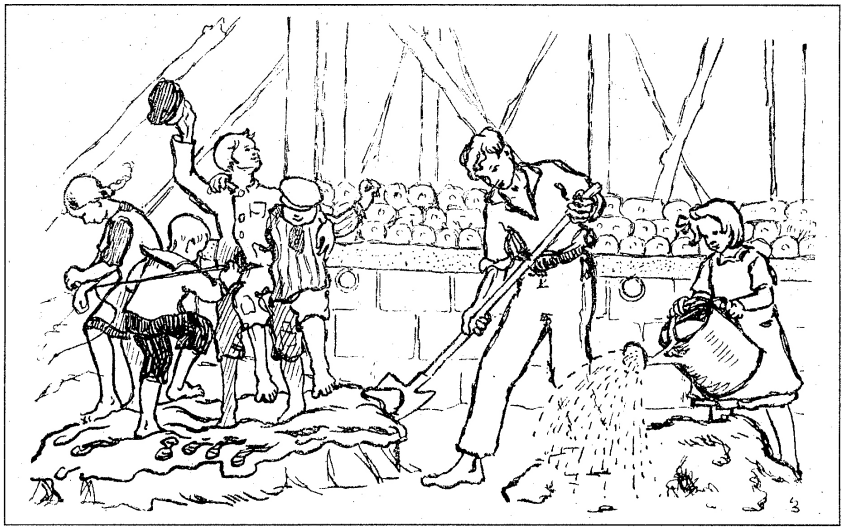

Fig.01. Preparation of the clay. Source: Gustav von Bodelschwingh, *Der Dünner Lehmbrotebau*, 1924.

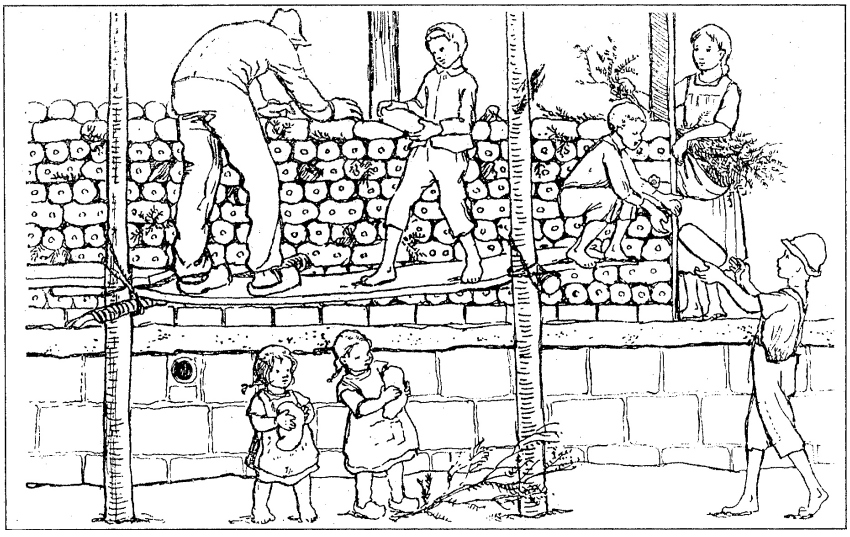

Fig.02. The raising of the clay wall. Source: Gustav von Bodelschwingh, *Der Dünner Lehmbrotebau*, 1924.

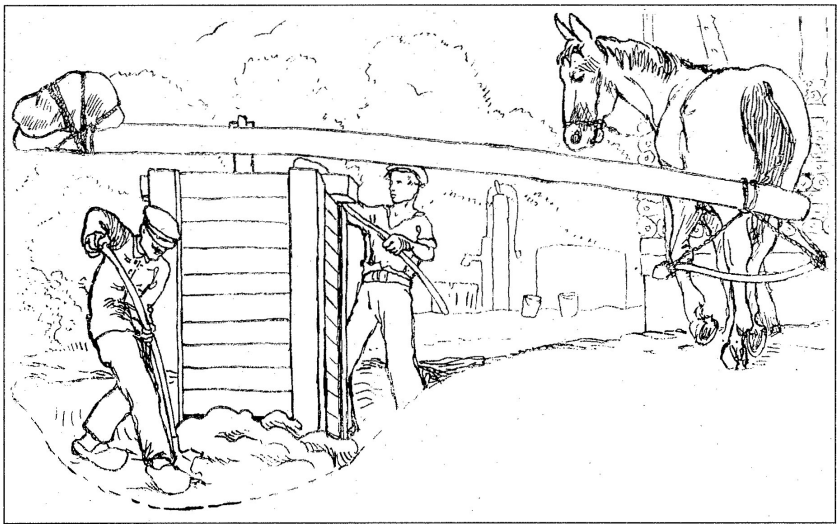

Fig.03. The clay mill. Source: Gustav von Bodelschwingh, *Der Dünner Lehmbrotebau*, 1924.



Fig. 04. Frames of a video tutorial on clay preparation. Video by Elke Geiger, Claudia Perez, Nicolas Pralong, *Fire and clay*, 2020.

Therefore, to answer the question posed at the beginning of this paragraph, we can state that the video tutorial complements, but does not replace, the vignette. Despite the fact that the video tutorial took precedence over the vignette, the vignette could still open up interesting scenarios for evolution and experimentation in the future.

In conclusion, we argue that both the vignette and the video tutorial share a focus on the act of building. They follow a trend of scientific dissemination in architecture, which began in the early nineteenth century with the publication of handbooks and can largely be traced back to Hatshepsut's illustration of clay procedures in Ancient Egypt.[15]

Both media give primacy to bodily knowledge, rather than focusing on the finished appearance of buildings.[16] This is how they help to define an epistemological approach of experimental architecture.

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The author would like to thank Mr. Arnt von Bodelschwingh of the *Heimstätte Dünne GmbH*, for his willingness to provide information and useful materials for the completion of this essay. The Bodelschwingh's *Heimstätte Dünne GmbH* is still operating today for the purpose of building as a social process under the motto: "*Menschen am Bauen aufbauen*" (Building People up through Building).

15. See Dethier 1982: 11.
16. See Marchard 2013.

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