Improving Social Housing in London

An Honors Thesis (HONRS 499)

By

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For a very long time now, housing for the lower classes in London England has been a major problem. There are not enough places for people to live well. The places that do exist are very low quality. Most developers and architects feel that the only way to provide housing at a low cost is by decreasing the quality of the design and the materials. However, there is one architect and one organization that proves these thoughts to be incorrect. In the past 80 years architect Berthold Lubetkin, and more recently the Peabody Trust, have been providing the lower classes of London with low cost, high quality housing. Through such works as Highpoint One, Priory Green and BedZED they show us that it is possible to provide a suitable living environment for a low cost.

Methods

There were two main methods in which I researched this project. The first was by the traditional means of reading articles and books. I did this not only through the architecture library here at Ball State but I also found the RIBA library in London to be unspeakably helpful. Finally, by being in London I also had another unique opportunity to research these developments. I was able to visit them for myself. The observations I personally took on these visits has had a distinct impression on my research. I was able to experience what it would be like living in these places.

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At the turn of the century living conditions gradually started improving. The government took control over the sanitation problems and started a process of improving housing by incorporating sewer systems into all of the buildings. However, overcrowding was still a major problem. In most of the poorer neighborhoods, "the rooms are full and people are sleeping in layers on top of each other". (Bosanquet 1917) Units were rented out per room and most families could not afford more than a single room.

If a family could afford more than one room it was typically in a less desirable neighborhood. Everyone was crammed into units like sardines in a can. The streets ran rampant with drunken and criminal activities. At the time, "many people believed that improvidence, intemperance, and licentiousness caused poverty and failed to realize that crowded living conditions had encourage[d] these vices." (Steffel 1973)

In order to remedy these conditions, after the end of WWI the government proceeded with its campaign to clear the slums. Often displacing large numbers of the lower classes to make way for new and improved buildings. These displaced families often had nowhere to go. If they did manage to find a better neighborhood it was very hard to find a place to live without a long wait (Bosanquet 1917).

The new units built on the slum lands were often too expensive for the lower classes to afford. They were typically larger but a larger unit also meant that the family had to spend more on rent, furnishing, and more importantly, heating. It is easy to live life without nice furnishing, but if a home doesn't have proper heat a person could possibly freeze to death during a London winter. Though with good intentions, what the
government said would help solve the overcrowding issues typically only made things worse (Bosanquet 1917).

Other than trying to alleviate the overcrowding issue, helping the lower classes was not a big concern. The government “did not involve any attempt to assist the poor by offering them any gift or by doing anything for them in the shape of charity… [It was believed that] such attempts had a tendency to injure and corrupt the poor by lessening their self-reliance and destroying their self respect.” (Porritt 1895) The poor were on their own.

At the time there were very few, if any, organizations centered on assisting the poor. These conditions were found throughout most of London, perhaps because most of London was inhabited by the lower working classes. The small areas of the upper classes typically had better conditions but that was simply because they could afford them.

By 1930 conditions began to change for the better. The government began taking a slightly more proactive approach in helping out the urban poor by providing sanitation and code restrictions on building developments. Through all this, there was one individual who was making great strides for improving the conditions of social housing. This man was the architect Berthold Lubetkin.

Lubetkin was an architect who immigrated to London in 1931. He was a Russian architect who was considered to have pioneered the modernist movement in Britain upon his arrival. This paper focuses on impact he had on social housing in London.

Upon arriving in London, Lubetkin put together the architecture practice Tecton. The firm was commissioned to complete various exceptional, although politically
unimportant, works
around the city. Most
notably are the works
done for the gorilla house
and the penguin pool at
the London Zoo. The
firm is known for
exploring the new
technologies in materials
that had become available at the time. The work done with poured concrete at the
London Zoo is archetypical of this. England was very supportive of Lubetkin’s desire to
experiment with new materials in architecture. However, Lubetkin was more interested
in the pressing social problems he saw in London at the time (Coe 1981). During
the 1930s, there were clear links being formed between the modern aesthetic, pioneered
in England by Lubetkin, and political radicalism. Lubetkin was convinced that
architecture and politics were intertwined. He saw his architecture as a way of alleviating
the poor housing conditions and the chronic health issues that resulted from these bad
conditions (Coe 1981).

The government, however, did not share his views. Lubetkin was “forced to
confront the reality of residing in a country that while giving him the freedom to explore
architecturally, was in conflict with his views politically. His response was to engage the
British context through combined architectural and political activism. In creating the
firm Tecton, Lubetkin was intent on establishing a progressive architectural standard while developing a strategy for initiating projects of social importance.” (Diehl 1999)

One of his earliest works towards this goal was the design of Highpoint One, an apartment complex in Highgate, a suburb of North London. The portion of Highgate in which Highpoint resides is called Highgate Wood. This is essentially a very large hill that rises to over 300 feet higher than its surrounding (Unknown, Hedon Park to Highgate 2007). This gives a splendid view to most inhabitants. Physically speaking Highpoint One is a huge success. Lubetkin managed to maximize exposure to sun, light, view, and ventilation.

Highpoint One was organized in a very straightforward, yet effective pattern. It was designed as a double cruciform plan. The services such as the elevators and stairways are located at the crossings of the cruciforms. This drastically increases the amount of sunlight that is able to penetrate into the interior spaces of the building. Each single cruciform is designed so that two smaller flats and two larger flats have their fronts accessible to the crossing. This is then repeated for the second cruciform. This organization creates a situation in which each flat has equal personal access as well as great access to light and ventilation.
Highpoint One is a building that expresses attitudes about social organization not prevalent in Britain at the time. Lubetkin saw this project as a means of integrating different social classes within one single community. Lubetkin had the idea that a single community such as Highpoint could be a metaphor for the perfect social state. He saw a place where rich and poor alike could live together in harmony. Where they all had access to suitable living conditions despite how much money they did or did not possess (Coe 1981).

Highpoint documents Lubetkin’s principles and his belief that this type of building environment could contain enough utopian vision to transform the world (Diehl 1999). He believed that architecture truly could be an agent for improving social conditions. He did this primarily by showing the world that low cost in no way means low quality.

Tecton put pressure on developers to lease flats to mixed social groups. Some went for low rents, some for higher (Coe 1981). Unfortunately the realities of his visions remained elusive. Although the developer was renting to a mixed range of clients, it became a status symbol to live in Highpoint One. So much so, that wealthy people were moving in at a much larger rate than lower class tenants. This increasingly unbalanced mix of residents began to make some of the lower class tenants feel uncomfortable and subsequently move out (Coe 1981).

Although Lubetkin was trying to design for all classes he incorporated elements into the building that inevitably led to a higher comfort level for higher social classes. These feelings were mostly brought about by the inclusion of servant’s quarters on the ground floor as well as a servant’s stairwell (Coe 1981).
Lubetkin was also disappointed in the relative failure of the communal ground floor space that his design had envisioned (Allan 2002). He believed that it was in these spaces that the different social classes could interact and perhaps see that they have more in common than previously imagined. However, this vision was not to be. There is no primary cause as to the lack of interest the tenants seemed to have in the communal space. Perhaps it was due to a lack of programming, or maybe it was merely because the apartments were too well crafted, too self sufficient, to require much interaction outside the units (Allan 2002).

Although Highpoint One may not have completely embodied Lubetkin’s ideals, he had another chance to put forth his concerns for the lower classes of London in a subsequent housing project in 1937 located in Finsbury, Priory Green.

It is difficult to know how to describe Priory Green. Unfortunately the ultimate construction of the estates was interrupted by WWII. The question then remains should it be described as Lubetkin originally designed it, or as it was actually completed at the end of the war? I shall endeavor to do both.

The Priory Green envisioned by Lubetkin was to be a housing development unlike anything that London had ever seen. It was Lubetkin’s ideal that low cost did not mean low quality, and he was determined to prove this ideal in Priory Green even more so than Highpoint.
Lubetkin incorporated large green spaces into the design of Priory Green. Typically these types of open green spaces were only a luxury of the upper classes at this time. Lubetkin thought that every class should have access to nature so he designed Priory’s green spaces to reflect the quality of other London squares (Coe 1981).

The physical nature of Priory Green greatly differed from other housing projects at this time. It moved away from the traditional “back to back” housing schemes and showed everyone the advantages of a more modern planned scheme. This modern technique provided a means of offering the most out of modern conveniences; sunshine access, separate access, and private balconies.

The most massive portion of Priory Green’s design consists of two, long, eight story buildings. These buildings run north to south across part of the site enclosing the large open green space discussed earlier.

Lubetkin provided each flat with a twin aspect. This means that one’s flat would not have its back up against another flat. Each unit would have an entry on one side of the flat and a balcony on the other. This not only provided each flat with ample access to sunlight and cross ventilation but also had another effect on the design. By combining this feature and the fact that the entrances to the flats were located on alternate half-landings of the staircases this meant that some flats were located half a floor higher than others thus giving greater privacy to each flat (Coe 1981)
This means of designing the flats with twin aspects also give a very nice aesthetic look to the façade as well. By alternating the face of the façade with a block of flats with their entrances to the east, then a block of west facing flats, then another to the east it creates a more dynamic façade. Instead of having a very repetitive, monotonous façade, Lubetkin added interest to a very straightforward design simply by flipping some units 180 degrees.

Also in Lubetkin’s original design, were smaller four story buildings running east to west located west of the larger buildings. These units also have twin aspects. Each building has the entrances on the north side of the flats, and balconies on the south side. This provides ample southern light into the balconies. The twin aspects of these buildings have the effect of reducing the monotony of the repetitive façade. Through the changing depths of the balconies, shadows help add more interest and make the façade more dynamic.

Priory Green provided the residents access to many amenities that lower classes had never had access to before. There was to be individual access to stairways, lifts, large living rooms with separate WCs, a fully integrated refuse system, tiled finishes, central heating, and a communal laundry room located centrally in the complex. Other
public amenities were also included in the design, including a community center, workshops, a nursery school, library, public house and extensive landscaping (Coe 1981). At the core of this design for these many amenities was a simple statement developed by Tecton during the design process. “The family needs a home; but near that home it wants health services for parents and children; schools for children of all ages; shops for the housewife; and recreation for all.” (Coe 1981)

Unfortunately one of the impacts caused by the delay in construction due to England’s involvement in WWII was to severely decrease the number of amenities that were able to be incorporated into the design. The interval of the war subjected the design to many reprisals and government spending cuts. The communal laundry room was the only amenity to survive these cuts. There was also a severe downgrading of specifications for floors, roofs, doors, and kitchen equipment (Allan 2002).

It became obvious that, “many of Priory Green’s evident shortcomings result from official intervention rather than designer intention” (Allen 2002). The restricted budget was most noticeable in public elements.

One positive effect that the war had on the design was to drastically enlarge the site. Due to bombings during the war the site was almost doubled in size. After the war the government was desperate for as many new housing developments as quickly as possible. Perhaps this
is the reason why so many of Lubetkin’s ideas were overlooked after the war. The government needed homes quickly and they did not have enough time to consider their architectural qualities or broader intentions.

These additional buildings don’t have the same flair that the original buildings designed by Lubetkin possessed. Lubetkin found ways in the original buildings to take repetitive elements and make them work. However, elsewhere the facades consist mostly of uncreative checkerboard patterns without the depth that Lubetkin was able to give other facades by including balconies into the face.

Elsewhere there are buildings the same size as the north-south facing buildings in the original design without the twin aspect feature flipped in the middle to break up the monotony of the design. This element of the design was poorly planned and executed. The reason for this is perhaps due to the fact that these buildings were not in the original design. They were designed and constructed after the initial buildup, following the war during the housing shortage.

While Lubetkin’s ideals didn’t always get realized in the actual construction of his projects he did still make an impact on the way London housing developments were treating the lower classes. He showed everyone that it is possible to demand a higher standard. While many of these ideas did not get constructed following the original design, they still had a profoundly positive effect on the condition of social housing in
their lesser states. One can only imagine what type of impact they would have had if they had been fully realized.

Fortunately, it does not require much imagination to consider the impact Priory Green might have had if its budget had not been cut. Sixty years after Lubetkin first imagined Priory Green another organization stepped in to help carry on the ideal of helping house the urban poor. In 1997 the Peabody Trust began a regeneration project to give Priory Green a much needed restoration.

To understand the goals of this regeneration project it is important to understand the group behind it. The Peabody Trust was founded in London in 1862. While in the past it has only had a minor impact on bettering the living conditions of the lower classes of London, recently the organization has started to have a major impact on these issues (Matheou 1995).

The mission of the Peabody Trust is centered on, “the construction of such dwellings for the poor as may combine to the utmost degree the essentials for healthfulness, comfort, social enjoyment, and economy for Londoners” (Unknown, Peabody Trust 2003). They are striving to give Londoners a better place to live.

Nonetheless, the Peabody Trust doesn’t merely build these housing units and move on. Instead, they stick around and make sure that each community is adapting to the new environments in a way that they had envisioned. They, “believe very strongly as a major provider of new affordable housing, in helping the communities flourish socially and economically” (Matheou 1995). The Peabody Trust has discovered, like most good architects, that people don’t always purely need a roof over their heads. Shelter is just a means to survive. In order to truly live one needs a safe and reliable community.
Buildings developed by the Peabody Trust now accommodate over 30,000 people in London (Matheou 1995). It has become London’s largest social housing provider (Tarnay 2006).

This distinction has come with much effort and planning on the part of the Peabody Trust. At a time when most social housing providers in London are diminishing the Peabody Trust became stronger through a strong business model (Matheou 1995).

Previously in London most housing developments rely on 60% of their funding to be contributed by the government. However, in the past few years the government has been able to give less financial support to these types of endeavors. This has made it very difficult for most housing developers to function. The only reason that the Peabody Trust continues to be successful despite these decreasing funds is that they have revenue coming in from their old projects. They chose to invest financially in these past projects. With this revenue coming in from past projects the Peabody Trust only needs about 30-40% of their funds to come from the state (Matheou 1995). Thus giving them enough financial means to continue to improve the conditions of London’s social housing where other organizations have fallen short.

When an organization invests in its own development it affects the way the organization treats that project. If the organization has its own personal financial interest in the success of the project they may be more motivated to ensure a successful design. This more successful design will then be more likely to earn money for the investors while providing any residents with a higher quality living environment. Thus, the Peabody Trust’s financial stake in the projects made a better design for all parties involved.
The Peabody Trust has expanded their mission from helping to serve the lower classes of London as well as promoting environmental responsibility. They continue to develop their broad range of residences and are including wider regeneration projects into their mission (Matheou 1995). Regeneration is an important concept to building development. The harsh truth is that the human race is multiplying at an exponential rate. If we continue in the direction we are heading we will one day run out of surface area on the earth to house ourselves. We need to stop wiping out our farms and forests to be replaced by a built environment. As an alternative we need to start going back to the projects that are no longer being used to their full potential. The old solutions to these projects need to be reassessed and a new answer needs to be found.

At Priory Green, the Peabody Trust chose to redevelop because there were many complaints being made by residents about deficiencies in the design. The major elements that the residents have problems with were; the central green space, the lack of security throughout the site, and the lack of a community building.

First, the residents wanted the primary green space between the two eight story buildings to be more developed. The Peabody Trust accomplished this by planting many more trees and shrubs in the area as well as providing a small play ground for
children. Second, the Peabody Trust was asked to make this green space feel safer to residents by enclosing it from non-residents and to provide only one point of entry into this space. A single point of entry would make the space more secluded and give it a safer feel. The Trust accomplishes this by only allowing people to access this space through the community center.

This community center is the last request that the residents had for the site. The Peabody Trust hired Avanti Architects to design the community center. It serves as an exemplary entryway into the central green space. The community center finally gives the residents of Priory Green the focal element they felt the project has been lacking all these years (Young 2004), and as mentioned earlier Lubetkin had originally planned on a community building in the original design but that was one of the elements that was taken out due to the restricted budget. With all of these updated elements Priory Green more closely embodies the spirit Lubetkin had envisioned for it.

Priory Green is an excellent example of Peabody Trust’s efforts to redevelop existing project but they have also made great strides with new developments as well. One of their most innovative projects is BedZED located in Sutton England, only 20 minutes south of London by train. BedZED stands for Beddington Zero Energy Development. It was designed with new architectural principles and
technology to be self-sufficient and to produce enough energy to power the entire development independent from the power from the grid.

The overall design inspiration came from a concept known as One Planet Living. This is a new sustainability school of thought that states that at the rate humans are living right now, Londoners will use three planets worth of natural resources (Tarnay 2006). Following this viewpoint, if we continue using natural resources at the current rate our children's children will eventually run out of natural resources. We need to change this trend and stop consuming excessive amount of natural resources. A set of guidelines have been developed to point people in a new direction. These guidelines are called One Planet Living.

There are ten major principles for One Planet Living (WWF International and BioRegional 2008). (1) zero carbon. Our climate is changing because of the human induced buildup of CO₂ in the atmosphere. To offset this buildup we need to start considering production and conservation of energy in ways that reduce amounts of CO₂. (2) zero waste. Discarded products and packaging use up valuable resources, emphasizing the importance of recycling. (3) sustainable transport. Traveling by gas fueled transportation is compounding the excessive amounts of CO₂ in the atmosphere and can add to noise pollution and congestion, especially in the cities.

(4) local and sustainable materials. This principle directly impacts architectural development. Most developments do not take into account the source of building materials. Obtaining materials from a distant source or a non-sustainable source can have negative effects on the environment. Materials from a distant source require higher transportation costs such as additional CO₂ released into the atmosphere from the
equipment used to transport the materials. An example obtaining a material from a non-sustainable source could be procuring wood from a non sustainable forest. A place in which forests are wiped clean. This is a major cause of deforestation. Sustainable tree farms replant the trees that are cut down. (5) *local and sustainable food.* Much like the building materials foods derived through non-sustainable production can harm local ecosystems as well as have severe transportation implications if shipped over large distances. (6) *sustainable water.* Local supplies of freshwater are often insufficient to meet local needs or become contaminated due to overuse or pollution.

(7) *natural habitats and wildlife.* Building on virgin land can cause a loss of biodiversity and occasionally overexploitation of natural resources. (8) *culture and heritage.* Local identity and knowledge are being lost through globalization. (9) *equity and fair trade.* This principle addresses how some in the industrialized world live in relative poverty and many in developing countries cannot meet their basic needs from what they produce or sell. (10) *health and happiness.* As rising wealth and greater health increasingly diverge, questions are raised about the true basis of wellbeing and contentment. It raises the question of what does it take to be happy, and suggests that maybe the answer is less complicated than we think (Tarnay 2006).

BedZED accounts for nearly all of these principles in its design. The title of the development suggests that they conform to the first principle of One Planet Living, zero carbon.
There are many architectural features built into the structure that will help minimize the need for heating and energy. Thermal mass walls are used to limit heating needs, photovoltaic panels to produce electricity, sunrooms to assist in natural ventilation through stack effect, and wind cowls to also help in natural ventilation. The electricity consumption of BedZED is 58% lower than the London average. BedZED also has 90% less heating requirements than the London average (Tarnay 2006). BedZED used to use a prototype biofuel plant that burned woodchips from a nearby factory which to produce all heating requirements and 70% of electricity requirements (Tarnay 2006). However, the woodchip burner was new and innovative technology when developed. It has broken down and is unable to be corrected at this time (StaffRepresentative 2007). This prototype also goes to show how BedZED attempted to follow the second principle of One Planet Living to limit waste by using woodchips from the nearby plant that originally would have been shipped to a garbage dump.

BedZED encourages its residents to consider sustainable means of transportation. There is a “car club” in which a few residents share an electric car (Tarnay 2006). There are car recharging stations throughout the development. BedZED also includes 23 work
units that encourage residents to work on site and thus limit the amount of travel required daily (Powers 2002).

The fourth and fifth principles of using local and sustainable materials and foods are also prevalent at BedZED. Of all the materials required to construct BedZED, 92% of those materials were acquired within 50 km of the site (StaffRepresentative 2007), drastically cutting down on transportation pollution. Each unit has its own personal garden space outside their units in which they have the opportunity to grow their own fruit or vegetables, which also cuts down on food miles.

The sixth principle of using sustainable water is also present in the design. The abundance of private green spaces serve a dual purpose of collecting and purifying water before it either enters back into the ground or is captured to be used as grey water on site (StaffRepresentative 2007). These personal green spaces and the sedum green roofs found throughout the design are also home to many types of insects and wildlife (StaffRepresentative 2007). This follows the seventh principle. BedZED is built on Brownfield land. A type of land in which farming is no longer possible and serves very little environmental purpose. This, in addition to the fact that BedZED is built at a density level higher than that of inner London, illustrates that one doesn’t need to lose valuable Greenfield land to low density traditional developments in order to house people comfortable. (Powers 2002)

Finally, BedZED makes an effort to follow the tenth and final principle of One Planet Living. It is difficult to gauge the amount of happiness found within a design however some factors can be judged. For example, studies found that there is an unusual degree of social integration at BedZED (Tarnay 2006). On average people living at BedZED know more of their neighbors than the other residents living in London. This creates a stronger sense of community and perhaps increases the level of happiness.
experiences by the residents. BedZED is not only beneficial to the environment but the people who live there as well. It illustrates that, “a task with a vision can change the world” (Powers 2002).

So why isn’t everyone building like this? Why is The Peabody Trust considered to be such a pioneer with these concepts of One Planet Living? There are others out there who have found the same concern for where this planet is heading as the Peabody Trust. There is the money issue but there are other issues as well. Unfortunately, “this is the future but not enough people think like this yet.” (Powers 2002)

BedZED is a perfect example of what Peabody Trust is capable of accomplishing because they were clever enough to invest in their own projects. It is a revolutionary new project that may one day serve as a template for how architecture may one day save the world.

Through it all, Berthold Lubetkin and the Peabody Trust have proven through the works of Highpoint One, Priory Green, and BedZED that it is possible to provide Londoners with high quality housing at a low cost. They were able to provide the urban poor with amenities and an abundance of green space that before had only been known to the higher classes. These works have helped to alleviate the horrible conditions that poor Londoners were forced to live in prior to the emergence of these projects. The newer projects also begin to address emerging concerns for the environment that have begun to plague many works of architecture.

All of this proves that sometimes it only takes one person or one small group to stand up and take action for a cause worth fighting for. Change is possible but it doesn’t happen on its own. It requires someone to step forward and take action. This is exactly what Lubetkin and the Peabody Trust chose to do and it has made quite a difference.
Bibliography


