How has there been an effect on qualities of Surveillance over time in Institutional Architecture through the use of Panopticon Principles?

CC3 - Dissertation

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Contents:

Abstract

This study explores the idea of using architecture to surveillance people. Thorough secondary data research has been explored to contextualise primary data gathered from a series of visits, photographs, and sketch diagrams of the newly built Skinners' Academy building. The Skinners' Academy having 3 atriums in its main block is a relevant test bed to conduct primary research about surveillance considering its design.

In chronological order, this study will first cover the idea of a central space dating back to the Athenian Agora through to the Skinners' Academy. Secondly, it will reintroduce a critical theory, that is Panopticism, due to its pertinent role in surveillance using architecture. The last chapter will reflect on the findings from the Skinners' Academy visits and how previously mentioned surveillance qualities exist in the architecture of the school. These will also be represented in the form of sketches to reenact scenes between teachers and students that resulted from the architecture. The conclusion questions the incorporation of Panopticism into more institutional buildings and whether it should be considered when designing for two cohorts of different levels of hierarchy.

Introduction

At initial thought, there is a tendency to believe that surveillance is managed through a technology system, but this can be compensated with the correct design choices. The research gathered on Bentham and Panopticism shows a breach from this stereotype and investigates how architecture can correct human behaviour to result in a better environment.

In this study, I will be exploring the development of the 'central space', later evolving into what we now know as the atrium, through a historical investigation, analysing existing examples of architecture ranging from the Greek Agora to the Skinners' Academy. One of the main principles that will be unveiled and studied is Panopticism, developed by renowned philosopher Michel Foucault. The reconstruction of learning spaces has always been up for debate. Hence, the primary study of the Skinners' Academy building will be focusing on the incorporation of the atria in newly built learning spaces and how the atrium effects the surveillance qualities with the presence of the Panopticon principles.

In newly built institutional typologies, Foucault's conclusions seem to be less explicit through a passive surveillance system unlike his cynical interpretations of Jeremy Bentham's ideas, the founder of the Panopticon. This application is similar to the atria which is now becoming more popular in learning spaces, i.e. that of the chosen case study in the new Skinners' Academy building. This institution forms a good testing ground to examine and evaluate whether the architectural intention behind the atrium attains the controlled environment needed to conserve discipline and good behaviour.

My personal experiences of studying at the Skinners' Academy also points to how the architecture of a school can help with enhancing surveillance over students. A scenario in which I had caught the attention of a Vice Principal when I was sent out the classroom is why I have decided to investigate, with a fresh new perspective, the advantages of tge existing atrium had created and whether this is something to consider in future institutional design.

The Idea of a Central Space

The Agora

The term "agora" dates to the Hellenistic and Roman periods in Greece referring to a communal central space. However, the official Agora was established in the Mycenaean period (1700-1100 BCE). This space would usually be inhabited with a town or state market where the commoners would gather to run their errands, vote in elections, or view dramatic performances.[1] For this specific agora study, I will be focusing on the Athenian Agora plan to analyse the potential presence of a surveilled space (Figure 1). All temporary activities such as street markets would take place in the middle of the Agora, presumably of ease when it comes to access and visibility; and temporary structures would be in this space too. It is known that the "Ancient Agora" did not consist of an area with extensive facilities as archaeologists had discovered in their findings. The Athenian Agora that we know of today carries aspects mainly from the different rulings over the 5th and 6th century.[2]
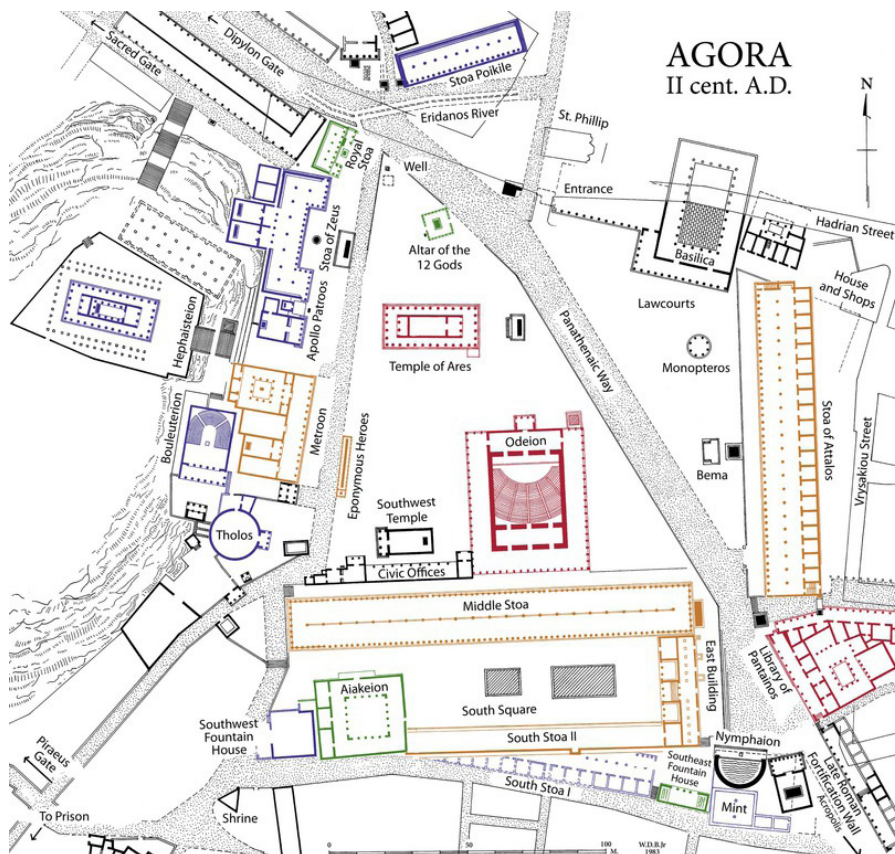

Figure 1 - Plan of the Athenian Agora excavations

1 'The Athenian Agora', The American School of Excavations in Athens, http://www.agathe.gr/overview/the_archaeological_site.html, (accessed Tuesday 16th November 2021)

2 'The Athenian Agora', The American School of Excavations in Athens, http://www.agathe.gr/overview/the_archaeological_site.html, (accessed Tuesday 16th November 2021)
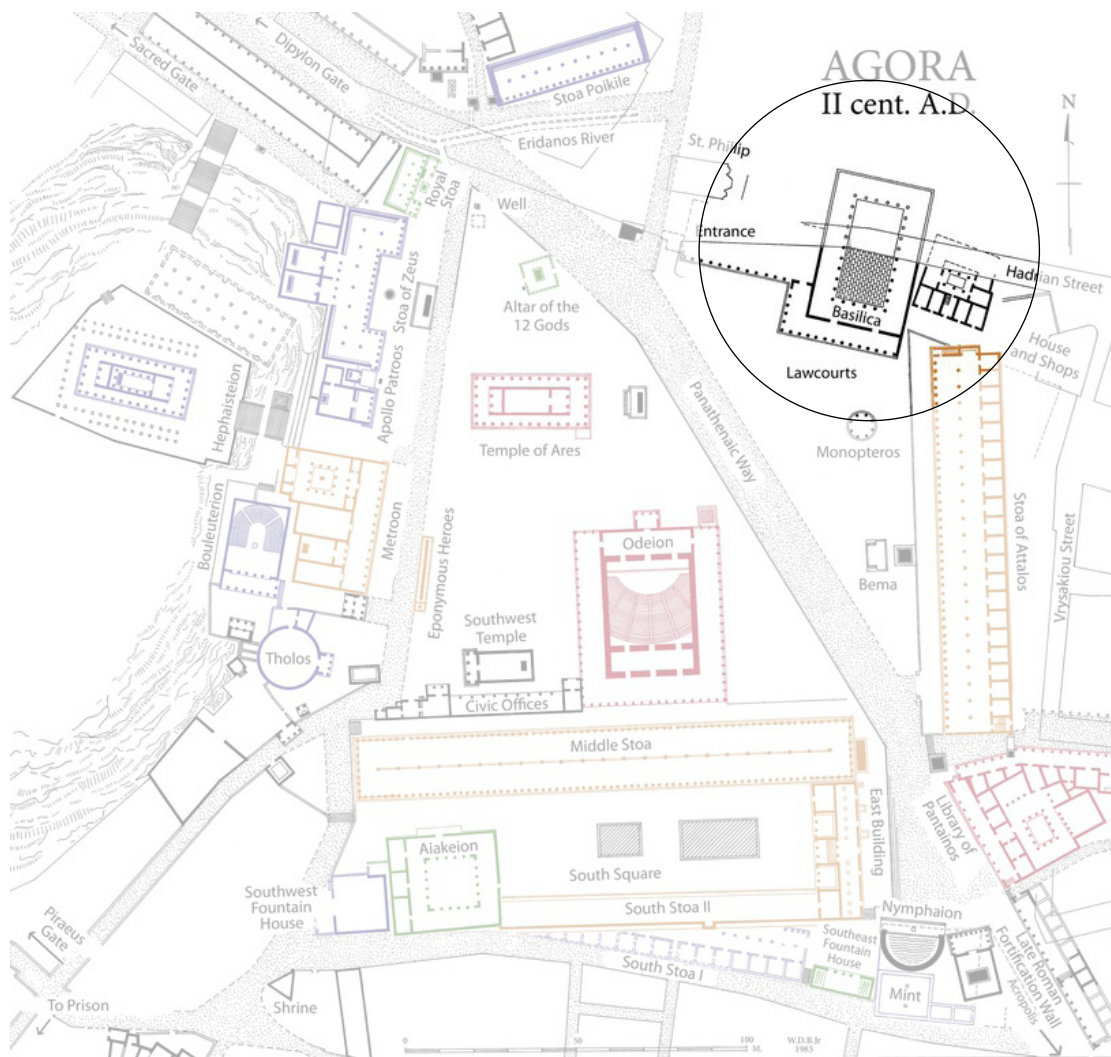
Figure 2 - Plan of the Athenian Agora excavations highlighting the lawcourts in the North-East corner

The Agora

The Lawcourts

The first establishment that suggests the idea of an institution, which has been uncovered amongst the ruins of the Agora, are the lawcourts (Figure 2). Besides the governmental label given to the building, extracts from a speech written by Antiphon for General Thucydides refer to inscriptions of the law copied onto sheets of papyrus and stone in view of the Agora across all the courts (Figure 3). In the context of the Agora, the main law written in the inscriptions would state consequences against any civilian planning or taking part in any act of tyranny against the people of Athens.[3] Dependent on the type of crime committed, some trials would also take place in an enclosed building in the Agora.[4] The presence of a live trial taking place in a covered building in the central Agora, gained public attention amongst the rest of the Athenians. Punishments during the Ancient Greek period would range from fines to exile depending on the crime committed.[5] Having a live trial happening in the most public space of the Agora which is viewable from any direction is a way of inflicting authority by the court members towards the commoners. This can encourage disciplined behaviour and enhances surveillance through a blatant method along with the constant appearance of the written law surrounded in the Agora. When witnessing a punishment for a certain action we can assume by using the theory of observational learning, which was later established under the social learning theory by Albert Bandura in the 20th century, they learn to not follow the same footsteps.[6] As a result of this, the Athenians with higher status can initiate control over the rest of the Agora by strategically having their live trials in the middle of the space.

Although the urban layout of the Agora may come across as the opposite to the Panopticon, the use of the main concepts of Panopticism are still present; spatial organisation, light and the 'unverified inspector'. The central marketplace is strategically placed in the middle which allows for a constant visibility of the plebeians, the commoners, for the patricians, the prestigious. This communal practice taking place in broad daylight provides an advantage when it comes to inspecting any potential illegal activity. In this case, the patricians take on the role of the 'unverified inspector' from the original Panopticon concept through their superior position to overlook the plebeians.

3 Homer A. Thompson and Richard E. Wycherley, The Agora of Athens, USA: The American School of Classical Studies at Athens, 1972, p. 1.
4 Thompson and Wycherley, The Agora of Athens, 1972, p. 19.
5 'Punishments in Ancient Greece', Ancient Greek Facts, http://ancientgreecefacts.com/punishments/, (accessed 30 December 2021).
6 Albert Bandura, Social Learning Theory, New York City: General Learning Press, 1971, p. 2-3.

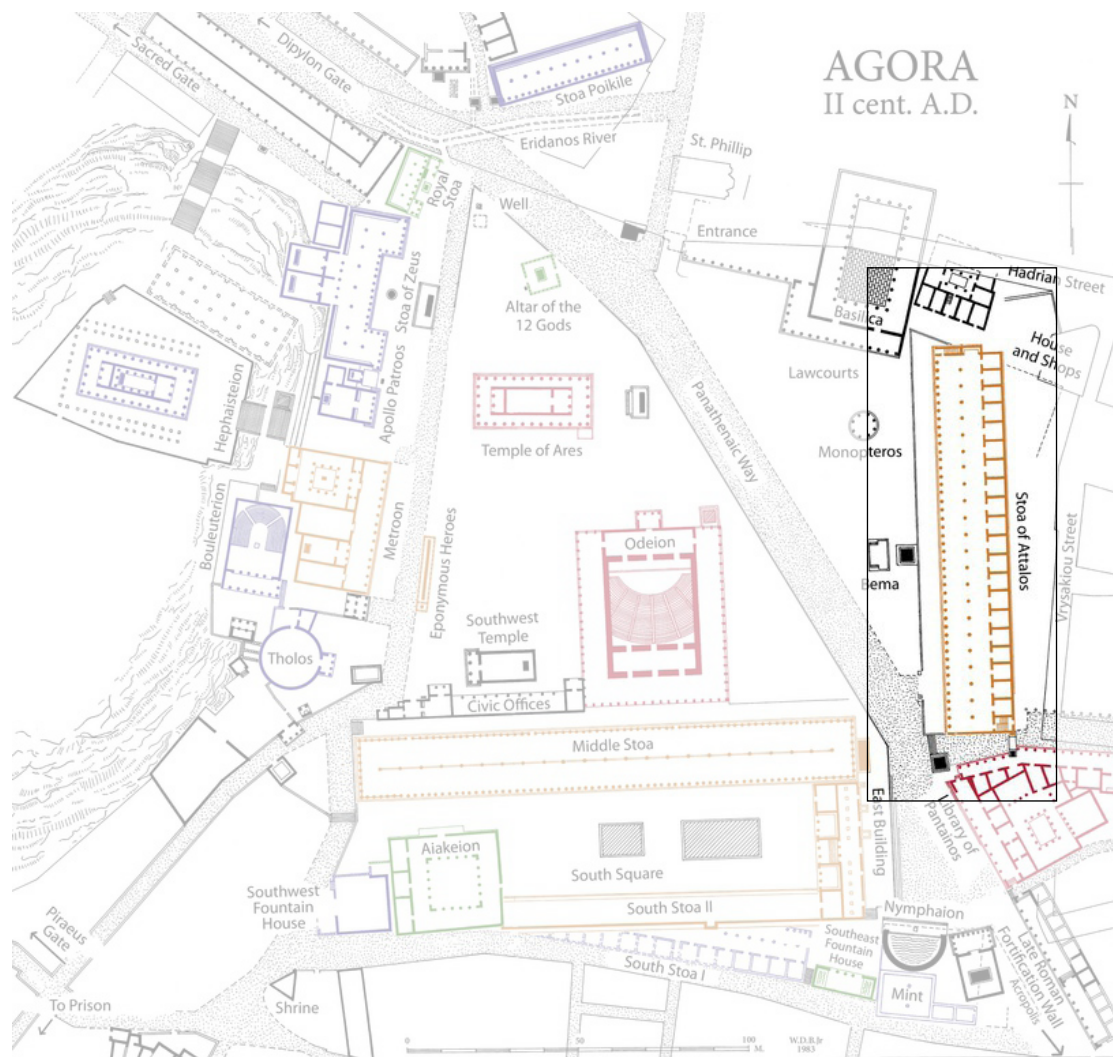*Figure 3 - Inscriptions of laws against tyranny found my archaeologists at the excavation site*

Figure 4 - Plan of the Athenian Agora excavations highlighting the 'Stoa of Attalos' on the East

The Agora

Stoa of Attalos

Besides the obvious surveillance infrastructure of the lawcourts, by the 2nd century there were new additions of stoas of great length in the Agora. The Stoa of Attalos was one of these and was built right next to the lawcourts nearing 116m in length and encapsulating the whole east side of the Agora (Figure 4). It has been described as "a background and setting for a large number of other monuments".[7] This suggests an idea of boundary and border especially due to its strategic right-angle placement to the pre-existing Middle Stoa. These stoas define where the Agora starts and ends and helps divide the land into more controllable segments for surveillance.

Additionally, it would be harder to define the central space that the people of Athens would occupy without the introduction of the stoas, as the defining thresholds they create would be blurred and wouldn't be as explicit. The upper floor consisting of an open plan terrace would be usable for viewing into the Agora (Figure 5). This is where the layout of the Agora in relation to the stoas start to hint at Panopticon principles. The steps and the terrace of the stoa "offer fine vantage points" over the Agora meaning the stoas facilitate surveillance from higher levels (Figure 6).[8]

This vulnerability created upon the plebeians by a building so close to the lawcourts would, in theory, deter the people of Athens from committing unlawful acts. This relates back to the idea of the 'unverified inspector' but rather than the existence being in the middle of the Agora, the inspector circles round the open space.

7 Thompson and Wycherley, The Agora of Athens, 1972, p.g 1.
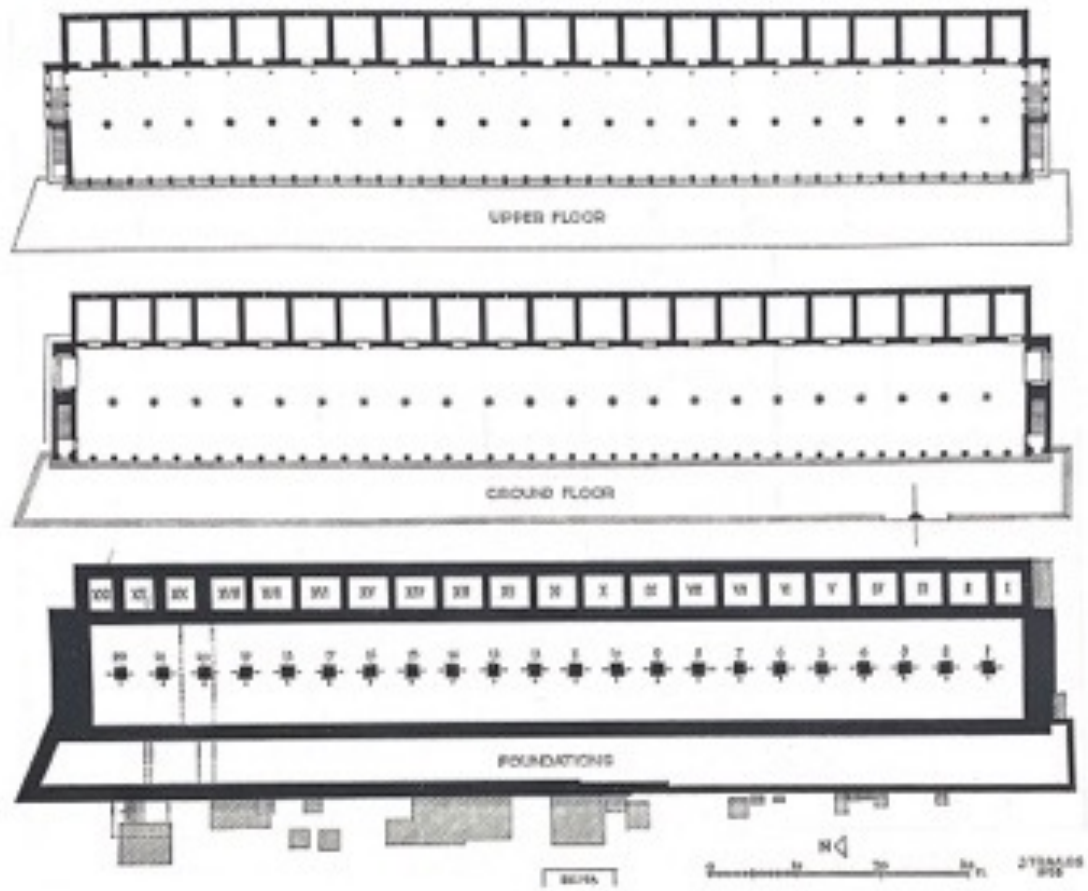8 Thompson and Wycherley, The Agora of Athens, 1972, p. 107.

Figure 5 - Foundation, Ground and Upper floor plans of the 'Stoa of Attalos'

Figure 6 - Rebuilt 'Stoa of Attalos' which demonstrates the overlooking terraces that provide surveillance over the central space
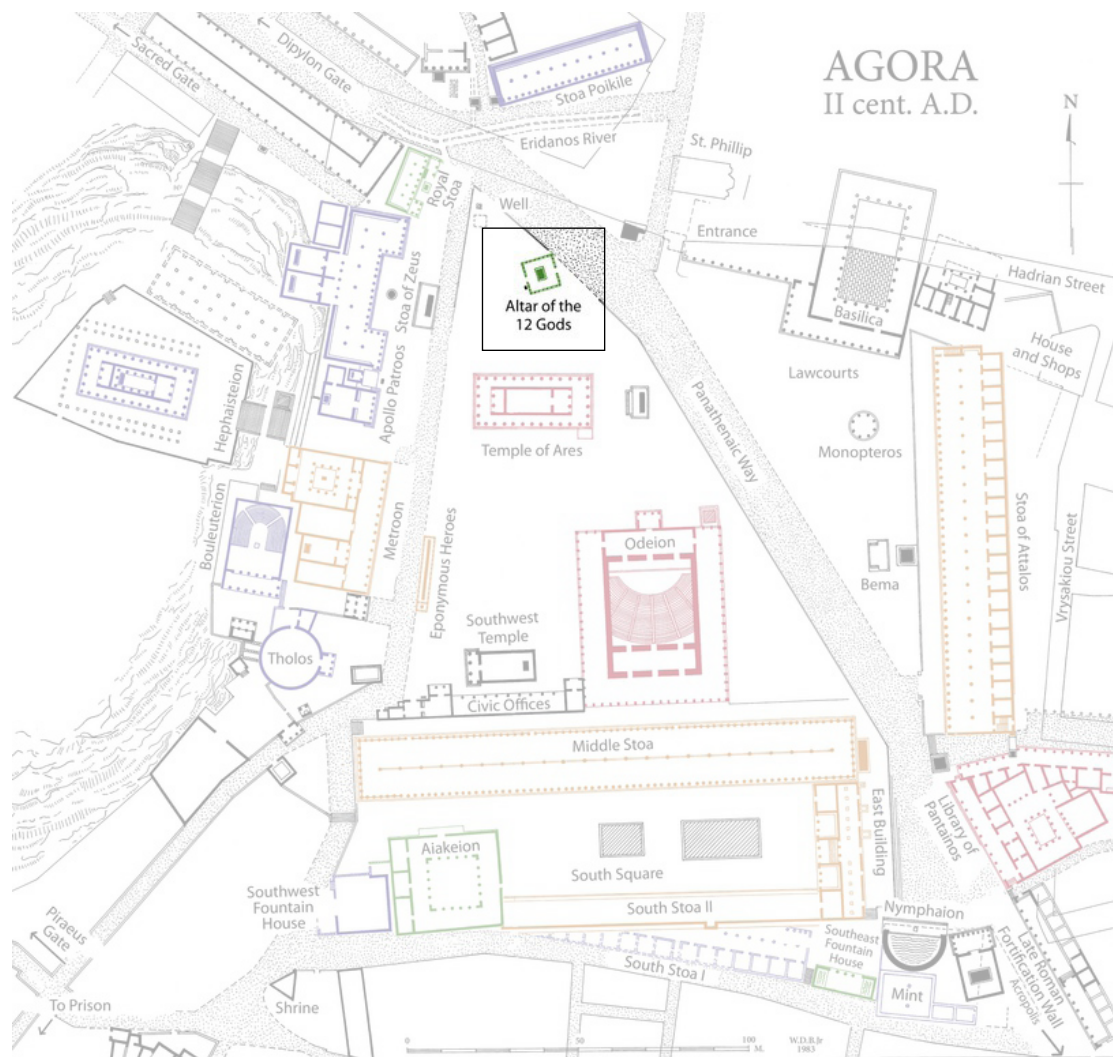
Figure 7 - Plan of the Athenian Agora excavations highlighting the 'Altar of the Twelve Gods' in the close-centre

The Agora

Altar of the Twelve Gods

The Athenians took pride in their past achievements and to commemorate their strengths many shrines and temples dedicated to Olympian Gods and Rulers were built. One of these monuments lies within the central Agora and is given the name the 'Altar of the Twelve Gods' (Figure 7). It has yet to be discovered who the twelve are and it is presumed that the twelve refer to the 12 Olympian Gods. Evidence from historical accounts in transcripts suggest that sacrifices were made as a way of repenting to the Gods at the altar. Its close-to-centre placement in the Agora consequently meant that when in the act of making a sacrifice it would "draw public attention to [the repenting Athenians] wrong doings".[9]

The concept of not knowing who is watching you and when you are being watched is present here too and just like the marketplace, the altar is in the centre. The altar has a short wall bordering it meaning it would only take a small effort to spot the presence of a repenting Athenian (Figure 8). The collection of God temples and altars, such as the Temple of Ares and Stoa of Zeus, create a sense of dominance over the people within the Agora too since these places within the city were holy to the people.

In conclusion, the Agora points at many fundamental surveillance principles that are later defined by Jeremy Bentham in his proposal of the Panopticon. The idea of a central space, light and the 'unverified inspector' are all present in the Agora and are used to the advantage of the patricians to establish authority. However, the Agora had a communal function, so the Panopticon principles were more diluted and impacted people in a more subtle, implicit way on a societal level. Later architectural examples of institutions, such as The Larkin Building, embody the Panopticon principles more explicitly and have a more direct impact on their users' behaviour, influencing them to act a certain way or deterring them from certain behaviours altogether.

9 Thompson and Wycherley, The Agora of Athens, 1972, p. 135.
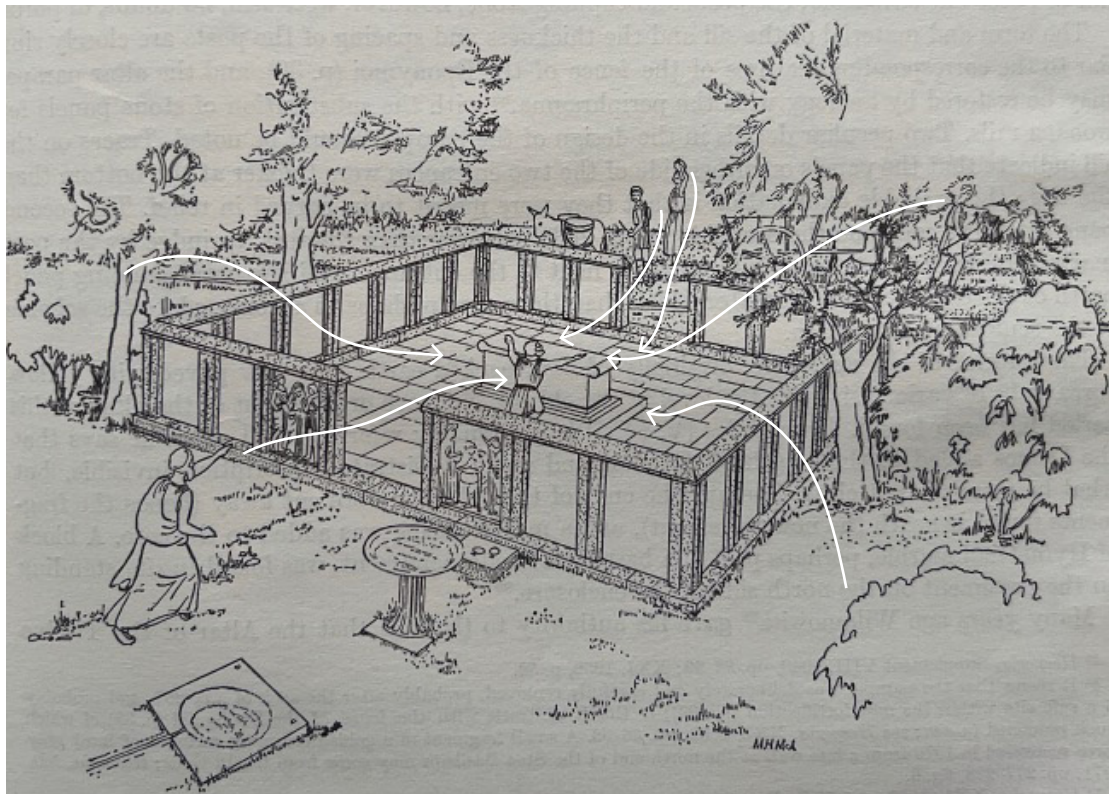
Figure 8 – Sketch of the 'Altar of the Twelve Gods' reimagining the space with data from excavations which shows the vulnerability whilst being in the altar

Introduction of the Panopticon

At the end of the 17th century, social theorist, philosopher, and reformist Jeremy Bentham developed the idea of the Panopticon. Due to its radical nature, Bentham's idea of applying the Panopticon to a prison typology accompanied with his thorough research was not enough to have it built.

One of the main purposes of the Panopticon was to "safeguard the interests of criminals", essentially a method of prison reform. His interest in doing so came from earlier on in his life when he was debating on the legal profession, but he soon came to the realisation that the government and law were skewed to benefit the rich and implicitly go against the public will. Therefore, he wanted to apply a true framework in favour of justice and believed that the interests of the criminal were always forgotten. He claimed that the criminal's interest should be treated similarly as it would be towards a law-abiding member of society with only the difference of facing a sacrifice but, in the end, the delinquent's interests should never be completely disregarded.[10]

Although his proposal was never actually built, in his written recordings, Bentham had considered every inch of the idea and the main aspects drawn from his research which suggest enriching the purpose of the Panopticon were, light, spatial organisation of the cells and the idea of "seeing without being seen".[11]

10 Janet Semple, Bentham's Prison: A Study of the Panopticon Penitentiary, Oxford Scholarship Online, 2011, p. 1-2.
11 'Jeremy Bentham and the Panopticon Prison', Criminology Web, https://criminologyweb.com/jeremy-bentham-panopticon/#Prison_Architecture, (accessed 2 January 2022).

Panopticon

Light

What Bentham had called the "inspector's lodge" would have visibility of all the prison cells that circled around since it was in the middle of the Panopticon prison (Figure 9). Perpendicular to the side of the iron grating would be two large windows which allows light to enter the prison cell. This is uncommon since prisons are designed with the tendency of allowing minimal light into cells as signs of the outside world are deemed as a luxury. However, the light entering through these windows create a shadow of all inmates, some more harsh than others, during different times of the day. This allows the guard to base his inspections on not only the physical body of an inmate but his/her shadow too. It is another practical way of examining a criminal's actions whilst still being in the lodge and the helpless situation is apparent to the inmates too. Prisoners know that their actions are being mirrored onto the ground, meaning chances of getting caught going against any prison rules are more likely to occur or to gain attention from the guards.

So, the strategic use of light gives the guards a greater advantage over the inmates in terms of surveillance and sustaining order and harmony in the prison. The institutional system is much more evident and explicit here than it is in the communal space of the Agora. The inferior mindset is instigated onto the inmates by the superior, being the prison workers, by creating a vulnerable environment whilst also reforming them back into society. This could be a possible interpretation of what Bentham was referring to when he spoke of the delinquents facing some sacrifices in prison because of their actions but not completely disregarding their needs. They still get to experience a well-lit room with large windows, but the space is limited.
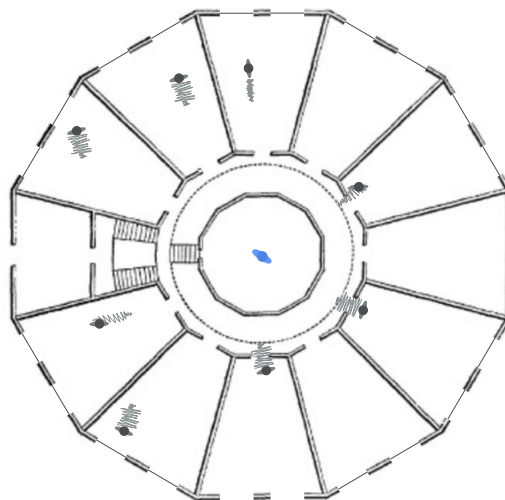

Figure 9 - Ground Floor Plan of the Panopticon Prison which demonstrates the individual cells monitored by the guard's tower and the shadows created by the perpendicular windows on the outer wall of the cells (includes author annotations)

Panopticon

Spatial Organisation

The striking choice by Bentham is that he chose a circular building for the design of the Panopticon prison with the 'inspector's lodge' in the middle. For the guards, it would only be a matter of turning round every so often to check on the other half of the circle for any suspicious behaviour. The clever placement of the cells in relation to the guards meant that only a handful of guards are needed for a completely supervised environment instead of the usual duty officers walking rounds to cover every crevice of the building. Also, the design of the Panopticon eliminates corridors and works with an open plan between the guard's tower and inmate cells which makes the labour of inspecting everyone much more efficient and simpler.

Another interest of the inmates that is given up once placed in the Panopticon prison is communication. The cells are partitioned by thick walls and to stop any conversations happening between inmates the wall between the cells continues a few feet further (Figure 10). This discontinues possibilities of partnership between prisoners for any illegal planning. Not only is verbal communication disrupted, but physical communication is also minimised between neighbouring cells. At most, inmates in cells across from each other would be visible to one another although, the tower would block a lot of the view between either side of the Panopticon. This is a controlling mechanism created by the architecture of the prison that reduces the need for guards to walk around reminding inmates to not be talking to each other. The extended wall between cells already gives off the impression to the prisoners that communicating amongst themselves shouldn't be happening; It acts as a reminder to everyone that talking to each other is against the rules.

In the context of the Agora, the authoritative buildings are not placed exactly in the form of a circle but someone's presence in the middle is able to be viewed from all of them and vice versa. They both share the idea of being able to witness all surrounding spaces from a central perspective with minimal movement. Similarly, there is an idea of confining spaces to make them more controllable. In the Agora, the placement of the stoas and authority buildings define a certain space which is where the public are concentrated in, and the Panopticon confines space on an individual level.
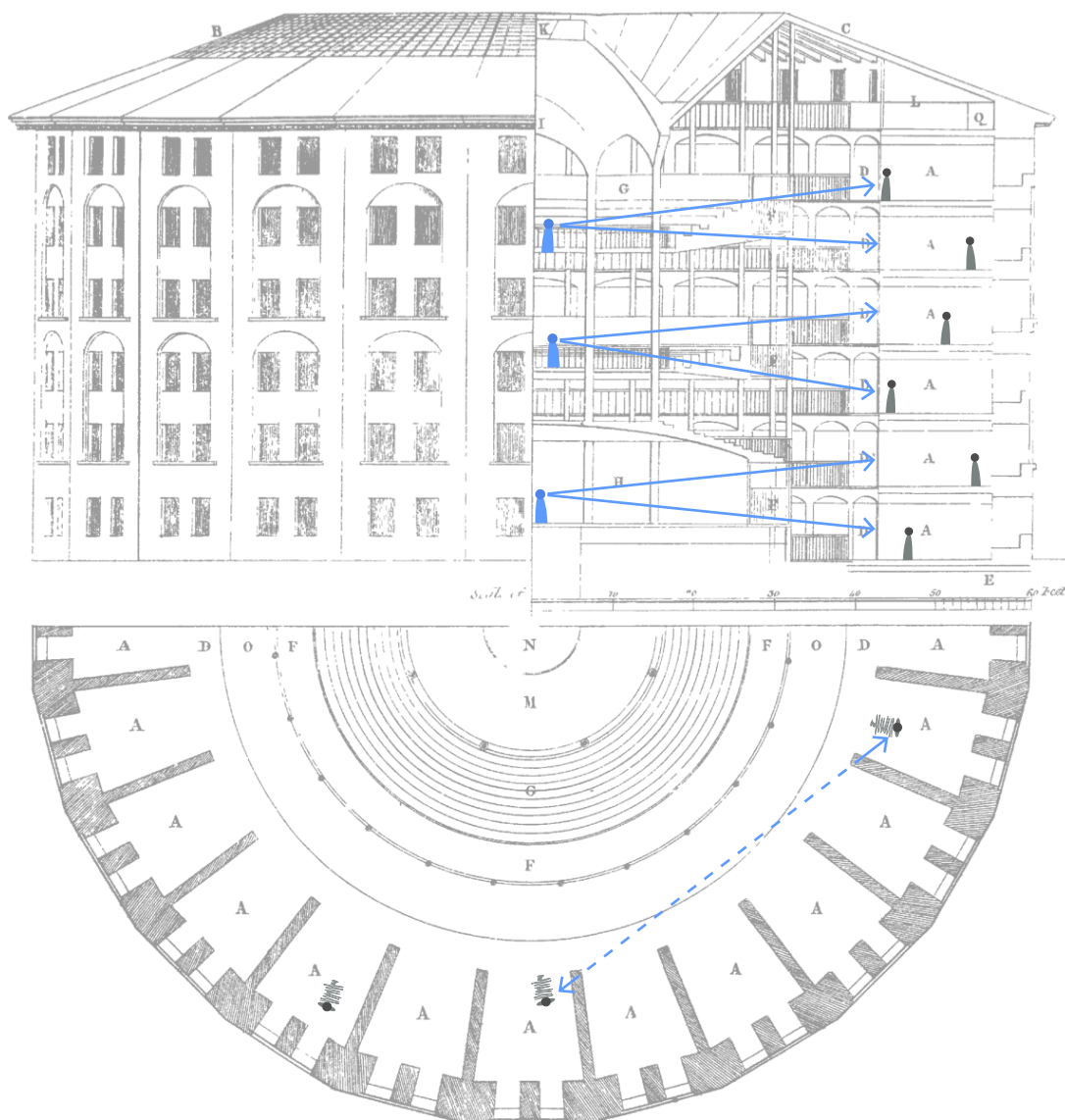
Figure 10 - Unfinished Section sketch of the first Panopticon Prison that had plans of being built (includes author annotations); Sketch Plan showing the disruption of view between inmates

Panopticon

Seeing Without being Seen

The idea of the 'unverified inspector' originates from the secrecy created between the guards and the inmates. The guard tower was designed with windows that were accompanied by blinds. Bentham had planned for the guards to use the blinds to cause confusion amongst the inmates on whether they were being watched. This is where the phrase, "seeing without being seen" was developed. The inmates cannot be sure if the guards are looking in their direction if the blinds are partially down as their view of the guards are disrupted however, the guards are still able to peer through to observe them. This meant that the prisoners would never be sure if they were being looked at and consequently would become less likely to initiate any signs of breaking out. Bentham was extremely confident that he claimed that "not a drop of forbidden liquor can be either drunk in the house, or so much as introduced into it, without being seen." [8]

We have seen this idea of seeing without being seen in the context of the Agora. When analysing the placement of the authoritative buildings, such as the 'Stoa of Attalos' and the 'Altar of the Twelve Gods', the exposure whilst being in or in view of these structures naturally raised the question of being caught repenting for an act of deviance or the deviance itself. The uncertainty of being watched is carried over in the Panopticon due to the lack of visibility of the guards.

12 'Jeremy Bentham and the Panopticon Prison', Criminology Web, https://criminologyweb.com/jeremy-bentham-panopticon/#Prison_Architecture, (accessed 2 January 2022).

The Larkin Building

The Larkin Company

The Larkin Company was a soap manufacturer as well as a mail-order business established in 1875. The company's advancements in the soap and mailing industry were fed by the social and economic changes that were taking place in America as a result of the Civil War. The development of manufacturing techniques in the mid 19th century made mass-producing soap cheaper and more feasible for commoners. Thus, the company had taken advantage of the nationwide progression being made. Soon after, U.S. mailing operatives gained attention for being the new method of transporting goods and the revolution for communicating between cities, so the company expanded into the mail service in 1880.[13]

In the early 20th century, the Larkin company's growing success in Chicago, America led to their decision to expand their works and were on the lookouts to commission an architect for their new administrative building. Darwin Martin, a successful businessman at the Larkin Company, received a letter from his brother, William Martin vouching for an architect who went by the name of Frank Lloyd Wright for the new building. William's recommendation of Wright to Darwin was followed by an invitation to "make tentative sketches for a new administrative building" which later led to him being signed.[14]

At this point of his architectural journey, Frank Lloyd Wright had worked under the company of Dankmar Adler and Louis Sullivan for over 5 years. These two names were recognised as a part of the leading members of the renowned Chicago School, so they had gained a reputation amongst clients which also helped Wright with gaining the commission.[15] In the past, Wright's designs would carry resemblances from his senior colleagues which he had worked with. This is pertinent to the initial design sketches of the new administrative building because it was Wright's first experimentation that strayed away from Sullivan's tall-building formula (Figure 11).[16]

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13 Jack Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, Massachusetts: The MIT Press, 1990, p. 10.
14 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 5.
15 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 3.
16 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 21.

Figure 11 - Exterior View of the Larkin Building after completion

Panopticism in the Larkin Building

Light

The final design of the main annex block of the Larkin Building had shifted the staircases to the four corners of the building. Looking at the potential precedents he may have been influenced by - Adler, Sullivan, and the Chicago School - this seemed like uncommon practice for architects. However, the decision of moving all stairs and lifts to the corners of the building, gave, what Wright called the "light-court", a new clarity to the atrium (Figure 12).[17] This mature design approach would stop blocking the way of valuable daylight entering the building. The atrium was common practice in American office buildings in the 19th century due to the non-existent invention of artificial lighting. This meant architects had to enforce ways of manoeuvring natural light into office spaces. What makes Wright's atria different to other office buildings was that there were no disruptions made by any circulation. An example of what could be called a questionable design choice in comparison to the Larkin building is the Bradbury Building in Los Angeles built in 1893 which showcases stairs placed within the central space (Figure 13). By moving stairs and elevators away from the atrium, more light can travel into the office spaces, therefore the Larkin Building would have better lighting qualities spread across during the day (Figure 14).

The deliberate enhancement of light qualities in the building design will naturally help with monitoring the workers from above which is where the authoritative roles of the company were located. All the executive workers under the Larkin company were situated on the "entire floor below the skylight" which refers to the top floor.[18] This institutional building evidently carries many Panopticism qualities. The well-lit main block allows the directors of the Larkin Company to monitor their employees throughout the day and notice anyone who may be slacking or causing any inconveniences to other workers.
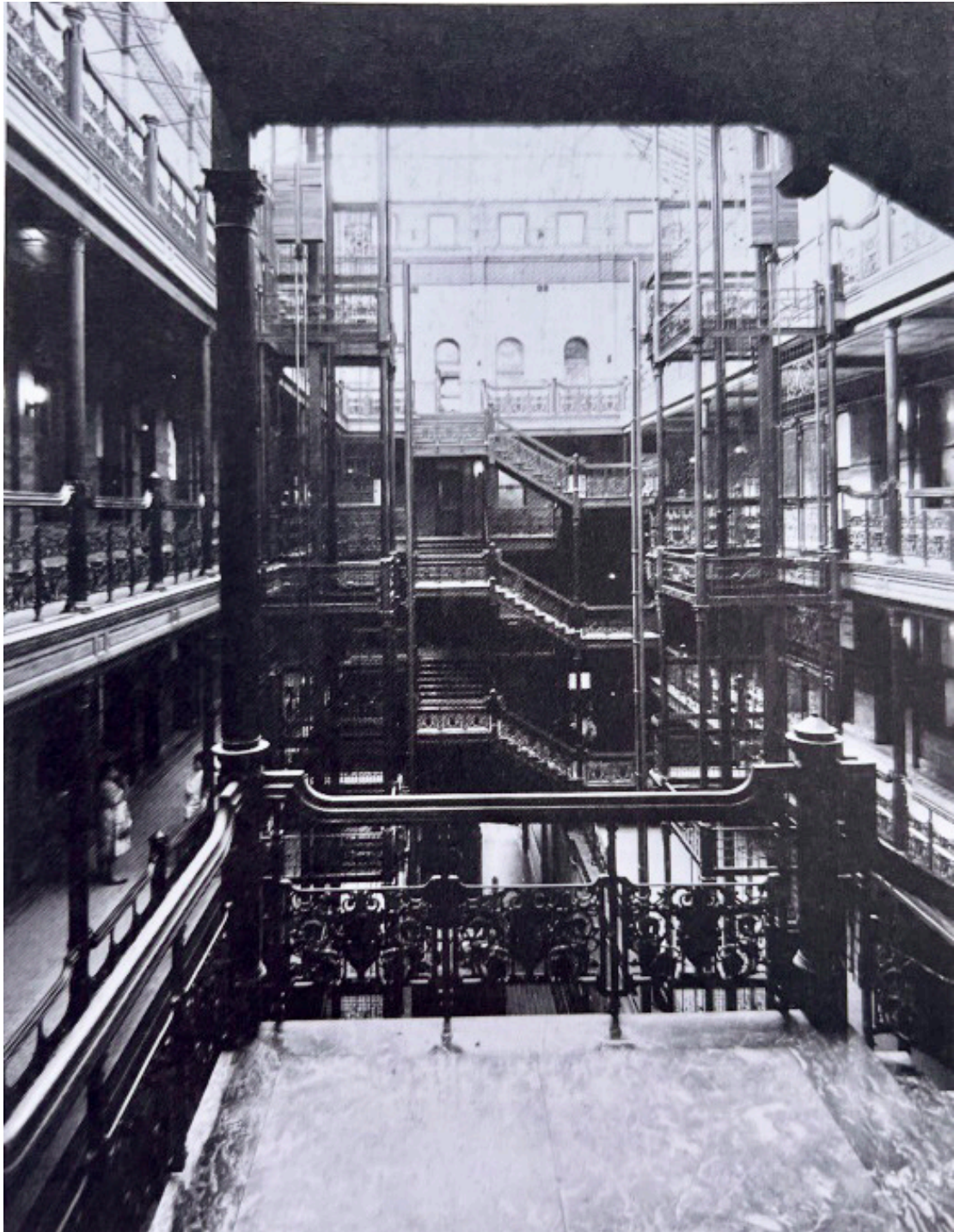
17 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 43.
18 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 55.

Figure 12 - The light-court in the main block of the Larkin Building

Figure 13 - The 'Bradbury Building' showing the placement of lifts and stairs inside the atrium which consequently disrupts light entering the building and creates dark spaces

Figure 14 - First floor offices are lightened up by the light from the roof as well as perpendicular windows to the atrium

Panopticism in the Larkin Building

Spatial Organisation

The floors are assigned in a capitalist approach with the prominent at the top and as you go down the building you are faced with workers of less role value.[19] Like the fine vantage points that were created by the introduction of stoas in the Agora, the top floor of the Larkin Building creates crisp views of the floors below. The balconies create a sense of hierarchy between the workers which enables the executives to assert dominance over their workers from above. From previous research, the entitled enforcing a dominance over the rest of a cohort is a running theme in sustaining authority.

Unlike the Panopticon's circular approach, the Larkin Building is shaped in a rectangle, which slightly weakens the performance of surveillance (Figure 15). The same opportunities to observe the work ethic of the employees between all floors are still present. However, more motion may be needed to cover any blind spots that arise due to the rectangular approach. The executive's 'lodge' is no longer in a fixed place which we know in the Panopticon, the guard's tower was fixed to the middle of the building (Figure 16). It is understandable why Wright wouldn't directly apply a prison typology to an office building. When you compare the two sets of groups kept under surveillance, it would be normal to assume that prisoners would need to be observed more often unlike employees who work for a company. Moreover, the 'guard's lodge', which in the context of the Larkin building is the top floor, consists of more people than in the lodge of the Panopticon.
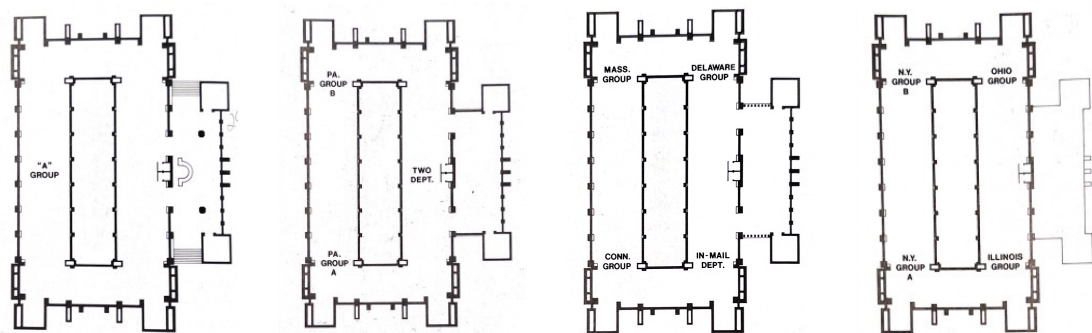

Figure 15 - (left to right) Main to Fourth floor plan showing the rectangular approach by Wright for the Larkin Building

19 Quinan, Frank Lloyd Wright's Larkin Building: Myth and Fact, 1990, p. 55.
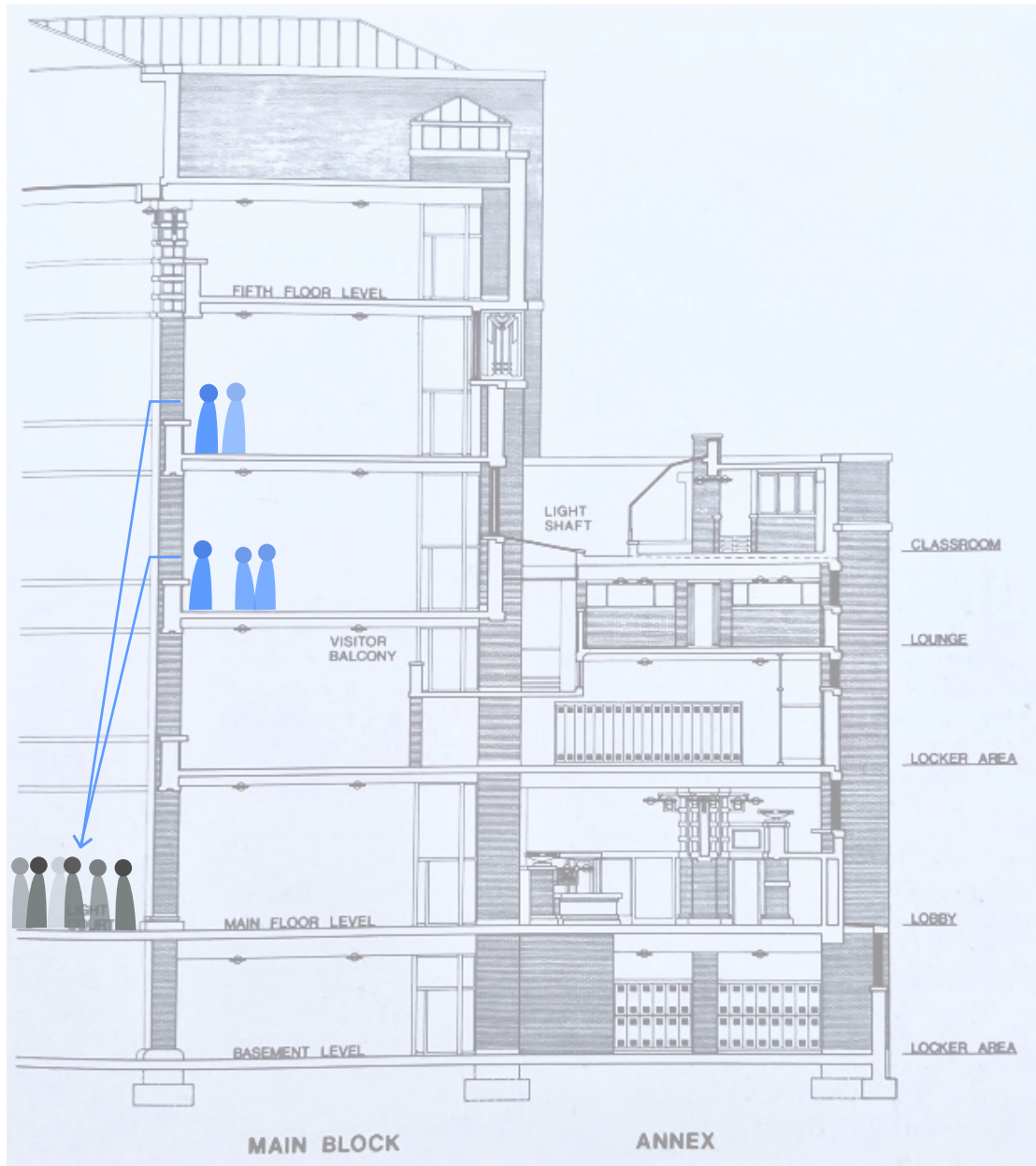
Figure 16 - Section of the 'Larkin Building' showing the level hierarchy between the workers and the executive officers who are on the floors above

Panopticism in the Larkin Building

The 'Unverified Inspector'

When analysing the way Wright had divided and allocated a space to each department under the company, he refrained from using harsh full walls. Instead, he opted in modulating the floor with partitions which wouldn't be classified as the usual room (Figure 17). The 'rooms' would now be half-exposed to everyone else on each floor. Like the Panopticon's elimination of privacy in the prison cells, employees are now more exposed to each other which benefits the executives of the Larkin Company when observing their employees. As a result, staff can be seen from multiple viewpoints in the building due to the incorporation of the atrium: above, below, across and behind. Considering the Panopticism theory, the workers, knowing that they are more vulnerable to detection, are less likely to disobey company rules. Wright's variation of the normal four walled room, shows a way of adapting the Panopticon's method of modulating inmates into cells into an office building typology. Yet, the idea of seeing without being seen is maintained.

The 'unverified inspectors' in the Larkin Building do not have a fixed place and the space for the workers are clearly defined which is equivalent to the plebeians in the marketplace and the patricians in the buildings surrounding it. In this case, the Agora and the Larkin Building share more common features in how the 'unverified inspector' is present in the relationship between the people surveilling and the people under surveillance.

Figure 17 - First floor offices are lightened up by the light from the roof as well as perpendicular windows to the atrium

Chapter Conclusion

In conclusion, looking across all typologies starting from the Ancient Agora to the Larkin Building, the idea of a central space and the Panopticism qualities it carries can be used to enforce a sense of order.

In the Ancient Agora, the urban plan displays a central marketplace used by commoners which is overlooked by structures, like the Stoa of Attalos, allowing patricians to observe the Athenians.

In the Panopticon prison, the principles give an advantage for the guards to undergo their role in preserving order and authority which subsequently leads to prisoners reforming during their sentence.

And in the Larkin Building, Wright essentially modifies the Panopticon prison to fit the needs of an office building.

The Development of Panopticism

As mentioned previously, during Jeremy Bentham's lifetime the Panopticon prison was never built. However, his research was not left untouched and was developed by philosopher Michel Foucault in the mid 20th century. Foucault's background in politics also led him to grow an interest in punishment. His book, 'Discipline & Punish: The Birth of the Prison', covers an interpretation and elaboration on Bentham's Panopticism theory which is what this chapter will be covering.

At the time of publishing his book, Foucault had prisons that were built based on the Panopticon plans which he had used to further his interpretations, unlike that of Jeremy Bentham. Bentham had invested money onto a piece of land in Millbank, London for the construction of his Panopticon prison. The prison was intended to be built on this land and the construction works had even begun but for unknown reasons, in 1812 the prison was abandoned. Soon after, under a new legislative basis, a competition was set up amongst architects to redesign a prison onto the site at Millbank which in essence lost Bentham's creations.[20]

From here onwards, Bentham's works influenced future prisons some of which, like the Statesville Correction Centre in Illinois, were present during Foucault's lifetime (Figure 18).[21]

20 Janet Semple, Bentham's Prison: A Study of the Panopticon Penitentiary, Oxford Scholarship Online, 2011, p. 1.
21 Rob, 'Panopticon Prisons', Google Site Seeing, http://www.googlesightseeing.com/2008/02/panopticon-prisons/, (accessed 2 January 2022)
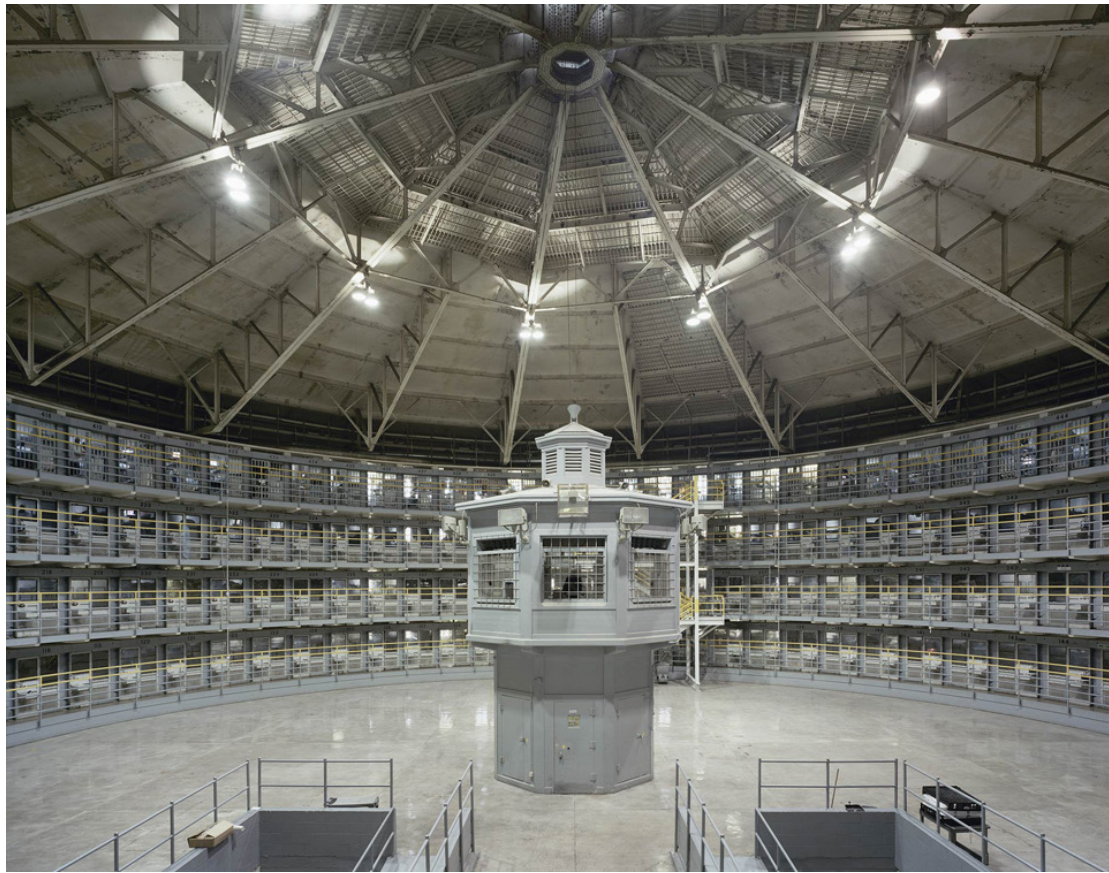
Figure 18 - Statesville Correction Centre in Crest Hill, Illinois, America

Michel Foucault's Panopticism Studies

Intentions

Foucault's interpretations of the intentions behind the Panopticon did vary to Bentham's. From the previous chapter, we know that the purpose of the Panopticon prison was to enforce social reform and Bentham did not disregard the individual consideration of inmates. However, Foucault approaches the Panopticon with a more sinister mindset.

Foucault's references to the Panopticon as a "laboratory" to experiment new medicine and "try out different punishments on prisoners" takes out the considerate nature Bentham had about the needs of the inmates.[22] The idea of confinement in a small space with almost no communication with other inmates is what Bentham saw as the punishment that the prisoners experience. Whereas Foucault overlooked the sacrifices already being faced in the Panopticon and describes using the prison additionally as a testing centre. This draws away from the initial reason as to why the prisoners are there; His perspective of punishment raises question and uncertainty for both the law and future prisoners since additionally to the segregation from society, there would be a mystery test of punishments to be faced in the prison too.

Foucault continues to list more functions that can take place in the Panopticon: "to alter behaviour, to train or correct individuals".[23] Out of the three he mentions in this chapter, Bentham had only proposed the Panopticon would correct the behaviour of inmates so they can mix back into society after learning what they had done was wrong to be in the prison in the first place. Altering and training individuals brings in aspects of using the inmates to create an army almost for the person in control of the Panopticon prison. At the time of writing this book, Michel Foucault was exposed to the post-war period after the 2nd World War so it would be understandable why he would have applied a training camp function to the Panopticon although it is not justifiable for him to objectify humans. He categorises inmates as test subjects giving Panopticism a different image compared to what Bentham had formulated it as.

22 Michel Foucault, 'Panopticism', in Alan Sheridan, eds., Discipline & Punish: The Birth of the Prison, Indiana: Indiana University Press, 2008, pp. 8.
23 Michel Foucault, Discipline & Punish: The Birth of the Prison, 2008, pp. 8.

Michel Foucault's Panopticism Studies

Applying to Other Typologies

The application of the Panopticon theory to other typologies have already been apparent in previous chapters of the dissertation: an office building, a prison, and the urban plan of a Greek city. Foucault introduces other ways of applying the Panopticon concept to different typologies as well as the surveillance consequences which they would result in.

"If the inmates are convicts, there is no danger of a plot, and attempt at collective escape, the planning of new crimes for the future, bad reciprocal influences; if they are patients, there is no danger of contagion; if they are madmen there is no risk of their committing violence upon one another; if they are schoolchildren, there is no copying, no noise, no chatter, no waste of time; if they are workers, there are no disorders, no theft, no coalitions, none of those distractions that slow down the rate of work, make it less perfect or cause accidents." [24]

Foucault introduces new ideas of applying the surveillance mechanism of the Panopticon to hospitals, schools, and the workplace. By adapting the main features of the Panopticon we know that the theory can be applied to various buildings whilst still maintaining surveillance. Wright's approach in doing so with the Larkin Building is an experiment of what Foucault is suggesting. The exposure of the light court deliberately puts workers on a visible pedestal for the company's executives to spot any behaviour which do not adhere to company rules. The possibilities of coalitions between employees are disrupted by the lack of private rooms on department floors. Limiting these opportunities from happening, in theory of the Panopticon, will mean a disciplined, functional, and efficient environment.

24 Michel Foucault, Discipline & Punish: The Birth of the Prison, 2008, pp. 5-6.

Michel Foucault's Panopticism Studies

Applying to Other Typologies

It is not coincidental that Foucault mentions hospitals because Bentham was also aware that by confining each prisoner into their own cell, this would prevent any lateral transmission of infections that an inmate may develop during their punishment.[25] Since the Panopticon constricts individuals into their own designated space, any sort of physically transmitted infections, which are many, will be eliminated. This not only minimises the risk between prisoners but also the guards who monitor them like that of patients and medical staff.

Foucault also mentions the possible application of Panopticism to schools. By replacing the cells in the Panopticon prison with classrooms, a school could adopt the spatial organisation of the Panopticon to enhance its surveillance methods on behaviour. The circular nature of the Panopticon also diminishes the use of corridors which results in more space able to be surveilled. In a school setting, this would mean students are more often exposed to school staff whilst outside of classrooms which would lower the chances of misbehaviour. The 'inspectors' would now be the staff members, mainly teachers, and like this the Panopticon principles can be enforced for on an institutional typology like school since its system is reliant on a hierarchy too.

25 Jeremy Bentham and the Panopticon Prison', Criminology Web, https://criminologyweb.com/jeremy-bentham-panopticon/#Prison_Architecture, (accessed 2 January 2022).

Chapter Conclusion

From Foucault's gatherings, we are introduced to the advancement of the Panopticon prison into different typologies. His understandings of the intentions behind the Panopticon, though sinister, do carry a valid argument which shouldn't be overlooked.

With slight adjustments it is clear from his understandings and the previous typologies covered in 'The Idea of a Central Space' chapter, that the principles of the Panopticon can be applied and have been applied to different typologies ranging from an urban plan layout to a hospital. Most importantly, these building functions have an obvious hierarchy between two sets of people; In the Agora, it is between the plebeians and patricians; In the Panopticon prison, it is between the inmates and guards; In the hospital, it is between the patients and medical staff; In the school, it is between students and teachers. Through the correct use of lighting, deliberate spatial organisation and creating the sense of 'seeing without being seen', a passive surveillance system can be created to maintain authority over the cohort being surveilled.

Testing Panopticism in Learning Spaces

Alongside the gatherings of Foucault during the post-war period, schools were also going through a vast change.

Like Foucault had mentioned, the atrium was starting to become a significant architectural feature across new schools that were and are being built. School buildings were drifting from the typical systematic grid organisation with a flat roof to introducing spatial qualities which carry more value amongst students. One approach towards this new thought was by incorporating atriums into school buildings in the early 21st century. The atrium became more common in school social spaces like libraries, canteens, and computer rooms. The key motivation to bringing in atriums into schools was to accommodate for social needs outside the classroom and improving staff and student morale. As a result of this, behaviour is now subject to passive surveillance by staff during their out-of-classroom hours.[26]

26 Pamela Woolner, The Design of Learning Spaces, London: Continuum International Publishing Group, 2010, p. 98.

The Skinners' Academy

The Skinners' Academy was originally The Skinners' Company's School for Girls when it was first opened to the public as a girls' school in 1890. The Skinners' Company, which was recognised as one of the best twelve livery companies, funded the school as a contribution to providing education for girls. Under the Education Act in 1944, straight after the 2nd World War, the school converted into a state grammar school to later change into a mixed academy for 11–19 year olds in 2010.[27]

The school is still majority facilitated by The Skinners' Company which allowed for the school to promote itself into an 'academy' after its relocation from Stamford Hill to Woodberry Down, London (Figure 19). This allowed the school to become less council dependent and receive direct funding from the government as well as the Skinners' charity. This also allows the school to be more flexible with its curriculum as long as they still abide by Ofsted protocol.[28]

The Skinners' Academy was the secondary school that I attended between years 2011 and 2017. The school's new building and the environment it created was something that always kept my motivations up in comparison to other schools that I have attended in the past. The major comparison between them all being the physical environment in which the learning happened. The design of the school also resonates aspects of Panopticism, so I organised some visits to gather primary data on the surveillance qualities at the school knowing it's adoption of the recent trends in learning spaces.

27 'Skinners' Academy', Wikipedia, https://en.wikipedia.org/wiki/Skinners%27_Academy, (accessed 6 January 2022)

28 'Types of Schools', Government Website, https://www.gov.uk/types-of-school/academies, (accessed 6 January 2022)

Figure 19 - The Skinners' Academy Front Entrance

The Skinners' Academy

Lighting Qualities

One of three Panopticon principles which Bentham had established was the strategic use of light. In the prison typology this was displayed by using windows and the shadows created from it to give the guards an advantage. This had created another source to be able to monitor the inmates from as well as increasing the exposure of their actions.

In the Skinner's school, by using the atrium, the light enters through an inflatable roof-light which enables a constant daylight on the circulation routes, classroom entrances and the library during timetabled hours (Figure 20). The idea of using light to the advantage of the school's surveillance strategy is exactly how Bentham's intentions on creating vulnerability is adopted here. Due to the exposed presence of students, in theory, they will have less of an inkling to disobey school rules knowing that their chances of being caught are higher than usual (Figure 21). Having this enforced on students will reform them to become high achieving by drifting their focus from messing around to studying towards their examinations. This would benefit both the student's education performance and the school's reputation during Ofsted checks.

The openness generated by the atrium, along with the well-lit environment, has students and staff visible to each other across all vertical floors. This helps enforce the authoritative relationship between the two cohorts. However, rather than using shadows to create an additional advantage for the teachers, the vertical light dispersed through the atrium from the roof enhances the observation of student behaviour.

So, shadows are not formed on the circulation routes, but they are created within the classroom. Large windows have been placed alongside the corridor connecting walls of each classroom. Additionally, on the perpendicular wall, windows have also been placed (Figure 22). This enables light to enter each classroom which produces shadows of all students and can be seen from the corridors due to the other window added, this is similar to how Bentham designed to have daylight enter each inmate's cell from behind.

Figure 20 - The 'Bradbury Building' showing the placement of lifts and stairs inside the atrium which conse-quently disrupts light entering the building and creates dark spaces
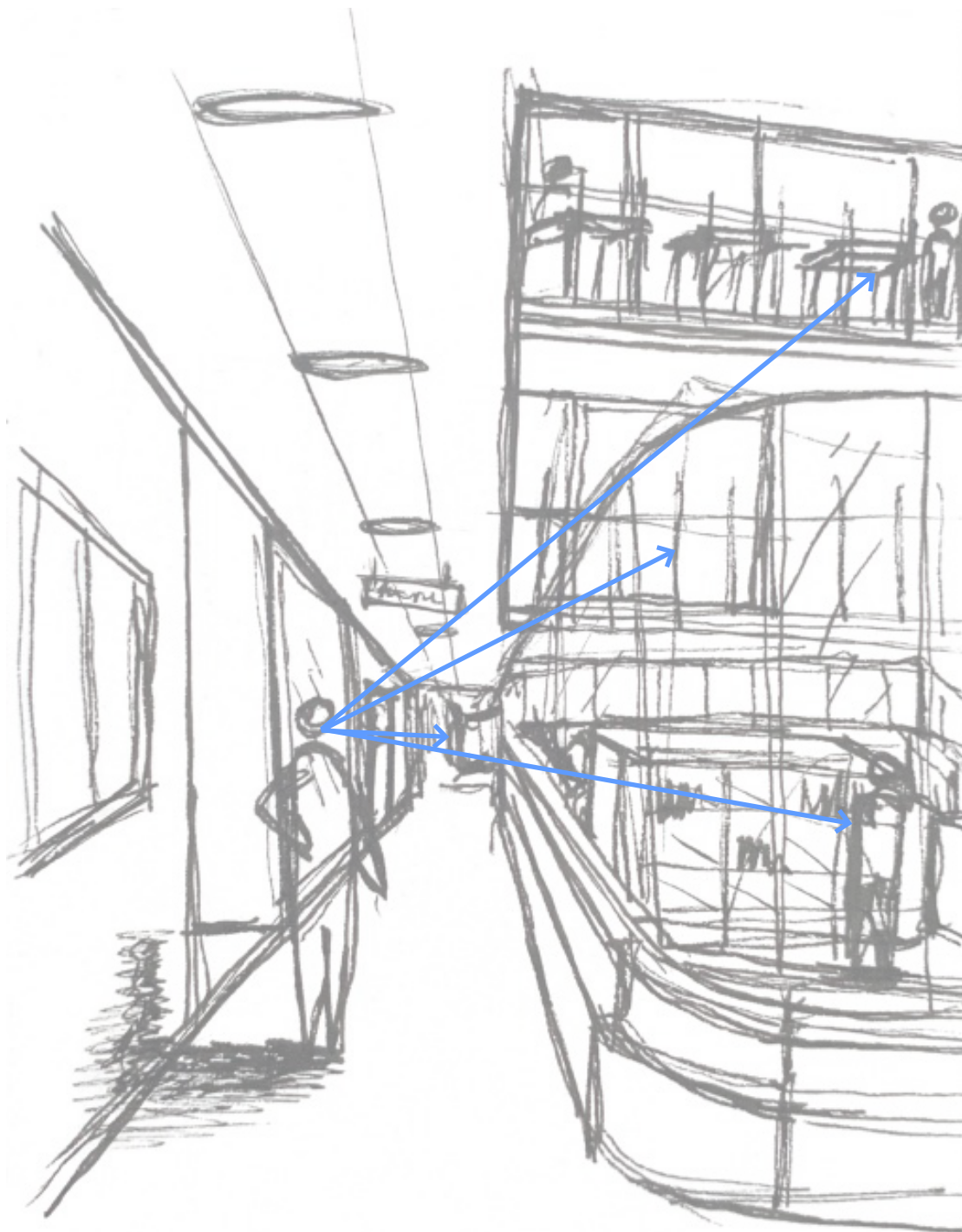
Figure 21- Sketch showing the view from the Principle's office which overlooks the library all the way up to the sixth form centre on the top floor

Figure 22 - Windows are placed on both sides of the classroom; windows facing the outside and the corridors beside the atrium

The Skinners' Academy

Spatial Organisation & Surveillance

When analysing the sketch plan drawings of the school, it is evident that it differs from both the circular Panopticon approach and Wright's rectangle method (Figure 23). The architects have opted for a sequence of abnormal triangles that are connected at their vertices. This is exceptionally different to the Panopticon prison, but its outcomes are similar to that of the Larkin Building.

The architect's design approach minimises significantly the use of hidden and dark corridors. Similar to the Larkin Building, at short distances when transitioning between the main sections of the school there are darker spots. The lack of visibility of these thresholds are accommodated by strategically placing staff offices with large windows to preserve surveillance (Figure 24). Since the students are not always present in these corridor-like spaces, it would be acceptable to have some more obscure locations on campus knowing that they spend more time in the classroom over the course of a school day.

However, it is notable that the school still feels obliged to have a duty system in place. The duty system relies on the Vice-Principals going on walks throughout the school during timetabled lessons. The purpose of these walks is to maintain the authority presence outside the physical classroom and speak to any individuals who have been sent out during lessons. Being sent out the classroom holds a greater consequence for students knowing that they could be penalised if caught by a Vice-Principal. These incidents did occur during my visit to the school, and it was interesting to see how the atrium helped with the effectiveness of the duty routes taken by the vice principals.
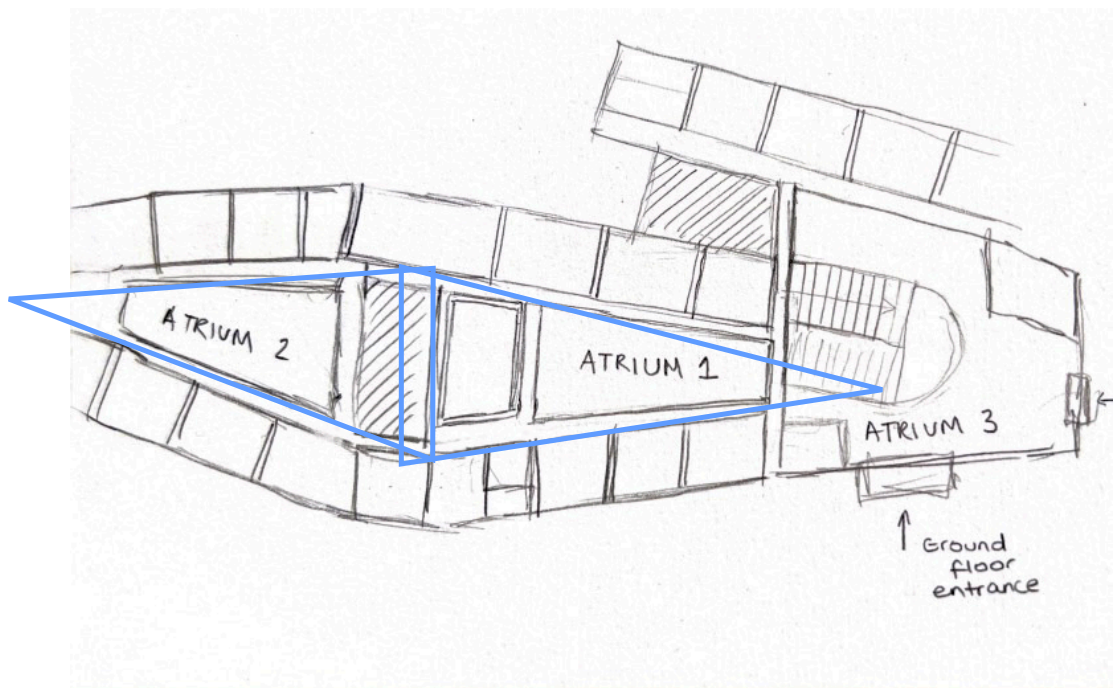
Figure 23 - Sketch plan of main blocks of the 'Skinners' Academy' building which shows a triangular approach to applying the Panopticon principles.

Figure 24 - Staffrooms and department offices are placed along parts of the corridors where it is darker to compensate for the lack of visibility of students by staff

The Skinners' Academy

Spatial Organisation & Surveillance

With incident one, students in a classroom were starting to cause disruptions. The teacher followed behaviour protocols and gave out two warnings for the student before sending him out of the classroom. A Vice-Principal, who was monitoring the corridors, saw the student from across the atrium and started making his way towards him. The student was asked by the teacher why he was sent out the classroom and what the consequences for his actions would be if he was to continue disturbing the learning environment. Once this conversation ended, the student returned into the classroom in an orderly fashion and discontinued his previous actions which had resulted him in being sent out (Figure 25). This could be interpreted in two different ways; The Panopticism principles active in the school's design do not provide a good enough indication to students to follow rules or the school have chosen to have a human surveillance system alongside the architecture of the school to reach a tougher level of monitoring behaviour.

Nevertheless, the atrium allows the Vice-Principal to become aware of the student's presence outside the classroom. There is fluid visibility both vertically and horizontally as a result of the atrium between teachers and students. This raises the chances of detecting misbehaviour happening at the corridors and consequently the students are less likely to disobey the school's expectations. Overall, this means a more disciplined and harmonious institution with optimum results.

Figure 25- Sequence of sketches showing the process of a student being sent out and how the exposed surrounding leads to the Vice Principal detecting the student

The Skinners' Academy

The 'Unverified Teachers'

As Foucault had hinted at in his further studies of the Panopticon theory, through the incorporation of a central space, like the atrium, the level of visibility of students increases. This helps teaching staff with witnessing any signs of misbehaviour over a larger span of surface area.

What the Skinners' Academy building does well, is by creating fluidity vertically and horizontally students are prone to being seen from above and below rather than strictly one point, which is what the Panopticon does. It could be argued that an atrium being added into a building leads to there being multiple 'inspectors' active at the same time. Having several moving 'inspectors', in this context the teachers, raises a question of their whereabouts. The pressure of not knowing where and when they will appear deters students from engaging in disobedient behaviour. Having numerous 'inspectors' could also be seen as a way of compensating for the small crevices which the architecture is unable to control. The same explanation can be applied to the Larkin Building.

The atrium was highly effective in making the 'inspectors' informed about any students who had been sent out. There were multiple occurrences where teachers were alert of students who had been sent out the classroom. The moment a student steps out of the classroom, before they have the time to think about getting caught by the Vice-Principals, they have already been seen by the staff on duty who proceeds to make their way to the student (Figure 26).

Figure 26 - The student had been sent out the classroom and 2 members of staff unexpectedly came from the corridors when in fact they were alerted of the student's presence when they were on the ground floor

Chapter Conclusion

Ultimately, Foucault's mentioning of applying Panopticism to a school typology seems extremely valid alongside my own findings. Since schools' work on an institutional structure, there is a need to distinguish the levels of freedom of action between school staff and students like that of the Panopticon prison. Hence, the incorporation of the Panopticon principles – light, spatial organisation and the 'unverified inspector' – are logical.

The aims of the school are extremely similar to Bentham's intentions. Although, it may not be on the same intensity as social reform, the school aims to monitor and maintain authority over students to work towards a good reputation. The surveillance qualities that the architecture provides helps reform the more rebellious students amongst the majority to become students who focus more on their studies and waste less time being sent out the classroom.

Conclusion

To conclude, the significance of Panopticism and the surveillance qualities it holds are evident throughout the different time periods and typologies covered in this study.

Although, the architectural concept was established after the Agora, its principles were still present in the urban plan layout but just not verified as a theory. The hierarchical relationship between plebeians and patricians in the Agora are distinguished through a shared communal marketplace that is overlooked by corporate structures, like the 'Stoa of Attalos', the 'Lawcourts' and the 'Altar of the Twelve Gods'. The 'unverified inspectors' are scattered across these authoritative buildings allowing them to monitor the commoners in the middle. The elevated nature of these buildings allows for the patricians to view and observe the rest of the Agora from upper levels. This was clear when analysing the terraces of the 'Stoa of Attalos'. The evident surveillance upon the plebeians discourages them from committing any attempt of tyranny as any suspicious actions would be easily disclosed to the authority.

Bentham's Panopticon prison puts the principles of light, spatial organisation and "seeing without being seen" to the test. Inmates are confined into individual cells in a circular building which is guarded by a fixed tower that raises the question of being watched. The uncertainty of being surveilled by the guards' results in the inmates refraining from going against prison rules. Thus, the prison acts as a new method of social reform whilst receiving a punishment of staying in a restrained cell with almost no human communication. The focus is on correcting the behaviour of inmates rather than disregarding all their needs away from society.

In both the Larkin and Skinners' Academy building, it is clear how the Panopticon principles can be applied to an office and school typology. Since the cohorts being surveilled are not constantly in the need of being surveilled, this has allowed both buildings to stray away from the circular shape. However, through the incorporation of the atrium, the openness created in both buildings maintains the 'unverified inspector' who is no longer in a fixed position. The same uncertainty in the Panopticon prison arises in both buildings because of this. Consequently, the behaviour of workers and students are controlled by the vulnerability created by the architecture which is exactly what Foucault had confirmed with his analogies.

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Conclusion

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Overall, the critical analysis into Panopticism in different typologies shows its pertinent quality in institutional buildings. I think the evidence provided in this study demonstrates that these conditions in buildings which have a variance in hierarchy should be considered in future design. The nature of the workplace and a school already determines a grading between people, so it is natural for the architecture to mimic it too. If the intentions behind the application does not advocate a cynical approach, like Foucault's, I think adaptations of Panopticism should still be contemplated in the future of institutional buildings. Before opting for technology to help with surveillance and security, architecture should seek in aiding these necessities to minimise a bombardment of cameras and guarding staff. This could be the evolution of architectural surveillance.

7495 words

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