Ste. Genevieve Library as a Criticism of Classicism

Kang, Tae-Woong

Assistant professor, Department of Architectural studies, College of Architecture at Dankook University

Abstract The purpose of this paper is to reconsider and revaluate Ste. Genevieve Library designed by Henri Labrouste as a criticism of Classicism. Considered as the epitome of the early structural Rationalism the modern historian tried to focus only on the iron structure of the library. Arguably, the structural concern was one of the ideas that the architect wanted to manifest in the library. As a rebel against a view of the Académie des Beaux-Art the notions of H. Labrouste were radical. He criticized an autistic Classicism with an echoing Claude Perrault's doubt about the myth of classical beauty. These radical ideas firstly showed in his report of the Grand Prix de Rome and must have been developed through several discussions for a novel: Notre-Dame de Paris by V. Hugo. 'Ceci tuera cela', one of the chapter of the novel, was generally known as the death of architecture due to the invention of the printing press around Renaissance period. We, however, consider that even though the historical background of the novel is the Gothic period the ideas, which was discussed with Labrouste, related to the death of architecture was not the architecture itself but classical architecture recomposed during Renaissance period. As the first design work the library must be reflected his ideas, which were developed, and manifested his criticism of the Classicism indirectly.

Keywords: Ste. Genevieve Library, Henri Labrouste, Claude Perralut, Victor Marie Hugo, Classicism

1. INTRODUCTION

Due to his design of the iron structure of Ste. Genevieve library (1838-1839), Henri Labrouste (1801- 1875) has been considered a pioneer of Modernism in architecture not only for his rational structure but also for his use of iron as a material of modernized production.[1] This building also has long been considered as one that epitomizes early Structural Rationalism. Most historians when discussing the early modern period merely focused on the use of iron structure. Somewhat simply, S. Giedion evaluated the building to be the chief task of engineers in the middle of the 19th century. Without any descriptions of the complicated contexts in which Labroute was working, Giedion believed the iron structure was separated from the eclectic wall because of anachronism.[2] This view was not only that of Giedion's but was also that of Pevsner, another modernist.[3] Recently, Neil Levine (1982) and David van Zanten (1987), however, claim that for the architect the structural expression of iron was not the major concern. They assert that there was more that needed to be told about the building

Corresponding Author : Kang, Tae-Woong, Assistant Professor
 Department of Architectural Studies, School of Architecture,
 Dankook University
 The 1st Engineering Bldg., Room-405, 126 Junckjeon-Dong, Suji-Gu,
 Yongin-Si, Gyeonggi-Do 448-701, Republic of Korea
 Tel : +82-10-9747-8883   e-mail : taewoong@me.com

than Giedion had suggested. Interestingly, H. Labrouste had an intimate connection to Victor-Marie Hugo (1802-1885), who was the author of 'Notre Dam de Paris'; Labrouste was involved in several discussions with the author for a chapter of the novel, named 'Ceci tuera cela' ('this will kill that'). After publishing the novel, H. Labrouste was commissioned to design the library. As the first major work, H. Labrouste arguably wanted to manifest the architectural discourses he had developed so far.

With this background, the purpose of this paper is to reconsider and revaluate the building as an essence of criticism of Classicism. For an argument, the paper starts with the debate provoked by the east façade of Louvre palace in the 17th century. The debate demonstrates Claude Perrault's doubt about unchangeable absoluteness: the myth of Classicism. A provocative architectural affair, which arose from the challenge to classical authority posed by young architects of the 19th century who echoed C. Perrault's doubt, will be discussed in the next chapter. The following chapter deals with the relationship between H. Labrouste, who was one of these young architects who challenged Classicism, and V. Hugo's novel. In addition, the chapter investigates the library in terms of both cultural and more practical viewpoints rather structural issue itself.

It can be deduced from the following discussion that Labrouste's library steers away not only from the Académie des Beaux-Arts' tradition but also from an engineering discourse, even though the structure is innovative, rather criticizes the Classicism being fossilized indirectly.

1.1 A definition of the term 'Classicism'

According to Oxford dictionary of architecture, by James Stevens Curl, Classicism means "the principles of Greek and Roman art and architecture, so classical architecture is derived from Antique

precedents that were respected as having some kind of authoritative excellence." However Colin St John Wilson(1995), a professor of university of Cambridge and architect, claimed that we have to distinguish Greek architecture from Roman architecture. The building in Greek period was intimately connected to their way of life and culture. Furthermore George Hersey(1998), architectural historian, speculates that their architectural style, Order, was derived from their ritual procedure and the mythical figures. Whereas Roman building erased the meaning of Greek and Roman architects accepted the Greek building as an example of form. As Curl mentioned above, Roman architect accepted Greek architecture as a system rather than a vestige of life. In the same token, Bertrand Jestaz (1996) asserts that Renaissance architecture was artificially created with limited sources. That's why Renaissance architects were concentrated on geometry as a way of creation. Because the term 'Classicism' was started to use from 1837 it meant a classical architecture of Renaissance. In this paper I will use the term 'Classicism' as a classical notion of Renaissance architecture. And also this paper follows Wilson's distinction.

2. A PRESAGE OF RELATIVITY

After the French Revolution in 1789, architecture in France was reduced to a more prosaic expression because the political situation affected architectural commissions.[4] The debate between rationalists and utilitarians was temporarily halted, to be taken up again when the condition had stabilized under Napoleon. From 1816 to 1839, Antoine-Chrysostome Quatremére de Quincy (1755-1849) was appointed the permanent secretary of the Académie and the École.[5] As a strict classicist and a trained sculptor, his ways of seeing and thinking about architecture were based on an anthropomorphic approach.[6] With respect to aesthetics, Quatremére De Quincy's ideas sympathize with Francois Blondel's character (caractére) theory with which a younger generation of architects disagreed in the 19th century. Conflict between Quatremére De Quincy and a younger generation of architect seems to return to the controversy between Claude Perrault (1618-1688) and Francois Blondel (1617-1686) in the 17th century over the concept of aesthetics.

2.1 The dispute over the concept of beauty of the 17th century
We can say that the east façade of the Louvre was the first epitome of the expression of fallacy of Classicism (Fig.1.).
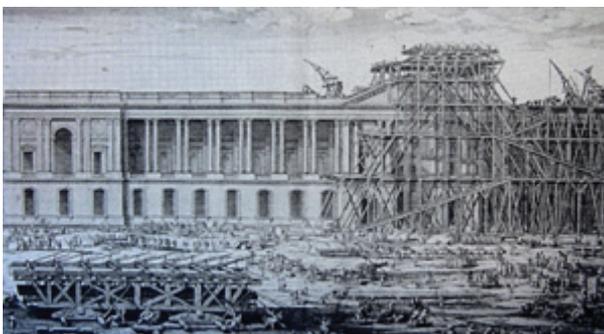
Figure 1. Building the east façade of the Louvre, 1674(Mallgrave 2009)

In order to represent political and economic power, Louis XIV decided to extend the Louvre Palace. The magnificent trabeated structure with its various coupled columns in the extended part

of the Palace was criticized severely. The contradiction is revealed through the architectural theory of Claude Perrault (1618-1688), who has been recognized as the designer of the extension.

As a trained doctor and scientist, Perrault's architectural ideas reflected modern scientific and analytic thought from which contemporary philosophy originated. He distinguished 'positive beauty' from 'arbitrary beauty'. He claimed that the essential criteria of positive beauty are related to properties of material, with its "precision and neatness of execution, size, sheer magnificence and symmetry."[7] On the other hand, 'arbitrary beauty' dwells in formal qualities, such as proportional considerations, form, order and shape those are related with a custom or culture and so on. Especially, he regarded architectural proportion, which is the most crucial element of architectural beauty so far, as the result of custom, constantly cultivated.[8] He believed that there were no fixed rules, no absolute beauty, and even no guide to its creation. In other words, 'arbitrary beauty' meant the hitherto conventional concept of beauty. This concept had been changed several times thus far. In Antoine Desgodet's book published in 1682, he confirmed Perrault's assertion with archaeological facts. Desgodet carefully measured forty-nine Roman antiquities and astonishingly, he could not find any evidence of consistency in proportion.[9] In this respect, it could be said that the beauty of Classicism cannot avoid becoming arbitrary because its formal laws, proportions and beauties have been determined by means of customs and culture. Therefore the beauty represents not divine beauty, but is the product of 'chance, fancy and custom.'[10] Overall, he claimed that there was no absolute beauty, but only relative beauty related to context.

Perrault's coupled columns, reinforced by iron bars, reflect the mechanical ideas of that time (Fig.2). According to Galileo's theory of limits, a structure formed of many small members is more efficient than a single large member. However, the use of doubled columns, which were the result of endeavoring to maintain the Classical proportion and rational structure, provoked criticism by Francois Blondel (1617-1686). Blondel claimed that Perrault's columns were structurally unstable and insufficient to bear the load of trabeation. This assertion was most probably based on the belief that ideal beauty was due to natural laws and vice versa.[11] Even though Blondel was a prominent mathematician and knew of scientific discussion at that time, such as Galileo's theory, he made the mistake of not distinguishing between physical laws and aesthetic laws, or as Perrault described it, between 'positive' and 'arbitrary'.
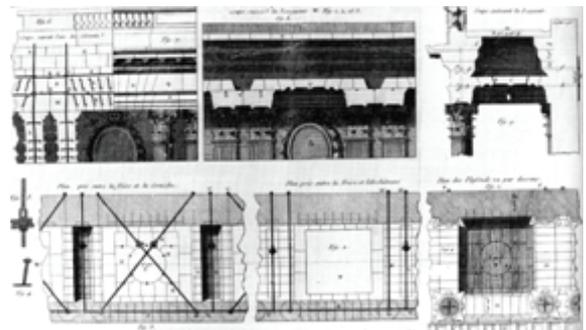

Figure 2. The construction of the flat vaults and ceiling of the Louvre colonnade. The iron frame of the building, with its bars and cross-ties, is plainly visible.

Despite basically holding more radical and progressive ideas, Perrault could not avoid the classical authority in which he had been educated so far. Paradoxically, the use of coupled columns and reinforcement with iron bars was being exploited to embody the absolute aesthetics, that of classical proportion. Even though Perrault recognized the discordance between physical matter and metaphysical matter, he could not escape the classical proportion. However, we should not fail to notice the crucial contribution made by Perrault of distinguishing custom from construction. Hitherto, Renaissance architects had believed that anything constructed by natural law, or proportion, was presented as absolute aesthetics and vice versa. However, according to Perrault's assertion, proportional and structural beauty should be distinguished in architecture. A classical beauty was derived not from physical perfection or a principle of nature, but was merely an issue of custom, supported by the education. For him a geometry related to visual thing was not positive but arbitrary, because of not related to a nature of materials.

2.2 The rebellious report of the 19th century

However, Perrault's assertion would not win many followers. The veiled contradiction in the debates between Perrault and Blondel arose from the discrepancy in the actual chronological period of Marco Antoine Laugier's 'primitive hut' (1713-1767) (Fig.3). Following Laugier's conviction, Quatremére De Quincy again emphasized the importance of the Orders and their absolute aesthetics, which was crumbled:

Figure 3. The primitive Hut. Frontispiece from second edition of the Essai sur l'Architecture, engraved by Ch. Eisen

"They are the fixed type of beauty and truth which, like nature, allow of variety but not change."[12]

Needless to say, these ideas were reflected in the curriculum of the Académie des Beaux-Arts; however the fissure since the 17th century was not completely covered within the curriculum.

Quatremére De Quincy's curriculum seems to have been accepted by his students, but his dogma could not veil the estrangement in Classical theory between the idealistic and material realities. His orthodox conservative ideas were not able to appeal to a younger generation of architects who already knew of the debates on beauty since the 17th century and were familiar with the two treatises by Jean-Baptiste Rondelet (1743-1829)[13] and Jean-Nicholas-Louis Durand (1760-1834)[14]. Standing against Quatremére De Quincy's; dogmatic doctrines was a group of students who had won the Grand Prix de Rome between 1823 and 1827: Félix Duban, Louis Duc, Léon Vaudoyer, Théodore Labrouste, Marie-Antoine Delannoy and Henri Labrouste, namely the Romanticists of 19th century French architecture[15]. Amongst them, H. Labrouste is the

most crucial. In his fourth-year report (envoi) in 1828, he rejected the idea of the evolutive formal refinement under which the three Doric temples at Paestum were classified hitherto (Fig.4). Conventionally, the chronological order of antiquities was arranged according to the increase in complexity of Order.[16] However, he placed antiquities in a different sequence. His arrangement was based not on a formal evolution and measured proportions but on the process of adaptation to environmental factors, such as vernacular
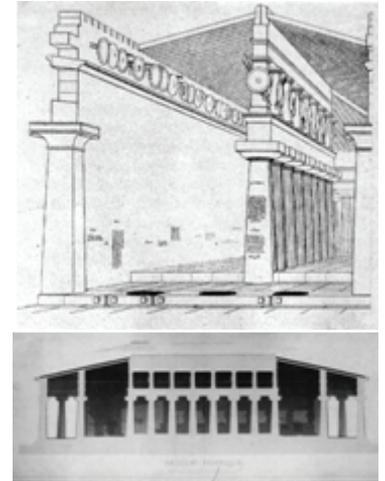
Figure 4. Reconstruction of the 'Basilica' at Paestum, 1892: Longitudinal section(above), an interior perspective(top)

material, culture and structural systems at that time. Furthermore, following this presupposition, he asserted that one of the buildings was not a temple, but an assembly hall for the people.[17] He considered that architecture was an object that presented not an ideal beauty but the reflection of the culture. These interpretations directly struck at the principle of the classical language of architecture. According to H. Labrouste, the architectural forms must have been adapted rather than evolved or developed, which was a conventional belief in the Académie des Beaux-Arts.

Even though Perrault's doubt about the beauty of Classicism was impetuously veiled the ideas influenced the rebels against Classicism to deny the notion of Classicism without cultural meanings.

3. THE LIBRARY

Because of his fourth year reports, which rebelled against Classicism, H. Labrouste did not receive any major projects for nearly a decade. His first major work began in 1838 when he was appointed as architect for the new library near the Ste. Geneviève church designed by Soufflot. However, in order to reveal H. Labrouste's ideas for the building, we should look back at the early period of the 1830s, when he returned from Rome after completing his research and the relationship between H. Labrouste and V. Hugo evolved.

3.1 Ceci tuera cela: 'this will kill that'.

'Notre-Dame de Paris' published in March of 1831 has been known as the book that triggered the Romantic Movement and also the Gothic revival in France in the 19th century. A year and a half later the eighth edition was published with an additional new chapter named 'Ceci tuera cela'. Archdeacon Claude Frollo's portentous phrase 'Ceci tuera cela' was generally known as the death of architecture due to the invention of the printing press.[18] There were several reasons[19] why the book was published without the chapter. The most probable reason might be that the book was related to a young architect who was rebelling against the Classical

authority. V. Hugo needed a young architect to help him prepare the chapter on the cathedral.

Figure 5. Notre-Dame de Paris, Circa 1881. Luc-Olivier Merson (1846–1920). Engraving. In Alfred Barbou, Victor Hugo et son temps (Paris: G. Charpentier, 1881): plate 25

Because of V. Hugo's pessimistic views of recent architectural conditions, Charles Robellin, an architect and a close friend of V. Hugo, found and recommended an architect with revolutionary views.[20] The architect was H. Labrouste. As mentioned in section 2.2, H. Labrouste was a controversial figure. He had strong doubts about the validity of the classical ideology as mentioned above.

He clearly distinguished positive principles from arbitrary notions, as had Perrault previously (See 2.1). His chronological ordering of the ancient buildings was influenced by cultural notions rather than classical grammer. This demonstrates that a building is nothing without context, of which the building is surrounded. Labrouste claimed that the Orders are meaningless outside of Greek culture.[21] These ideas probably convinced V. Hugo of H. Labrouste's pessimistic views toward Classicism through several meetings and discussions with him. 'Ceci tuera cela' ('this will kill that') is the phrase uttered by the monk, Archdeacon Claude Frollo, in the novel of the 15th century. However, at the time of writing the novel, the author had already witnessed the death of architecture. In the novel, V. Hugo claimed that architecture was starting to reveal a malady, which was due to the invention of the printing press of the 15th century. This was the beginning of the Renaissance. Being deprived of hegemony, the architecture of the Renaissance was no longer an expression not only of society but also of its culture but withdrew into ideals.[22] He seemed to criticize the architecture of the 19th century as no longer reflecting society and that it no longer tried to communicate.[23] For both H. Labrouste and V. Hugo, the Classicism had been fossilized since the 16th century and had become autistic. It had lost its crucial role as a 'social book'.[24] Even though 'Ceci tuera cela ('this will kill that') is written in the future tense, the real meaning of the expression is, arguably, "this killed that." Hugo devoted the chapter of the novel to the manifestation of the death of Classicism. Because it was his first commissioned project after long isolation from architectural practice, for H. Labrouste, Ste. Genevieve library was most probably an excellent opportunity to manifest the radical ideas he had developed so far.

3.2 The manifestation of anti-Classicism.

The site where the library was built belonged to part of the urban space characterized by the St. Geneviève church. The library faces south, laid out longitudinally from east to west. On first impression of the building, it appears to be a simple rectangle without classical elements such as pediments, porticos and columns (Fig.6 & Fig.7). The entrance rises in the middle of the

Figure 6. The Bibliothèque Ste-Geneviéve (1838-50), the southern façade(Bergodol 2000)

Figure 7. The Bibliothèque Ste-Geneviéve (1838-50), Interior view of the reading room

ground floor of the two-storied building. One can approach the main stair leading to a reading room on the first floor through the dark vestibule. The reading room is flanked by book-stacks for manuscripts, prints and drawings on the left and stacks for rare books on the right.[25] The three-quarter-turn stairs at the rear guide one up to the reading room surrounded by countless books. The whole upper space is covered by two barreled-vault iron structures supported by sixteen slender cast iron columns (Fig.7). The daylight from the arches spreads in all directions and the gas-lights dangling from the white terracotta panels lighten up the space day and night. The adoption of new technologies, the iron structures and gas-lights, create an efficient space for reading and study. Because the reading room is surrounded by forty-six arches, it can secure daylight on all four sides. For the cast iron columns, which have eight pedestals, four facing the east and the rest facing west, one can perceive the passage of time through the movements of the sun.[26]

Apart from the above general descriptions, we should not fail to notice what H. Labrouste wanted to say through the building. Here he clearly distinguishes a performative function, which is echoed building performances, from a cultural function, which is echoed cultural meanings. The building was thoroughly designed without a notion of Classicism.

3.2.1 A Performative function:

"But Labrouste's chief accomplishment in this library rests in the manner in which the iron construction is balanced in itself, so that it puts no stress on the walls."[27]

The only reason why Giedion accepted the eclectic building, Giedion claimed, was that the iron structure is cantilevered. This means that the structure never generates lateral forces so that the iron armature applies no thrust against the outer wall. Therefore, Giedion did not understand the reason why H. Labrouste designed
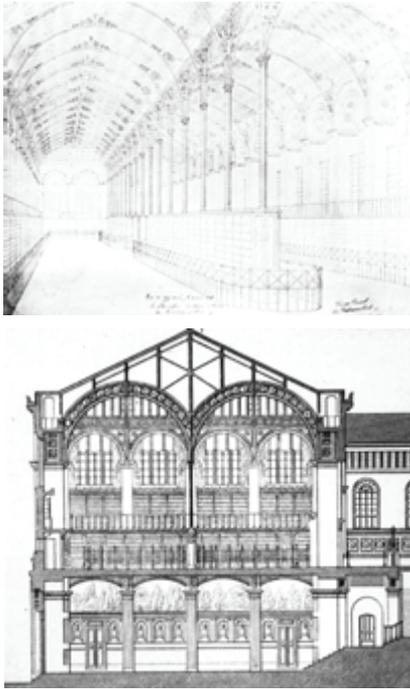

Figure 8. A perspective drawing of a double truss with gable, 1839(top), a transverse section with a double truss with barreled vaults, 1850 (above)

the massive masonry outer wall. For Giedion, it was not only useless but was also anachronistic. Yet we need to take note that there were three versions of the truss; a single truss, a double truss with gables, and a double truss with barreled vaults (Fig.8). According to Bergodol, in order to achieve a better recognition of space articulation, Labrouste adopted a double truss with sixteen slender iron shafts rather than the single shaft suggested in the first schematic design.[28] Yet both trusses still generate lateral forces and cannot be cantilevered. For some reason H. Labrouste changed the second version to the latter version: a double truss with barreled vaults. These trusses were finally cantilevered. Did he change the structure for structure's sake? Zanten denies this and argues that the reason why H. Labrouste decided to use barreled vaults was the need to diffuse the light for reading.[29] As the library stands on a flattened site and orients directly to the south, the most crucial problem to solve was the provision of proper light conditions. With the reflecting ceiling he applied another architectural devise: deep arcades with thin piers that would act as a sunscreen. In terms of light control, the barreled vaults reinforced by cantilevered arch trusses and the massive wall are intimately connected, whereas for both of these, it is a different matter in terms of structure: they are perfectly separated. Even though the trusses are tied by tiny corbels onto the walls, these are not enough to deliver lateral forces to the walls. The roll of the corbel is probably used to fasten the arch truss at their ends. Each of them merely bears their own weight.

Giedion criticizes this by suggesting that the "thick masonry outer walls"[30] veil the rational iron system. However, Labrouste's major concern is arguably not the revealing of the structure to the outside.

On the contrary he clearly separated the outer wall from inner structure for the roof. He assigned other roles to the walls: their cultural reflection.

3.2.2 A cultural function: reflecting the contexts

The library and its site are intimately connected in terms of the inner space and outer appearance. They substantially sympathize

Figure 9. The main entrance of the Bibliothèque Ste-Geneviéve

with the context. The shape of the site is a narrow and long rectangle, as mentioned previously. It faces the church of Ste-Geneviève by which the site is overwhelmed. While the lower storey is massive, the wall of the upper storey reflects the inside and outside stories as a membrane. The only ornaments of the lower storey are two embossed lamps on the flattened jambs of the entrance and a row of garlands below a horizontal stringcourse, by which the two storeys are strongly divided. The two lamps symbolize the unique function of the library (Fig.9). A ministerial decision was made in 1838 to open the library in the evening for students. Consequently, it needed to move from the attic of the Lycée Henri IV to the present place. The lamps imply that the library is given to people who lighten the darkness in terms of not only a physical but also a metaphorical representation of the enlightenment.[31] The swags on the lower storey echo those of Ste-Geneviève and visually connect with the two buildings by which the library is flanked: to the east the staff quarters of the library (1847-1848) and to the west the Collège Sainte-Barbe (1845-1847).[32]

Similarly to a membrane or printing paper, the upper storey directly reflects the inner function and the social state at that time. During the course of construction, the Revolution of February took place in 1848. Under the second Republic, the Panthéon was transformed into a temple of Humanity through a series of didactic murals by Paul Chenavard. As evidence of the victory of Reason, Foucault's pendulum, showing the rotation of the earth, was suspended under the dome of the Panthéon.[33] In this context, with the influence of Auguste Comte's philosophy, Positivism[34] H. Labrouste decided to inscribe the 810 names of the authors whose works belong in the library on the tables set in the arches. The authors are chronologically ordered from Moses to Berzelius, the Swedish chemist, symbolizing the progress of humanity from monotheism to scientism[35].

4. CONCLUSION

The library expresses the essence of H. Labrouste's architectural notions. Even though C. Perrault noticed the Classicism's fallacy he could not avoid the Classical authority. On the other hand, H. Labrouste revealed the criticism of architectural discourse of those times, which he discussed and developed with V. Hugo. V. Hugo claimed that the death of architecture was due to the

development of the printing technique. However, he believed that the fundamental reason was that the architecture of the 16th century was no longer an expression not only of society but also od culture, but that it withdrew into ideals with an abandonment of communication. Architecture without a connection to society must become extinct.

As Giedion mentioned, the iron trusses and the outer wall are structurally separated. They hardly bear their own weight. In respect to both an engineering viewpoint and a Classical viewpoint, the outer massive wall is worthless. From an engineering point of view, the first version of trusses was more practical than the last version in terms of spatial efficiency. The massive wall could be acceptable because of the lateral forces generated by the first truss. For spatial recognition and light diffusion, H. Labrouste changed the trusses and finally separated them from the wall. With the separation he assigned the independent walls with a cultural communication between the inside and outside contexts. This could be seen as a cultural membrane. He did not wish for the library to be isolated but to echo the social state at the time. In brief, similarly to the Greek edifice the building must be adapted, rather than developed, from reason.

The library stands on the site as a background rather than a foreground. On the one hand it presents the stories, which are housed inside, on the other hand it responds to the stories of the outside. The library is not an object but a backdrop reflecting the society, culture, and political aspirations. H. Labrouste wanted to be his building as a 'social book' rather than a building of taxidermied Classicism.

Notes

[1]   St. Genevieve library can be considered the first monumental building used an unveiled iron skeleton in the western architectural history. See Van Zanten, D. Designing Pries(London, The MIT Press, 1987) p.277, note 23

[2]   Giedion, S. Space, Time and Architecture, 4th ed.(Cambridge MA, Harvard University Press, 1997), pp.218-220

[3]   Pevsner, N. The Sources of Modern Architecture and Design (London, Thames and Hudson, 1968), p.15

[4]   Middelton, R. and Watkin, D. Neoclassical and 19Th Century Architecture (New York, Harry N. Abrams, Inc., Publisher, 1980), p. 207

[5]   Middleton, R. "Hittorff's polychrome campaign" In: Middleton, R. (ed.) The Beaux-arts and nineteenth-century French architecture. 1st MIT Press ed. (Cambridge MA., MIT Press, 1982), pp. 175-176

[6]   "Nature has provided sculpture with the means to determine relationships, the proportional system of the human body … controlling the slightest changes in proportion by fixed ratios between the parts … . Architecture, in its way, has set up similar system … so that a building becomes, almost, an organic body, subject to rules that serve as its basis and rationale … . The study of the human body in its various forms revealed to sculptors those differences dependent on age and type that inform the various modes established by Polycletus, and which one can see upheld in antique

statuary. Architecture has its parallel in the orders. There are three styles: the Doric expresses strength; the Ionic, grace; the Corinthian, combining the first two, expresses nobility and majesty.", A.-C. Quartremére de Quincy, 'Architecture', Encyclopédie méthodique, 3 vols, Paris 1788-1825, Vol. I, p. 119, re-cited Zanten, D. (1982) "Architectural polychromy: life in architecture", In: Middleton, R. (ed.) The Beaux-arts and nineteenth-century French architecture. 1st MIT Press ed., Cambridge MA. : MIT Press, p.197

[7]   Middelton, R. and Watkin, D. (1980), op. cit., p. 12

[8]   Herrmann, W. (1973) The theory of Claude Perrault. London: A. Zwemmer, pp. 31-32

[9]   Middelton, R. and Watkin, D. (1980), op. cit.

[10]   Ibid., p. 32

[11]   Rykwert, J. The first moderns : the architects of the eighteenth century (Cambridge MA. MIT Press, 1980), pp. 84-85

[12]   A.-C. Quartremére de Quincy, Recueil des notice lues dans les séances publiques de l'académie des Beaux-Arts, Paris 1834, p. 351, re-cited Ibid.

[13]   He opposed the concept that architecture must be 'an art of imitating nature', but based it on the principle of construction and systematic analysis in the book of 1802, 'Traité théorique et pratique de l'art de bâtir'

[14]   As a professor of the École Polytechnique he defined architecture as a logical system and further as a composition of elements, which are articulated in a grammatical way.

[15]   Levine, N.,(1982) " The book and the building: Hugo's theory of architecture and Labrouste's Bibliothèque Ste-Geneviéve", In: Middleton, R. (ed.) op. cit., p. 139

[16]   Following this, the temples at Paestum are placed in this order: the basilica (the temple of Hera I), is the oldest temple, the temple of Neptune (the temple of Hera II) is the intermediate and the temple of Ceres is the youngest. However, Labrouste placed the temple of Neptunes first, the temple of Ceres second and the basilica last.

[17]   R. Middleton said that these assumptions were partly right. Yet the importance of Labrouste's ideas are not in the historical facts but in the attempt to escape from the stereotype of style.

[18]   This phrase has been interpreted by architects and theorists according to their own perspectives. For instance, F. L. Wright interpreted 'ceci' as a symbol of the machine and 'cela' as an art. Ibid., pp. 140-141

[19]   Ibid., p. 145

[20]   Ibid., p. 146

[21]   Van Zanten, D. (1987) op.cit., p.13

[22]   Hugo, V.(2011) The Hunchback of Notre Dame, London, The Harper Press, pp. 228-229

[23]   Henry Frances Mallgrave (2009) Modern Architectural Theory: A historical survey,1673-1968, New York, Cambridge university Press , pp. 81-82

[24]   Anthony Vidler, 1993, representations 42, p.126

[25]   Levine, N.,(1982) op.cit. p. 155

[26]   Ibid., p. 169

[27]   Giedion, S. (1997) op.cit., p.221

28 Bergdoll, B. (2000) European architecture 1750-1890, New York: Oxford University Press, p. 181, Coincidently, the design of the central colonnade is similar to the assembly hall at Paestum, as reconstructed by H. Labrouste.

29 Van Zanten, D. (1987) op. cit., p. 98

30 Giedion, S. (1997) op. cit., p. 220

31 Levine, N. (1982) op. cit., p. 169

32 Middelton, R. and Watkin, D. (1980), op. cit., p. 230

33 Bergdoll, B. (2000) op. cit., pp. 183-184

34 IbId.

35 Middelton, R. and Watkin, D. (1980), op. cit., pp. 231-232

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