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## **Evolution of Victorian Architecture**

### **Intro:**

The nineteenth century in London is when industrialization occurred, thus, the way the city developed changed greatly. The changes came from what materials became available, the factories being built, and the demand for housing. The style of architecture during the nineteenth century is known as Victorian. Due to such a large number of migrants to London during the nineteenth century, the city is left with little choice but to expand rapidly, leading to the creation of flats instead of full houses.

### **Population Rise and Influence:**

During the nineteenth century, London grew and expanded rapidly. Within a ten-year time period more than 330,000 migrants entered the capital, “representing a staggering 17 percent of the total population” (Porter 2001, 205). At the start of the nineteenth century London’s population was approximately one million, by the end of the century the population grew to four and a half million (Porter 205). London had limited choices of how to respond to the increasing population so the city began expanding. Once London began to expand, suburbs developed that separated social classes. During the Victorian era, houses are built for middle class people but within the century, the design of housing is altered. The middle class, otherwise known as the working class, became the target market. Over-crowding and “high market value of land in central London with the low market value of many forms of labor” causes housing issues

in London (Hennock 1979). The working class has more stability than the lower class allowing builders less of a risk when building housing. With the immense demand for housing, Victorian builders began to produce middle and high-class homes but quickly the supply outnumbered the actual demand (Porter 2001, 208). When the demand for houses diminish because an excessive amount is built, busy suburbs turn into ghost towns. With the number of migrants looking for housing in the city, London's architecture and building strategy changed with the circumstances. The second half of the nineteenth century is when the lower-class housing becomes more important (Hennock 1979). Authorities cannot solve the housing problem for the lower class. Housing agencies and authorities are "unable to provide socially acceptable housing at a rent that the lower-paid, obliged to live in central London, could afford." (Hennock 1979). The housing problem involving the lower-class causes the city to develop flats.

### **Housing:**

Greater London has no real boundary, natural or man-made. Paris, had a wall surrounding the city so it could only expand so far, and many other major cities abut the ocean which forces expansion to stop. With the number of "migrants flooding into the capital, representing a staggering 17 percent of the total population" London had to expand (Porter 2001, 205). With rapid expansion beginning to occur, the most efficient way to house all the people is to alter the current style of housing. This period of expansion is where "flats" were developed. The building style changed from actual houses built for the middle-class, to multiple apartments within a single building built for the lower-class. Instead of large, multi-storied houses, flats were small, single story apartments stacked on top of one another. Flats though were typically made for the poor men and women of London and the working class would tend to live in multistoried houses that were much larger (Porter 2001, 29-31). With the help of the new railway, London was able

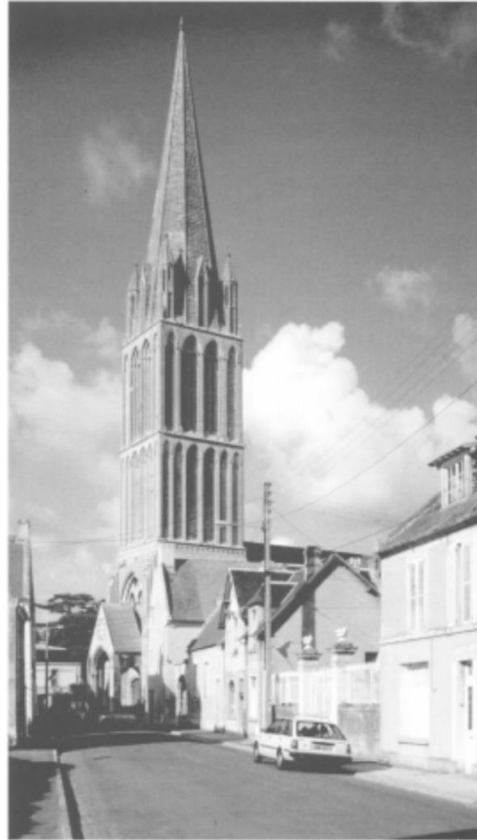
to expand quickly, and workers could live further away due to the ability to commute into the city. The finalization of the railway is also where commuting to work and the choice to live directly in the city or on the outskirts of the city became a possibility for people. The expansion of the city also indirectly altered what materials were used in construction during the Victorian Era. During expansion, the city finalized the railway system throughout London. The railway system held great value for efficiently moving people around the city, but it also had another purpose. The railway allowed builders to gain access to materials that in previous centuries could simply not be obtained. The introduction of the railway in London caused the architecture to become unique due to the importation of new material.

### **Design of Victoria Architecture:**

The definition of the style of Victorian Architecture in England during the nineteenth century is Gothic Revival (Reeve 2013). Gothic Revival was considered to be an exotic style but once the Parliament Building was reconstructed, the style became popular (Stamp 2003). The design of buildings focused on delicate detail on the exterior and interior, along with colored stone and brick. Later in the nineteenth century, the amount of elaborate detail decreased. For churches specifically, a style named “High Victorian Gothic” became not only popular in England but across most of Europe (Stamp 2003). This High Victorian Gothic style drew upon elements of medieval architectural design. The following figure gathered from Stamp’s article display the similarities between a Victorian church and a medieval church.



**Figure 3** John Loughborough Pearson, St. Augustine's Church, Kilburn Park, London, 1870-97



**Figure 4** Church, Bernières, Calvados. The steeple dates to the thirteenth century.

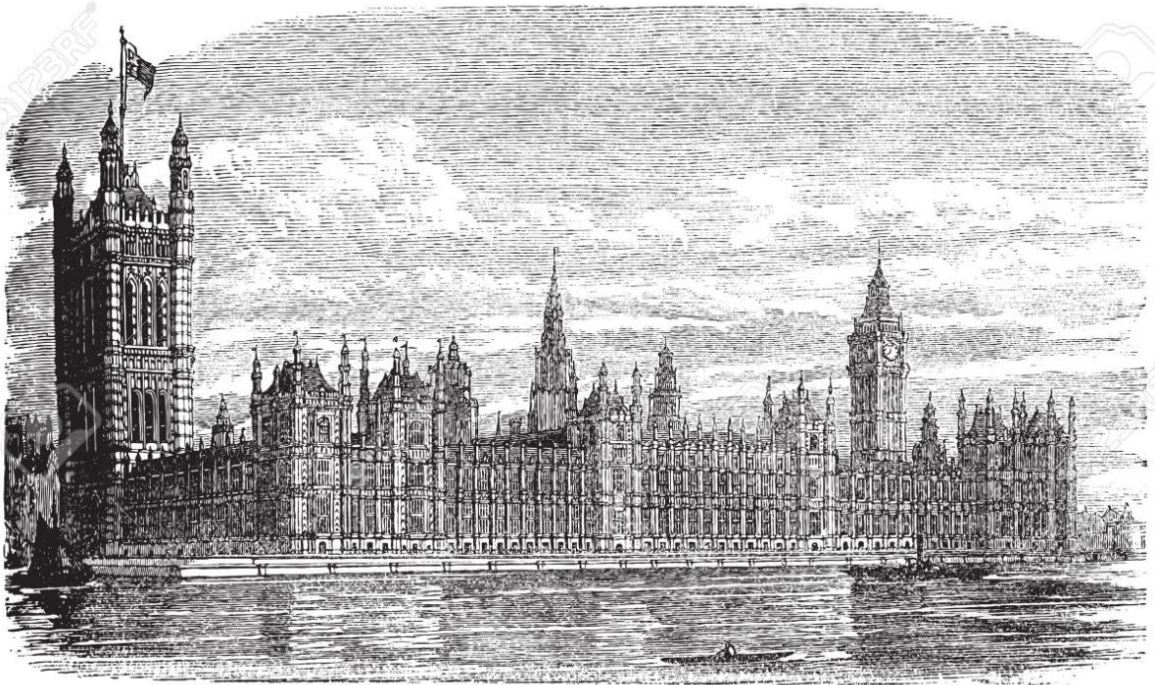
### **Figure One** *High Victorian Gothic*

Figure One offers a great set of images to compare the similarities in styles of steeples from the thirteenth century and one from the nineteenth century. The very high steeple coupled with point arches instead of rounded are key determinates to gothic style. The city of London holds many prominent Victorian buildings including the Palace of Westminster, and St. Pancras Station.

#### **Palace of Westminster:**

The Palace of Westminster is currently used as Britain's House of Parliament but was originally built to house the royal family. In 1834, the medieval palace burned down, thus an opportunity to reconstruct the building arose. A design competition was held to determine the look of the new building and Charles Barry won due to his creative design that integrated gothic

hints to partially match Westminster Abbey (Ballantyne 2012, 256). To help finish the design of the building, one of the greatest Victorian architects who is known for his role in the Gothic Revival, Augustus Pugin, joined the project. Pugin has written and published his own books on England's architecture. Together the two men chose to create high ceilings with beautiful detail inside and out. The central hall was designed exquisitely with a “soaring gothic space” that was the “point of arrival for members of the public” (Ballantyne 2012, 256). Pictured below is a drawing of the current Palace of Westminster. The building does resemble a great amount of Gothic style but is actually considered to be Victorian due to the construction, materials, and the period when the building was constructed (Gillin 2018).



**Figure Two** *Palace of Westminster*

Because of the fire destroying the original Westminster Palace, safety regulations for construction became prominent in the nineteenth century. The Elizabeth Tower, improperly known as “Big Ben” is an example of poor construction that puts the stability of the building at

risk. The new imperial measuring system led the “Houses of Parliament [to] physically embody two crucial forms of measurement” during construction (Gillen 2018). The imperial measuring system is passed in law in 1855 to ensure that measurements being taken would remain equal (Gillen 2018). The law is significant because the new House of Parliament is built only a few years earlier but used multiple means of measurement. Given that the whole city is industrializing, science and mathematics became significantly more important with construction in the nineteenth century.

### **St. Pancras Station:**

Transportation technology is important to London’s architecture because new stations are needed in the city. As London continued to modernize in the nineteenth century, the development and improvement of steam power for transportation grew popular. With steam powered transportation taking off, the construction of stations quickly followed. Because steam powered engines released an immense amount of smoke, the station needed a high ceiling in order to decrease the level of smoke passengers inhaled (Ballantyne). Pictured below, figure three displays the arched roof of the station in 1868.

**Figure Three** *St Pancras Station trainshed*



St Pancras Station trainshed, 1868 © *National Railway Museum/Science & Society  
Picture Library*

The roof is constructed of twenty-five arched trusses each weighing approximately fifty-five tons (“Construction St. Pancras”). Victorian architecture made use of red brick more than any other type of material. The exterior of St. Pancras Station is made of approximately 60 million red bricks (“Construction St. Pancras”). With the exterior having elegant brick design and hints of gothic structure, St. Pancras Station is one of the most identifiable Victorian pieces of architecture that London has. Pictured in Figure 3 is the exterior brick work of the station. St. Pancras Station is known as one of the most beautiful Victorian-Gothic pieces of architecture in the world.



**Figure Four** *London St. Pancras International Station*  
London St Pancras International Station-<https://www.flickr.com/photos/ell-r-brown/20745429359>

**Conclusion:**

The Victorian era within London introduced many opportunities for the city to architecturally be altered. Industrialization coupled with a rise in population forces London to change the style of housing to adapt to social classes. Along with housing, buildings such as the

House of Parliament also is presented the unfortunate opportunity to be reconstructed due to a fire. The Victorian style was named after the “Victorian” era, the time during which Queen Victoria reigned, and resembled medieval times with gothic designs. Architects working on the House of Parliament use gothic revival as the building design focus. The Victorian style, also known as gothic revival, developed when architects sought to reimplement medieval architecture into their work. St. Pancras Station was created due to industrialization and followed the popular Victorian architecture design creating a stunning railway station in London. Combining industrialization which allowed for better construction, and the revival of medieval architecture, buildings constructed in the Victorian era became unique to those before its time.



## Bibliography

- Ballantyne, Andrew. *Key Buildings from Prehistory to the Present: Plans, Sections and Elevations*. Laurence King, London, 2012.
- Gillin, Edward J. “Parliaments, Politics and People Seminar – The Victorian Palace of Science: Scientific Knowledge and the Building of Britain's Houses of Parliament.” *The History of Parliament*, 19 Apr. 2018, [thehistoryofparliament.wordpress.com/2018/05/08/parliaments-politics-and-people-seminar-the-victorian-palace-of-science-scientific-knowledge-and-the-building-of-britains-houses-of-parliament/](http://thehistoryofparliament.wordpress.com/2018/05/08/parliaments-politics-and-people-seminar-the-victorian-palace-of-science-scientific-knowledge-and-the-building-of-britains-houses-of-parliament/).
- Henock, E.P. “The Eternal Slum.” Review of *The Eternal Slum: Housing and Social Policy in Victorian London*. 1979, pp. 136–138.
- Porter, Roy. “‘The Contagion of Numbers’: The Building of the Victorian Capital.” *London, a Social History*, Harvard University Press, 2001.
- Reeve, Matthew M. “Dickie Bateman and the Gothicization of Old-Windsor: Gothic Architecture and Sexuality in the Circle of Horace Walpole.” *Architectural History*, vol. 56, 1 Jan. 2013, pp. 97–131.
- Stamp, Gavin. “High Victorian Gothic and the Architecture of Normandy.” *Journal of the Society of Architectural Historians*, vol. 62, no. 2, 2003, pp. 194–211.
- “Construction | St Pancras International.” *A Brief History of St Pancras | St Pancras International*, [spancras.com/history/construction](http://spancras.com/history/construction).