6-1. In the demographic upheavals created in the wake of the industrial revolution, "morality" became one of the key areas of concern for those seeking to manage social behavior efficiently. Describe some of the *spatial* responses to this perceived moral turpitude of the "industrial classes".

Katherine James' response

The industrial revolution brought a population explosion in city and accompanying overcrowding, poor work conditions, and inadequate sanitation. The physical dirtiness and resultant poor physical health was evident. What is interesting is the associative assessment of the city as a place of moral degradation. "For where overcrowding exists in its sanitary sense, almost always it exists even more perniciously in certain moral senses" (Evans, 104). The city was seen as a machine of moral descent; the spatial field of the urban lifestyle- the "flesh pressed against flesh" (not unlike the environment of the slave ship)- was capable of corruption of the masses. What is perhaps even more interesting is the hope, or even certainty, that architecture could or must be the cure for this perceived moral infestation.

One strategy that architecture proposed to solve the ills of industry was to marry the factory and home in one physical location. The designs claimed to allow the workers to develop community through the physical proximity of workplace and residence. Quality of life could be insured through the absolute control of the capitalist ownership. "The built form could act as an element of control, potentially replicable, within the overall bureaucracy" (Darley, 44). The problem with this strategy is precisely its strength: the overreaching arm of the company into the private lives of the workers caused great unrest. A sense of free will was stripped of the community members. Even in the most humane proposals for this factory-town model, Arkwright's mills or Ledoux's royal saltworks, workers "could still not easily forget that the factory lay just beside the village" (Darley, 72).

Other attempts at spatial cures were focused on utopian goals of improving housing conditions (The Model Houses for Four Families by Roberts) or the factory independently. However, the more effective alleviator of city congestion and therefore immorality was not an ultimately effective architectural model of the working man's spatial organization alone, but also improvements in transportation. Later proposals including the Cite Industrielle and Villa Contemporaine acknowledged the huge significance of transportation and accessibility in their proposals. Transportation advances allowed these new proposals for a less dense, less macro-centralized city. This, along with improvements in sanitation and work reform such as the Factory Act, allowed for an atmosphere of less physical and moral illness.

density and morality

Nicole Vlado

The emergence of a new concept of density surrounded sites of industry in the late 1800s, constructing with it a shift from private to public. The space for privacy within the home was moved out of the small flats and dwellings of the urban working class, into the public sphere, with the performance of domestic life "in the theater of the street" (Evans, 104). The exposure of the lifestyle of the urban poor created a stark distinction between social classes, and presented a fear to the greater public of the potential (moral) degradation of society, a fear associated with the spread of such lifestyle and behavior.

The space occupied by the urban poor was a space once owned by a different demographic. Many of the slums and rookeries of 19th century London were once mansions, abandoned and left to decay. The ruins of these mansions were reconstructed to form multiple dwellings, their grounds filled with informal housing. Their transformation from the space of the aristocracy to that of the urban poor was marked through degradation, a symbol of the ruin of an established pre-industrial order.

This filling of the space of the upper classes with the multiplied body of the urban poor reflected a shift in the understanding of the body in space. Density assumed spatial proximity, an intimate closeness between men, women, children, family and strangers, described by Evans as having the potential to "decline into habitual promiscuity and beyond that to incest" (p. 106). These fears helped define the agenda of reformers, towards an architecture that could reinscribe social order within the family through the assignment of space to individuals within the family. This is idealized with the design of the Model House for Four Families, in which the space of each family defined, interiorized (brought in from the street, made private), and compartmentalized by activity (in addition, these spaces were sex-segregated in order to prevent the habitual promiscuity/incest of the slum dwellings).

While housing reform in London produced an architecture reflecting the body politics of the Victorian upper class, urban reforms in the United States sought to transform the city through the insertion of nature. The park became a planning strategy for the "reconstruction of a degraded environment" (Dal Co, 164), alleviating the congestion of people and pollution associated with American cities. Green spaces were theorized by reformers, including Olmstead, as spaces laden with the potential for improving the "moral health" of the city's residents. In both cases, these initial reforms were responsible for the emergence of urban planning as a discipline.

Catherine Fowlkes

The slums and resulting immoral lifestyles created by the industrial revolution sparked both concern and fascination with the domestic life of the working class. The varied remedies for the situation ranged in scale but shared an underlying belief that a rational order would promote more orderly behavior. This order enabled measures of control as well as "inspiration" to its inhabitants.

The physical and the moral were inextricable from each other in the eyes of the reformers, there "lay a conviction that virtue could be wrought from architecture as surely as corruption was wrought from slums." (Evans P97)

One solution to the problem of overcrowding in cities was to remove production and workers entirely. This decentralized response to congestion was experimented with in various forms. Ladoux's elliptical plan for the Saline de Chaux was "driven by the notion of social order and economic efficiency." (Darley p50) The factories and workers dormitories were situated around the central Director's house. Thus, the director's authority, control and watchful eye radiated out towards them at all times. This panopticon-like arrangement was intended to ensured productivity and moral behavior. According to Jeremy Bentham, "morals reformed – health preserved – industry invigorated – instruction diffused...all by a simple ideas in Architecture." (Darley p53-4)

Other factory towns, such as William Hosketh Lever's Port Sunlight, arranged settlements around a central open area. Common green spaces were implemented into many of these plans, "parks, trees, and nature here become emblems and physical elements of a just and harmonious life." (Dal Co p154)

In the city, slums were studied to note conditions and propose reforms. Surveys in the form of maps documented that slums often occurred in "distinct enclaves with a noticeably different pattern from the rest of the city." (Evans p99) Like Frederick Engels observations of the reoccurrence of meandering streets in slums, these surveys made a connection between physical space and the behavior of its inhabitants. "Thus architecture...could be interpreted as a physical geography of moral conditions: the layout of the house mapped the moral condition of the family, and the street layout mapped the moral condition of a community..."(Evans p99-101)

On a more initimate scale, there was a focus on the actual characteristics and layout of domestic spaces in the slums that drew much attention and criticism. As opposed to the emphasis on surveillance in the factory towns, privacy was a focus of many reformers for the city's slums.

The separation and rational organization of domestic space characterized the architecture of reform. Plans such as Henry Roberts "Model Houses for Four Families" separated families into distinct spaces around a common open stair. This avoided the need for different families to enter each others spaces. Inside the homes, rooms were designated for different activities such as cooking and sleeping to avoid morally dangerous situations

where "every detail of daily life was made public and familiar" (Evans p104) There were separate bedrooms for girls, boys and adults – each with only one door to avoid these spaces being walked through. The bedrooms were carefully laid out so that the parents could easily observe the children's rooms from the living room, while there own bedroom was given more privacy. "Hence the wall and the door were the determining elements in the configuration of reforming architecture; the wall as the means of a general sequestration, the door to give specific structure to personal relationships." (Evans p109)

Spatial responses were a result of the conceptions of space of this time. Notions of "the promiscuity of public space" (Stallybrass and White, p136) and the bourgeois repulsion/fascination with the slums – as illustrated by the best selling Chadwick's report, inspired fear and want of regulation, manifesting itself in large and small scale attempts at order, designated separated spaces, efficiency and control.

Rooks and Cattle

Nathalie Westervelt

The bulk of the answer to this question lies in the 1978 Essay 'Rookeries and Model Dwellings.' Although Rookeries are literally where Rooks nest and breed, here the word is used in it's old-fashioned sense for overcrowded tenement buildings. Each room was linked to another, may people lived in small spaces and slept side-by-side with all sexes and with non-family members. Moralists were aghast and many proposals were made for the amelioration of this issue.

"The architecture of reform would work by specifying movement and distinguishing spaces." (Evans 107) Specifically, Henry Roberts 'Model Houses for Four Families' for 1851 Great Exhibition marked the early phase of housing philanthropy and the following housing project represented the "ways in which architecture was to be deployed against low-life." The project boasted: outdoor access stairs, privies (id est toilets), sculleries –(id est keeper of the dishes), a living room, and 3 bedrooms for separation of boys and girls. Each bedroom had a door and the parent's bedroom entrance was through the scullery for privacy. The children's rooms, however, were under surveillance from the living room.

"The wall and the door were determining elements in the configuration of reforming architecture." (Evans 109) These elements offered privacy, security and sound separation. In addition to new projects, existing housing blocks were refitted with washing areas and were "judiciously fitted with partitions."

Often, even when presented with separate rooms, families would still choose to sleep together. Moralists saw this as a choice was not between "good and bad housing but between two radically different ways of life." (Evans 112) To this end, Robert Kerr proposed (with much uproar) that housing for the poor should comprise of one large room, because "they liked living that way looked forward to seeing the front and back doors open all day." (Evans 112)

Around the same time that the living room Panopticon was developed, Jeremy Bentham traveled to Russia to impose the real thing on his brother's textile mills. "Morals reformed – health preserved – industry invigorated – instruction diffused – all by a simple idea in Architecture" (55 Darley)

This model failed for factories because it neglected the necessary equipment changes that occur in factories. "The Panopticon never proved itself to be a replicable model for industry, although it fared rather better as a prison." (Darley 55) Therefore the all-seeing eye of morality was put to good use for those who needed the most moral structure.

Moral models such as Moravian and Shaker Communities were regarded as good factory models that include housing and amenities. They gave "formal expression to self-impose individual regulatory limits, familial and sexual." (Darley 59) In addition to separation of sexes, "thoughtful planning and high quality services (ventilation, running water and

toilets on every floor) all helped to raise 'the moral and intellectual standards of the population.' (Darley 67)

Jimmy Shen's response

The moral condition of society was closely associated with the built environment where the physicality of the architecture itself was seen as a manifestation of the moral condition of those that lived within it. In which case the supposed crudeness, filthiness, and moral ineptitude of those that lived in the slums resulted in a physical environment that was reflective of that condition. Therefore, "An informing purpose of the first philanthropic housing agencies was ... to replace dwellings that were both the sign and cause of corruption with the format for a new, purified domesticity." (Evans 101)

One of the problems of slum dwelling was identified as the "multitude of entries and exits and indiscriminate use of its undifferentiated rooms." Therefore the "architecture of reform would work by specifying movement and distinguishing spaces." This can be observed in both the separation of individual dwellings from each other through the use of stairways as public circulation space, as well as the divisions within the house itself. Bedrooms for children were placed adjacent to the living room so that parents have close visual access whereas the parent's room is separated from the living room through an intermediary scullery in order to be more "secluded from innocent or prying eyes." (Evans 109)

On a larger scale, there were experiments to reorganize the whole of society by incorporating the working and living aspects of daily life into one physically enclosed world. One example of this is Jean-Baptiste Godin's industrial community called familistere at Guise, France. The community was housed in three linked residential blocks with internal balconies that surrounded a central courtyard with the intention of creating "social spaces that would draw together the village-sized population." This in addition to "thoughtful planning and high quality services helped to raise the moral and intellectual standards of the population." (Darley 67)