Architecture and Biopolitics at Les Halles[1]

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The food markets at Les Halles, in nearly continuous operation since the tenth century, were a primary connection between Paris and its surrounding territory. Due to the centrality and visibility of the market district, Les Halles came under enormous pressure to showcase the ability of the government to manage the circulation of products from agricultural land to the city. Conceived variously as the "stomach of Paris" or the heart of the city, the site at which all flows are organized, Les Halles has played a crucial role—both symbolic and material—in elaborating spatial schemes to enable mass food consumption. From the 1763 construction of the Halle au blé, to the 1851 ground-breaking on architect Victor Baltard's market pavilions, then to the removal of the markets to the suburb of Rungis in 1969, the markets at Les Halles were regularly redesigned and rebuilt to accommodate and/or produce shifting notions of architectural, social, and financial order. Such renovations became a source of inspiration and knowledge to communities of architects and helped to define the capacities of architecture to produce bodily and social transformation. Although Les Halles' markets have long since been moved from the site, spatial and discursive architectural forms elaborated through transformations to the architecture of provisioning still nourish contemporary debates about disciplinary capacities of architecture. Shifting beliefs in the ability of architecture and urbanism to manage the relationship between the city, the market, and the bodies of Parisian citizens have generated new biopolitical roles for architecture and urbanism at Les Halles and beyond.

The Halle au blé

During the eighteenth century, Les Halles was a barometer of the success of the city's organization and governance. It was a political as well as a biological

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necessity to maintain a successful market, one that would resist cycles of abundance and famine and one that would make affordably priced food continuously available to Parisians. Although private merchants managed the purchasing, distribution, and sale of food in the city's markets, provisioning was not something that could be entrusted to private commerce alone. A balance had to be struck between food merchants and government, and it was up to the police to regulate Les Halles' markets to ensure that they maintained sufficient order, food supply, and low prices to provision the city.[2]

As historian Steven Kaplan has explained, grain provisioning was especially important to market authorities due to its political and nutritional significance.[3] Charged with overseeing Paris's grain markets under Louis XV, the police developed a series of new regulatory techniques to ensure that Paris would be appropriately provisioned by grain merchants. In the 1760s, one police inspector in particular, a certain Poussot, was instrumental in imagining a new architecture for grain commerce at Les Halles. His ideal was "constant abundance," which would in theory lead to stable and affordable bread and grain prices in Paris.[4] Yet this ideal seemed to be continually resisted by material conditions at the grain markets. It was difficult to force merchants to sell grain at Les Halles, where sales could be monitored more easily, since it was often more convenient and less expensive for them to do so outside of the district. Those who did sell within the marketplace had to endure poor sanitation and overcrowding, which could lead to disputes amongst merchants, injuries, and disease, not to mention administrative discontent. As reports of spoiled flour, overcrowding, theft, and disorder accumulated, Poussot recognized the need to make both spatial and organizational changes in the space where grains were sold.[5]

With the support of grain merchants, Poussot organized a campaign to build a more permanent structure for grain sale, and in 1762, the National Assembly agreed to construct a new grain market and storage center, the Halle au blé.[6] The new Halle au blé would provide more space for the grain trade than the previous open-air grain market, and, in contrast to the former straw structures at the site, would provide secure and sanitary conditions for storing grain within the city. Plans for the building were drawn up by architect Nicolas Le Camus de Mézières, and the building was constructed between 1763 and 1767.[7] Made of stone, the Halle was built in the shape of a ring with an open interior courtyard. Light and shadow played across its curved walls and torquing interior staircases. Stalls within the building provided space for merchants to sell grain on the first floor and storage space intended to keep the grains from catching on fire on the second floor.[8] The many entrances to the building suggested its permeability to trade, while the presence of the gates on its exterior wall underscored the degree to which the products inside were subject to protection, regulation, and surveillance. With its regularly positioned doors, the building seemed almost to be a synecdoche for Paris itself.

Yet the form of the Halle au blé was not simply symbolic; it was also imagined to formalize and facilitate many of the police principles that inspired its

construction. Its circular form, reminiscent of not only the Pantheon, but also Jeremy Bentham's Panopticon, would facilitate the program of centralizing and surveying the grain trade within Paris.[9] With entrances positioned in regular intervals along an exterior wall, the Halle au blé would enable traffic to approach the building from all sides, decreasing congestion in the immediate neighborhood. The Halle's open courtyard would facilitate transport of commodities within the building, and, most crucially, permit merchants or police inspectors entering the market to immediately apprehend the quantity of grain stored therein.[10] Yet only a year after the Halle opened, a temporary structure had to be built in the courtyard to provide more space for grain sale, which somewhat limited surveillance.[11] Twelve years later the courtyard was permanently covered by a large wooden cupola, a structural and formal marvel designed by the architects Jacques-Guillaume Legrand and Jacques Molinos. The roof protected the merchandise inside, provided more space for storage, but enclosed the building more than its architects originally intended, suggesting less an open market than a temple to grain. Ironically—since the grain inside was supposed to be protected from fire—, the roof burned in 1802 and was replaced by an iron cupola designed by François-Joseph Bélanger and the engineer François Brunet in 1813. Among architects, the Halle au blé was admired for its formal elegance as well as for the technological accomplishment of the long span of Legrand and Molinos' pot-belly shaped roof. Its construction intensified architectural interest in market halls as an architectural type.[12]

This interest in the potential of the market hall to protect Parisians from famine directly preceded a more comprehensive rethinking of the relationships between urban architecture and the health of urban populations during the late eighteenth century. After the Hôtel-Dieu was destroyed by fire in 1772, for instance, debates about the design of hospitals provided an opportunity to link architectural design to health. As disease spread within densely populated cities, Parisian doctors began to understand that the general health of an urban population was limited by the illnesses of the city's more impoverished citizens. Finding ways to improve their health would not only protect the well-being of other members of the population, and act as a form of charity for the sick, but would also increase the productive power of the city overall.[13]

With this understanding of the relationship between the hospital and the city, the Académie des Sciences convened a commission to reconsider the design of the Hôtel-Dieu in 1785. Medical reformers concentrated on developing mechanical systems to increase the ventilation of hospitals, as this was seen to be a primary renovation that would improve the health of the hospital's patients. In the words of Doctor Jacques-René Tenon, the perfectly ventilated hospital could be a "*machine à guérir*," or curing machine, an apparatus capable of producing predictable effects in its patients' health. Michel Foucault has shown that this medicalization of architectural knowledge expanded the power ascribed to architecture by imagining how it could be capable of producing effects within bodies—not just in bodies of hospital patients, but in

bodies of the population of the city as a whole. Foucault's description of the hospital is one of the first examples he gives of a spatial engagement with a *noso-politique*, or biopolitics, in which "equipment and techniques" for managing the biological traits of a population become politically important since they will increase health and thus the overall productivity of a population.[14]

Doctors standardized their plans for ventilation in hospitals so that their plans could be recreated elsewhere. In generating this ideal of a consistent and repeatable set of design rules intended to translate desires for health into the form of the hospital, medical reformers assigned previously unimagined health effects to material components of the hospital's architecture. In contrast to older conceptions of architectural knowledge of order, symmetry, and ornamentation, late eighteenth-century architectures of health or provisioning also concerned themselves with the management of health through program, or the arrangement of spaces for various activities within a single building. Programming the hospital to increase the circulation of air, doctors translated their desires for the effects that the building would produce into spatial form. This spatial knowledge about the health effects of a properly ventilated hospital was initially the domain of medical specialists. But it eventually helped to define the ground upon which architects would rely for an ideal of architectural functionality. As architects claimed the ability to manage health-inducing program as one of their many skills, architecture extended its capacities. In the late eighteenth-century hospital, bodily need thus fed the architectural imagination and expanded the disciplinary and political purview of architecture.[15]

The construction of the Halle au blé should be understood in the context of this transformation of architectural capacities. Both the market hall and the hospital were buildings that sought to confine activities deemed potentially dangerous to the overall population (faulty commerce, disease) by putting in place an architecture to incite circulation—of air, in the case of Tenon's hospital, and of grain and money, in the case of the Halle au blé. In so doing, they would thus supposedly combat population-wide health problems such as disease and famine. Managing the Halle au blé required the presence and regulations of Poussot and other members of the police and thus was not imagined to automatically ensure health like Tenon's "curing machine" or automatically ensure discipline like Bentham's Panopticon (which was also apparently of interest to Tenon, and whose form resembled that of the Halle au blé).[16] Yet architecture would improve the ability of the police to regulate grain trade. Although the Halle au blé was lauded for its formal elegance and the ways in which it elevated the grain trade by providing it with a monumental structure in the center of a gentrifying district, its architecture is strikingly similar to that of other buildings of discipline and reform such as the hospital and the prison. This creates an odd sort of equivalence between commerce and the poor, the criminal and the infirm. They are all entities that would be relegated to a circulation-controlling building in order to improve the overall health and productivity of the urban population at large.

The construction of the Halle au blé did not alone solve the problems of overcrowding or food security that its designers intended.[17] Rather, it stood for governmental attentiveness to these problems, and it provided a form for imagining the effects of these attentions. And in the case of both the hospital and the new Halle au blé, the investment of members of the police in commissioning these structures meant that the intended effects of these buildings were not merely localized within the buildings themselves, but were supposed to extend to the city as a whole. Unclogging the overcrowded and undefined open-air space of the Halle au blé with a newly organized stone structure meant not only creating a more permanent and elegant space for the activity of buying, selling, and trading grain, but it also irrevocably tied the activities at the building to the bodies of citizens whose only direct link to the Halle was through the bread they ate. The Halle au blé was thus invested with biopolitical significance.

Baltard's Halles

As trade through Les Halles intensified, its markets continued to be the target of campaigns to improve the city's overall health and hygiene. The putrescent Cimetière des Innocents was cleaned and replaced with the Marché des Innocents, where fruits and vegetables were sold. A new Halle aux draps designed by Legrand and Molinos was completed in 1787, and improvements were made to the Marché des Prouvaires during the early nineteenth century.[18] Yet it was not until 1851 that any significant construction activity at Les Halles began to take place. A series of projects designed by architect Victor Baltard, who later worked in collaboration with architect Félix Callet, engaged many of the concerns that emerged in prior renovations at the Halle au blé.[19] Yet they also considerably shifted terms of the debate about how architecture would negotiate the biopolitics of provisioning. Whereas the cupola of the stone Halle au blé enclosed the market and made it into a monument to abundance, Baltard's pavilions provided a new form for an architecture of regulated circulation.

Several proposals to improve conditions at Les Halles preceded Baltard's projects. In the beginning of the nineteenth century the district's problems were readily apparent: it was crowded with unorganized merchants and foodstuffs. Vegetables spilled out of overcrowded market stalls. Prostitutes and informal commerce surrounding the market generated an impression of disease and moral contagion whose containment was essential to the health of the district.[20] As part of a more general call to improve communication and circulation in Paris, in 1808 the Préfet de la Seine, Nicolas Frochot, made a proposal to improve the hygiene of Les Halles. Frochot suggested that the markets take on a more regular form, and that they be further separated from residential districts. In 1811, Napoléon Bonaparte, who had once lived in an apartment overlooking the Halle au blé, declared that improvements to the Halles

were one of the most important priorities of the nation.[21] In decrees of 24 February and 19 May, Les Halles became the "Grandes Halles," a national center for the food trade. This allowed the markets (which sold meat, fowl, fish, shellfish, fruits, vegetables, potatoes, butter, eggs, cheese, salt, flowers, and cloth—not only retail to consumers but also wholesale and semi-wholesale as well) to be regulated and redesigned as an ensemble and subjected them to more comprehensive forms of renovation. Architects Joseph Bélanger, Pierre-Louis Fontaine, and Louis Bruyère submitted design schemes to improve the flow of food in and out of Les Halles and to improve the spaces in which this food was bought, sold, and traded.

In 1835, the Préfet de la Seine, the Comte de Rambuteau, ordered the destruction of the old market buildings to make it possible to widen streets in the area. Although several members of the Paris Municipal Council subsequently argued for moving the markets out of the area entirely, this plan was eventually rejected as unfeasible.[22] Baltard, who was then Inspecteur des Travaux de la Ville de Paris, was selected to be the chief architect for renovations to the markets in 1843, and the Municipal council created a new commission to study this project on 19 July 1844. Several questions needed to be worked out: the placement of the markets within Paris, the arrangement of different markets within the ensemble of the Halles, and the form that these markets would take. Over the next ten years, first under Rambuteau and later under Baron Haussmann, Baltard developed a series of plans intended to translate desires for a more hygienic market into spatial form.[23]

Plans that Baltard initially prepared in 1843 show an irregular ensemble of market buildings, with differently shaped buildings for each food market surrounding a nearly rectangular central building. Yet Préfet de la Police Gabriel Delessert expressed a preference for rectangular pavilions arranged rectilinearly, a scheme that Baltard followed in his subsequent plans.[24] Though markets would still be separated by the type of food that they sold, they would appear to be uniform from the exterior. In 1848, Baltard prepared plans for a series of eight stone buildings arranged on an east-west axis from the Halle au blé to the rue de la Lingerie; these plans were revised over the next several years. Solicited and unsolicited, many architects proposed other schemes for an ensemble of markets at Les Halles. A famous counterproposal by Hector Horeau, for example, suggested expanding the market district to the south so as to connect them to the Seine. However, Baltard's plans were approved in 1851; in May of that year Napoléon III laid the building's first stone.

In 1847, Rambuteau had requested that the markets be of a monumental character, which would imply that they be made of stone. Baltard's plans respected this request, employing stone cladding on the lower floors, but also took advantage of then-modern iron framing that would allow for large open spaces for the market inside the building; a series of iron-gabled roofs would open the building to light and air. Dissatisfaction with these plans was immediate; it appeared to many to be a fortress, a building of control rather than an

open space. Merchants had requested that the ground floor of their markets remain open, protesting that without making their wares visible to passersby, they would lose the ability to make necessary spur-of-the-moment sales.[25] Construction was halted as the first market building was near completion in 1853, and Haussmann again solicited new proposals for the renovation of the markets. This time, Haussmann and Napoléon III insisted that the building be nearly entirely constructed of iron, which was less expensive to build with than stone and had been used to great effect at the Gare de l'Est.[26] Baltard and Callet submitted a stunning project, which preserved much of the program of their previous proposal but did away with its stone cladding. Evoking both the Gare de l'Est and Joseph Paxton's famous 1851 Crystal Palace, a model of glass construction and a popular sensation, these new plans for Les Halles were approved in 1853. Haussmann promoted the project, expropriated adjoining residential property, and secured funding to enable construction to begin on the new structures early in 1854.

In contrast to the Halle au blé, which emphasized the very idea of concentration and regulation in its ring-like form, Baltard's famously transparent iron-and-glass market pavilions enclosed commerce without seemingly concentrating it. The pavilion's tectonic allusion to then-modern rail stations suggested that Les Halles were a place for new circulatory freedoms. Yet this was somewhat of a cover for contemporaneous changes that were made to regulations concerning the circulation of products within the market. As Victoria Thompson has shown, these regulations impacted who could buy and sell goods within the new Halles and had the effect of limiting the economic liberties of women who worked in the marketplace. Profitable positions in the pavilions were given to more bourgeois and correct stall owners, and the periphery was intended for those that had not sufficiently espoused bourgeois systems of management (i.e., those that were intermittent, headed by women, without creditors, etc.). Stall owners could only employ members of their own family; hiring assistants was prohibited, as the young female assistants were considered to be too similar to prostitutes, and administrators prohibited female stall owners from passing on market stalls to anyone except their own daughters.[27] These renovations at Les Halles provided an excuse to "clean up" the behaviors and morals of its largely female merchants, limiting their economic power as a class and providing an opportunity to further manage the behavior and morality of those attempting to participate economically in marketplace exchanges.[28]

Baltard and Callet's monograph of etchings of the 1853 plans for Les Halles, published retrospectively in 1863, show several understandings of the relevance of such desires for regulation of commerce and commercial behavior to the architectural, urban, and technological renovations of the markets.[29] Initial plates displayed Les Halles in its urban context, emphasizing the transition of Les Halles from a series of small heterogeneous markets to a single market complex. Plans II and III superimposed the locations of the new and

old markets, showing a patchwork of markets spread throughout the neighborhood of Les Halles: prior to the renovation, butter and fish markets were adjacent to one another, with vegetables and fruits immediately to their left. A few blocks to the south was the Marché des Innocents, where food was sold directly to consumers, and a separate market for potatoes. In Baltard's new plans, each of these markets was moved into its own pavilion, and the ensemble was organized in a rectilinear form, following Delessert's suggestions. Wholesale and retail commerce would coexist. In plan, the markets, arranged by the type of food that they sold, with little architectural differentiation between spaces intended for different foods or types of commerce, appeared to be almost interchangeable.

Though the distribution of the market buildings and the materials used to build them bore the influence of the mandates of Haussmann, Delessert, and Napoléon III, details that Baltard (and perhaps Callet) invented for the market pavilions further envisioned the relationship between the goods of the market and the ordering function of its architecture. In their plans for the "Petits Pavillons, détails des combles," wrought-iron curlicues abstracted from flowers and vines and evocative of products sold within the markets fancifully filled the spaces between structural joints. Iron latticework, another nonstructural element, filled the spaces below the arches in the second roof gable, echoing the rectilinear image of the newly organized ensemble of markets in plan. The juxtaposition of these two stylistically different embellishments suggests an easy aesthetic coexistence between domesticated vegetables and an organized market. The architectural historian Siegfried Giedion would later claim that the architecture of Baltard's Halles was insignificant, little more than "greenhouse" architecture writ large (as was gardener/architect Joseph Paxton's Crystal Palace).[30] Yet the new Halles' resemblance to a greenhouse elevated to the scale of an international exhibit may not be reason for criticism; an embellished greenhouse would in fact be the perfect symbol of the ordered cultivation and bourgeois scopic pleasure that undergirded Haussmann and Napoléon III's desires for the renovation of the market.

While the Halle au blé attempted to improve circulation by enabling storage and surveillance of grain, Baltard's designs improved circulation of foodstuffs, water, air, and light within the marketplace itself, again almost as a synecdoche for the renovations to the city underway under Haussmann. Baltard and Callet's drawings demonstrated elaborate plumbing and cleaning systems that would perfect the flow of water and waste through the buildings. Storage space for provisions was provided in the basement of the market buildings, away from moving foodstuffs aboveground. The circulation of air was also important in this design: the high ceilings of the pavilions encouraged ventilation, which was less worrisome as a marker of disease than as an olfactory nuisance. The focus of these designs was not to illustrate the concern of the monarchy for the alimentary fulfillment of the population, as it had been in the eighteenth century, or necessarily to formally illustrate an idealized

relationship between government and commerce, but rather to manage circulation in miniature via the infrastructure of the market.

Baltard and Callet's plans emphasized the ability of the market's new organization to bring aesthetic order to both the interior and the exterior of the markets. For example, their drawings of the fixtures of market stalls (*détails de l'entablements*) showed Madame Ledoux's vegetable shop and Madame Dubois' fish shop.[31] In plans for the meat market, a detail of a stallfront (*façade principal d'un étal*) showed a meat shop belonging to a Monsieur Aubry.[32] These gender assignments—of men to meat and women to fish and vegetables—corresponded to prerenovation expectations of who would sell different types of products. In addition to this standardized signage, the sizes and placement of fixtures in the markets suggest an ordered and consistent environment. It is easy to see that the notion of hygienic reform at Les Halles was not merely an attempt to use architecture to affect health, but also an aesthetic decision. If the markets appeared orderly, they would in turn function in an orderly manner. It is clear from accounts of regulation inside the market that architecture alone could not in and of itself produce this effect. It did, however, stand as a sign of changes to the economic and social ordering of the market.

Nineteenth-century renovations to Les Halles altered the provisioning program of the ancien régime, so much so that by the time that most of Baltard's pavilions were completed, the Halle au blé, half empty and in disrepair as better grain storage was available in *entrepôts* outside of the city, was transformed into the Bourse au Commerce.[33] The 1889 renovation of the structure by architect Henri Blondel announced this shift. Architecture was not simply intended to assist in the maintenance of affordable and regular grain supplies to hungry Parisians, as was the case at the Halle au blé. Rather, larger-scale operations of both architecture and urbanism were needed to improve the process of food sales. The nature of surveillance was also transformed in the marketplace. Les Halles' transparent and orderly architecture did not merely enable observation of quantities of food, but also permitted their reach of surveillance to extend into the bodies of the market workers themselves. New technologies for managing the flow of foodstuff, commerce, and the movements and activities of merchants were coupled with new architectural technologies facilitating inexpensive construction and hygiene. In spite of these differences, state, market, and body remained intertwined at the new Les Halles.

A Market in the Suburbs

By the beginning of the twentieth century, the markets at Les Halles were again clogged with food and traffic. Trucks stopped up streets designed for smaller modes of transport. Speculators caused prices to shift radically. By 1950, the market had fallen out of favor with large-scale food vendors, who were incapable of selling large quantities of food at Les Halles and were increasingly

moving their business operations outside of the market. The number of purchases made in the market declined, and Les Halles risked becoming a place that would only supply an immediately local population, rather than a market capable of provisioning a region, or even a nation.[34] In postwar France, only 5 to 6 percent of food was distributed to consumers through supermarkets (the figure was 70 percent in the United States).[35] Centralized wholesale markets like Les Halles were still essential facets of the national food distribution network. To ensure the food supply and to fulfill aesthetic expectations for the center of Paris, Les Halles thus needed to be modernized.

Although finance and agricultural ministers in charge of overseeing the market discussed plans to move parts of Les Halles to open space at Bercy or La Villette, they tended to feel that Paris was no longer capable of accommodating large-scale food trades and that the market should be moved to the suburbs. Critics ranging from Situationists Abdelhafid Khatib and Guy Debord to historian Louis Chevalier and medialogue Jean Baudrillard lamented that the removal of Les Halles was irrevocably part of the long process of removing popular Paris to the periphery of the city, a perpetuation of a Haussmanian legacy; they claimed that the activity that had once been the foundation of urbanity was no longer proper to it.[36] Yet it was nearly impossible to contest the move. If suburban space was the only territory open, invisible, and manipulable enough to accommodate a market, then the political imagination of the relationship between government and consuming bodies had somehow shifted. These relationships did not need to be demonstrated experientially in the heart of Paris. They could just as easily be put into place outside of the city in a new wholesale food market at Rungis.

Located approximately ten kilometers from the southern border of Paris, in a largely agricultural area adjacent to Orly airport, Rungis was a place where relationships between urbanism and the biopolitics of provisioning were further developed. In 1961, the ministers of the Interior, Finance, Public Works and Transport, Agriculture, Construction, and National Commerce signed a decree authorizing the creation of a *société d'économie mixte* (a public-private partnership) charged with studying and developing a new market at Rungis. Initially headed by Camille Nicolle, and later by former Algerian market administrator Libert Bou, this partnership laid out a series of goals for a new suburban market. Nicolle wanted to modernize market infrastructure, to organize high-volume sales through the rapid diffusion of information, and to create a means of regulating and simplifying "fair prices" for the consumer without overburdening their food budgets.

To accomplish these goals, the Rungis market would impose minimum standards for business volume, eliminating smaller-scale business that supposedly raised prices in order to cover their higher costs. It would place limitations on the succession of businesses, which would eliminate some of their speculative quality. In the wake of decolonization, market administrators wanted to intensify exports to other countries and encourage the sale of "normalized and regularized" French food products. To improve health, they wished to raise the

number of fresh fruits and vegetables consumed daily. All of this would result not only in better health for the consuming population, but in more competition, which would lower food prices for consumers and free household budgets for other expenditures, which would drive the postwar economy. The need of the food consumer—not, this time, for affordable sustenance, but rather, for the ability to purchase other non-food goods—was again the excuse for marketplace renovation. Administrators envisioned that by 1990, the market region would reach a population of approximately 12 million.

Within the market, Rungis's planners also sought to improve the conditions of food sale. They wanted to reduce the necessity to move products around manually inside the market; the famous *forts des halles* would no longer be necessary in a modern market. They wanted storage space that would maintain even temperatures for a variety of foods. These would not merely be material improvements, but would also provide a form of cultural "renovation" for marketplace workers, who would have better conditions in which to work. All of this could be accomplished in a cheaper, larger, more open suburban space. Finally, rebuilding the market outside of the city would again improve traffic and hygiene within Paris. An added benefit would be the higher real estate prices that could be commanded in a newly gentrified Halles district.

Precisely because Rungis was intended to unclog Parisian traffic, planners insisted that the new market have links to highways, rail lines, and even the new airport at Orly. This concern with improved traffic circulation is present everywhere in plans for the market. In plans drawn up just prior to the 1964 groundbreaking of the new market at Rungis, the market's architects, led by Prix de Rome laureate Henri Colboc, sought a form for these circulatory desires. Published in 1964, in the French magazine of architecture and engineering, *Techniques et Architecture*, the market's plans expose the visual imagination of its planners. A thicket of rail lines leads directly into the markets (see Figure 1). Diagrams and drawings of the market focus on the movement of food into and out of its various pavilions. Whereas Baltard invoked the aesthetics of the Gare de l'Est in his design for Les Halles, at Rungis the market-as-train-station is taken literally: each pavilion was called a "*marché-gare*."[37]

Thirteen years prior, also in *Techniques et Architecture*, similar circulation diagrams were used to show off the recently developed *libre-service* Monoprix grocery store (see Figure 2), whose goal was to allow customers to anonymously and efficiently purchase their own provisions. The architects of both spaces use the same representational techniques to imagine the utility of the new markets; the wholesale food market follows the example of private commerce and extends its circulatory logic to its wholesale spaces. And the significance of both is that they are ideal spaces to logically extend technocratic circulatory and transportation patterns developed in previous centuries by circulation-obsessed architects. As one of Rungis's engineers, P. Barre, explained in a special issue on the new markets at Rungis in *Techniques et Architecture*, "These markets are also stations for merchandise: in effect, they constitute the

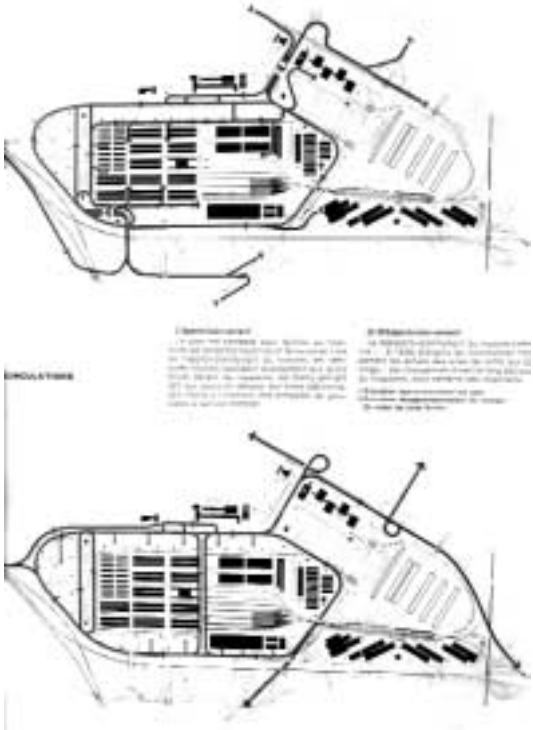

Figure 1. Circulation diagram of the Marché d'intérêt national at Rungis, published in *Techniques et Architecture* in a special issue on Rungis from 1969
Source: "La Composition," *Techniques et Architecture,* numéro spécial, "Pans-Rungis-La Villette: Transfert de Halles Centrales," December 1964, 56.

Figure 2. Circulation diagram and interior of a Monoprix grocery store published in the magazine *Techniques et architecture* in 1951
Source: Roger Morel, "Formes Nouvelles Du Commerce: Libre-Service," *Techniques et Architecture* 11, 7-8 (1951), 87

point of arrival and departure for these food products that are not really meant to stay in one place, but to be in transit in the best possible conditions: of speed, price, and comfort."[38] Barre does not tell us whether these traveling vegetables will end up in a restaurant, a *libre-service*, or simply in a hungry belly. What is important is that there is no material, social, or urban resistance to their movement.

Rather than policing the spatial organization of the marketplace or the behavior of shopkeepers, as was done following the previous renovations at Les Halles, Rungis's engineers sought to control commodities themselves. This control would be achieved by tracking the movement of food throughout the market, recording and displaying the prices at which the food was sold, producing maximum transparency and data. Such surveillance would not be enabled by architecture, as it was in the eighteenth-century Halle au blé, but by early computer and telecommunication technologies, images of which are liberally featured in publicity material for the market. At Rungis, food became an informational commodity as much as something to eat. This is technocratic market planning taken to its limits. The social functions of the market, so heavily invested with political and moral significance during the Monarchy and the Empire, had been totally stripped from the program of provisioning during the *trente glorieuses*. The form of twentieth-century Rungis was reduced to an image of pure circulation, an architecture of low prices. This architecture and infrastructure is today repeated in suburban Paris in *hypermarchés* such as the Carrefours and Auchans situated next to RER stations and highway exits.

Returning to Les Halles

After the departure of the food markets from Les Halles in 1969, formal representations of biopolitical relations elaborated through the markets' architecture seemed to have been demolished along with Baltard's pavilions. Rungis, visible only to market workers, needed little formal embellishment. However, a short distance away, many of the concerns that had once been expressed in Les Halles' architecture of provisioning entered into discourse about a building with an entirely different purpose. In 1971, shortly after the last Baltard pavilion was disassembled, President Georges Pompidou announced that architects Richard Rogers and Renzo Piano had been awarded the commission to design a new center for art and culture, the Centre Beaubourg (which was renamed the Centre National d'Art et de Culture Georges Pompidou after Pompidou's death). The Centre Beaubourg was to be constructed on the Plateau Beaubourg, an open plot of land that had been cleared in the 1930s to prevent the spread of tuberculosis and that had more recently been used as a parking lot for Les Halles' vendors. Though Pompidou had supported the demolition of Les Halles, the competition for his museum of contemporary arts seemed to

be an attempt to resuscitate a selected set of desired characteristics of the former market and the social activity that had taken place in Baltard's pavilions after the market's removal.[39] The Centre Beaubourg (as it was initially called) would be a popular space, open to the public, animating the neighborhood, another "Louvre of the People."

One of its most celebrated aspects was that its interior walls could easily be reconfigured, given that all of the structural and infrastructural elements of the building were worked into its shell. In a sense, Piano and Rogers's building, a mere shelter for the unforeseen activities that would occur in its interior, was the realization of Napoléon III's ideal of Les Halles as a series of simple "umbrellas" that would protect the marketplace. A space with such an open plan could accommodate art appreciation or happenings as easily as it could food selling. Piano and Rogers made this explicit in the commentary accompanying their plans. The building's physical flexibility allowed the cultural center to be programmatically flexible as well; no longer did a building have to be tailored to a specific use or set of sociopolitical desires. At one point, Piano stated, "Now [Beaubourg is] a cultural center, and after that perhaps an Open University, later on, I don't know. A cattle market?"[40] Peter Rawstone, one of the project's architects, added, "Things change all the time anyway. Houses, factories, today become museums tomorrow. Maybe one day our museum might become a foodstore, a supermarket. We want to make a loose infrastructure in which people can move, criss-cross on the way somewhere, live, eat, enjoy themselves, do things, and make decisions which can, if necessary, change the building."[41] The Centre Pompidou was even called "the building with its tripes on its outside."[42] Les Halles' alimentary ghosts lurked in the colored ductwork of the new Centre Pompidou.

Contemporary Les Halles and Rungis

Before discussing contemporary Les Halles and Rungis, it seems worthwhile to summarize some of the transformations that have accompanied renovations to both spaces. In eighteenth-century renovations to the Halle au blé, market managers charged with preventing hunger and famine felt that regulating the flow of grains would improve the food supply to the Parisian populace. Architecture activated and symbolized their goals of inciting competition and self-governance throughout the market. In the nineteenth-century reconstruction of the entire Halles market district, excess as well as need provided a spur for marketplace renovation. This time, renovation would improve the conduct of an exceptional class of female merchants, rather than the material conditions for an exceptional trade. Architectural structure, ornament, and infrastructure were charged with demonstrating a commitment to maintaining a liberal circulation of goods just as regulation of market activities proved that this was a myth. In the twentieth century, as Les Halles' markets were moved to Rungis,

the infrastructure for food commerce was excised from Paris, and the people required to keep the markets running were largely replaced by mechanical and electronic systems to keep food moving. At Rungis, food, in addition to market workers, was the target of surveillance. Market renovators shifted their attentions from producers to consumers, who would be able to purchase increased amounts of mass-market goods after lower food prices left room in household budgets for such purchases. Rungis required no ornamentation. Architectural innovation was instead reserved for the programmatically flexible cultural center rising at Beaubourg.

At both Les Halles and Rungis in the twenty-first century, similar yet reconfigured concerns are in evidence. Both sites still manage the circulation of goods, money, and consumers and relationships between the city and its exterior, as well as producers and consumers. Rungis has remained the world's largest wholesale food market, and recently changed the meaning of its acronym, M.I.N., from *marché d'intérêt national* to *marché international*.

The market's public relations department has embarked on a intensive campaign to increase public awareness of Rungis's role in assuring food quality and safety, distributing "I provision at Rungis" stickers to grocers and restaurants for display in their shop windows. The application of these marketing techniques is a symptom of food's transformation from something necessary for health and survival to a discretionary expense, the minimization of the discourse of biological need that originally inspired Les Halles' architecture. And although Rungis initially consolidated the food industry, it now also supports small-scale and local food businesses by providing them with a central place to sell their goods and facilitating the distribution of their food products by giving them access to a wide variety of consumers (restaurants, catering services, *épiceries*, institutions, etc.) For this, Rungis is studied by market administrators worldwide.

In contrast, at the Carrefour *hypermarché,* a retail food shopping center that echoes the scale and distribution logics innovated for wholesale commerce at Rungis (and perhaps the only publicly accessible contemporary space where food is sold at a scale comparable to the former Les Halles), controversy erupted after a December 2006 decision by the management of the Rosny-sous-Bois (Seine-Saint-Denis) store to prohibit minors unaccompanied by adults from entering the store. Located in a shopping complex adjacent to the Rosny-sous-Bois RER station, the Carrefour is directly connected to the Forum des Halles through the rail network. It is also a hangout for teenagers who, as one shop owner suggested, congregate there because they may not be able to afford the five euro round-trip train ticket to Paris.[43] For these teenagers, the Carrefour had become a place for leisure and high jinks (perhaps even a new "Louvre of the People"?) rather than a space for purchase alone. As in the Halles of the Second Empire, exceptionalism based on biological traits is still at work in such contemporary retail spaces of provisioning. What is at stake is no longer the right of women to earn their livelihoods within the markets, but

the right of the young to occupy the market; in fact, opposition to the Carrefour's policy focused on the ways in which teenagers' subjectivity as browsers or consumers had been denied. Now, however, inventing and enforcing these regulations is not a public activity of the police, but rather a private process carried out by local management of large multinational corporations who assume the authority to police their own markets.

Similar questions about the productive and regulatory potential of architecture and urban design are still very much at play in contemporary Île-de-France. After the 2004 competitions for the redesign of Les Halles, we can further understand the relevance of such biopolitical questions to the future of renovations at Les Halles. Reviewing debates about which of the two leading finalists in the competition would be chosen, Rem Koolhaas/OMA or David Mangin/SEURA, it is clear that questions about program, the relationship between city and suburb, and the transformative potential of architecture are still at play.

In the project briefs submitted for a new Les Halles, Rem Koolhaas/OMA emphasized that their plans would improve connections between the city and the suburbs.[44] Koolhaas's plan features a series of "perfume bottle"-shaped buildings intended to host a variety of activities to be determined by yet-undisclosed political or commercial forces. These buildings transect the space between the subterranean Forum des Halles and RER train station and the park space above ground, providing an immediately recognizable visual link between the site's above- and below-ground spaces. By tying together underground Les Halles, which many understand to be the only space that has any relationship to the "popular" for which Les Halles was once lauded (i.e., the Les Halles not comprised of tourists, or wealthy locals, but rather commuters and suburban teens), and the rest of the city, critics understand that Koolhaas's project was the most committed to providing a rapprochement between the urban and suburban spaces that convene at Les Halles.[45] Koolhaas's buildings, whose program or function is not immediately specified, are intended to be placeholders for the processes of programming a site. Koolhaas's vision is thus firmly situated within a trajectory of architectural design that has its origins in eighteenth-century debates about the productive potential of architecture. His project attempts to keep buildings as a sign of architecture's disciplinary potential to redirect movement, to organize the flow of bodies through the district; they also seem to be attempts to replicate the successes of the supposedly program-free Centre Pompidou. In a sense, the Koolhaas project is the most historically contiguous with prior renovations, as it still claims that architectural program—a capacity of architecture and urban planning that stems from biopolitical expectations and desires once generated at Les Halles—remains the primary motor for design of the site.

In contrast, the most clear formal gesture of David Mangin/SEURA's project (the project finally selected by Parisian mayor Bertrand Delanoë) is the

way that it reimagines the public space above the Forum des Halles as a garden and a boulevard for slow *flânerie* à la Barcelona's Ramblas. Mangin's above-ground project calms the frenetic circulatory energy of the underground RER station, reducing the neighborhood scale of Les Halles and demonumentalizing the formal gardens installed in the 1980s. In this sense, Mangin's project seems to do exactly the opposite of Koolhaas's; that is, it creates spaces with distinct formal vocabularies, speeds, and modes of use above and below ground, and these spaces are intended for entirely different populations (local residents and tourists above ground, suburban commuters below ground). By concentrating the gesture of renovation in an above-ground garden, Mangin's project makes no clear architectural link between it and the subterranean suburban-urban circulation through the RER train station. In formal terms, Mangin's plan seems to perpetually reproduce the difference between city and suburb. What is historically proper to the urban architecture at Les Halles—its very ability to concentrate, monitor, and perhaps socially transform people passing time there—is relegated to mere digestion in the intestinal and overlooked tunnels of the RER.

Instead, Mangin's project brings the suburbs to the city not by bringing suburban populations into the center of Paris, but by importing nineteenth-century landscapes of suburban leisure. This use of landscape design rather than the construction of new buildings is somewhat of a departure from past projects at Les Halles, which imagined that the neighborhood would be a conduit for circulating products of the land, rather than a place capable of generating these products itself. (No one has yet decided to install community agricultural plots at the site!) This work with landscape makes the plan more open to easy modification as it is simpler to redesign a garden than it is to construct a new building. Critics have seized on this argument against the project. The fear among architects is not only that the city has missed an opportunity to think out the spatial politics of *mixité* at one of the city's most charged sites, but also that it has favored unambitious landscape design over more "architectural" renovations, that Les Halles will be devoted to images of biological productivity aligned with the garden, rather than social productivity aligned with architecture. Professionals in architecture and urbanism thus wish to maintain the primacy of the designed space (even as the practices and materials that design itself encompasses have changed), while politicians are still using the site as a means of representing the relationships between government and a population defined in relationship to consumption.

As the history of modifications to Les Halles shows, renovation is simultaneously an occasion to reframe priorities for social space and an occasion to imagine new spatial forms. And in both Mangin/SEURA and Koolhaas/OMA's projects, architecture's loosening of its hold on program is of concern. Without representations of the eventual use of the site, we must ask who will work out new programs at Les Halles: market forces, municipal regulation, community groups, or merchant associations? It is crucial to debate what an aesthetic

of a functioning Les Halles might be and to discuss the new exclusionary regulations that may be put into place in order to make the site function.

This is where architecture must enter the picture. Its role at Les Halles has always been its ability to envision desired effects of renovation, and these effects could be understood more comprehensively than is evident in current plans. What kind of people and activities will Les Halles welcome, and which will be excluded? How will these spaces be policed and monitored? Is it possible, given any of the current plans, to imagine more creative and innovative formal or programmatic connections between suburban and urban Paris? Instead of attempting to cover over the flow from outside the city that has always nourished Paris, could a new Les Halles acknowledge the city's debt to its periphery? Instead of suggesting that urban and suburban residents have fundamentally different needs and spaces to occupy, could the architecture at Les Halles acknowledge or generate new regional Parisian identities or reorganize the separation between city and suburb? What rapprochement between city and suburb, between cities, markets, and bodies—and what new biopolitics—could a new Les Halles inspire?

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Notes

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2. This is discussed in greater detail in the introduction to Steven L. Kaplan, *Provisioning Paris: Merchants and Millers in the Grain and Flour Trade during the Eighteenth Century* (Ithaca, NY: Cornell University Press, 1984). For a more detailed account, see Steven L. Kaplan, *Bread, Politics and Political Economy in the Reign of Louis XV* (The Hague: Martinus Nijhoff, 1976).
3. Kaplan, *Provisioning Paris*, 594. Further details about provisioning networks for other foods can be found in Reynald Abad, *Le Grand Marché: L'approvisionnement alimentaire de Paris sous l'ancien régime* (Paris: Fayard, 2002).
4. Kaplan, *Provisioning Paris*, 604.
5. Bertrand Lemoine, *Les Halles de Paris: L'histoire d'un lieu, les péripéties d'une reconstruction, la succession des projets, l'architecture d'un monument, l'enjeu d'une "cité"*

(Paris: L'Équerre, 1980), 24. Also see Kaplan, *Provisioning Paris*, 111-21 and 604. Renovations to the grain markets had previously been proposed, specifically in plans produced in 1748 by the architect Germaine Boffrand. See also Jean Martineau, *Les Halles de Paris, des origines à 1789: Évolution matérielle, juridique et économique* (Paris: Éditions Montchrestien, 1960), 165-75.

6. Kaplan, *Provisioning Paris*, 115-17.
7. Le Camus recorded this project in a folio entitled *Recueil des differens* [sic] *plans et dessins concernant la nouvelle Halle aux grains située au lieu et place de l'ancien Hôtel de Soissons*. Images from this folio are reprinted in Mark K. Deming, *La Halle au blé de Paris, 1762-1813: "Cheval de Troie" de l'abondance dans la capitale des lumières* (Bruxelles: Archives d'architecture moderne, 1984). See also Dora Wiebenson, "The Two Domes of the Halle au Blé in Paris," *The Art Bulletin* 55, 2 (1973) and Robin Middleton's introduction to Nicolas Le Camus de Mézières, *The Genius of Architecture, or, The Analogy of That Art with Our Sensations*, trans. David Britt (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1992).
8. Lemoine, *Les Halles de Paris*, 24-25.
9. Panoptic prisons were built in Russia during the early eighteenth century but were not popularized by Bentham until after the design of the Halle au blé.
10. Deming, *La Halle au blé de Paris, 1762-1813*, 37-38.
11. Ibid., 46.
12. This interest also followed the 1748 competition for a *place royal à la gloire de Louis XV* in which Boffrand's plan for a new market was received.
13. Michel Foucault, "La Politique de la Santé au XVIII^{e} Siècle," in *Les Machines à Guérir: Aux origines de l'hôpital moderne*, ed. Michel Foucault and Bruno Fortier (Paris: L'institut de l'environnement, 1976), 14.
14. Ibid., 14-18.
15. Bruno Fortier, "Architecture de l'hôpital," in *Les Machines à Guérir*, 72. For more on the relationship between health, circulation, and program see Anthony Vidler, *The Writing of the Walls: Architectural Theory in the Late Enlightenment* (Princeton, NJ: Princeton Architectural Press, 1987), 51-58.
16. Vidler, *Writing of the Walls*, 74.
17. The Halle au blé was immediately thronged with activity. See Françoise Boudon, "A History of Les Halles, 1400-1950," *Architectural Design* 9-10 (1980), special issue of *A.D. Profile*: "Consultation internationale pour l'aménagement du quartier des Halles - Paris," 6.
18. Lemoine, *Les Halles de Paris*, 27-30.
19. The extent to which Callet contributed to plans for Les Halles is largely unknown, and Les Halles were commonly referred to as "Baltard's Halles."
20. Victoria Elizabeth Thompson, *The Virtuous Marketplace: Women and Men, Money and Politics in Paris, 1830-1870* (Baltimore: Johns Hopkins University Press, 2000), 107.
21. This fact about Napoléon Bonaparte is cited in Deming, *La Halle au blé de Paris*, 43.
22. The Parisian municipal council considered plans to relocate the market after 1839. Debates were led by Jacques Séraphin Lanquetin of the Commission permanente de la grande voirie. For more on Lanquetin see Pierre Lavedan, *La Question du déplacement de Paris et du transfert des Halles au Conseil municipal sous la Monarchie de Juillet* (Paris: Ville de Paris, Commission des travaux historiques, 1969).
23. For more comprehensive summaries of Baltard's projects, see chap. 9 of Pierre Pinon, *Louis-Pierre et Victor Baltard* (Paris: Monum éditions du patrimoine, 2005). See also chaps. 7-11 of Lemoine, *Les Halles de Paris*.
24. Lemoine, *Les Halles de Paris*, 73-78.
25. Thompson, *The Virtuous Marketplace*, 109.
26. Pinon, *Louis-Pierre et Victor Baltard*, 178.

27. Victoria E. Thompson, "Urban Renovation, Moral Regeneration: Domesticating the Halles in Second-Empire Paris," *French Historical Studies* 20, 1 (1997), 98 and 107-18.
28. Thompson, *The Virtuous Marketplace*, 104-106. See also Thompson, "Urban Renovation, Moral Regeneration," 95-96.
29. This monograph is reprinted in Lemoine, *Les Halles de Paris*, 237-70.
30. Siegfreid Giedion, *Building in France, Building in Iron, Building in Ferroconcrete, Texts and Documents* (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1995), 112.
31. Lemoine, *Les Halles de Paris*, plans XXXI and XXXII.
32. Ibid., plan XXXIII.
33. Deming, *La Halle au blé de Paris,* 51.
34. Françoise Bosman, Julien Moreau, Stéphanie Rivoire, eds., *Des Halles de Paris au Marché international de Rungis, 1953-1990: Archives versées par la Société d'économie mixte d'aménagement et de gestion du marché d'intérêt national de la région parisienne dite SEMMARIS: répertoire numérique de la sous-série 2447 W-dépôt* (Créteil: Conseil général du Val-de-Marne, 2002), 3.
35. Libert Bou and Jacques Millon, "Les Marchés de gros français devant l'évolution des techniques de commercialisation des denrées alimentaires," *Techniques et Architecture*, special issue (December 1964), 122.
36. Abdelhafid Khatib, "Essai de description psychogéographique des Halles," *Internationale Situationniste* 2 (December 1958); Guy Debord, *La Société du spectacle* (Paris: Buchet/Chastel, 1967); Louis Chevalier, *The Assassination of Paris* (Chicago and London: University of Chicago Press, 1994); Jean Baudrillard, *L'Effet Beaubourg: Implosion et dissuasion* (Paris: Éditions Galilée, 1977).
37. André Darlot, "La Conception générale du Marché de Rungis," *Techniques et Architecture* 30, 3 (1969), 58.
38. P. Barre, "Les mouvements des marchandises à Rungis," *Techniques et Architecture* 30, 3 (1969), 86. Translation mine.
39. In March 1969, the Société d'études pour l'aménagement des Halles was granted permission to temporarily use the pavilions for cultural activities. The group helped to coordinate several exhibitions that received more visitors than the city's current modern art museums. A popular ice-skating rink and an architectural teaching center, the Unité d'enseignement et de recherche sur l'environnement (UERE), were also installed at Les Halles. For more on cultural activities at the former market see Jacques Herbert, *Sauver les Halles, cœur de Paris: Un dossier d'urbanisme contemporain* (Paris: Denoël, 1971). For more on the UERE see Jean-Louis Violeau, *Les Architectes et mai 68* (Paris: Recherches, 2005).
40. Nathan Silver, *The Making of Beaubourg: A Building Biography of the Centre Pompidou, Paris* (Cambridge, MA: MIT Press, 1994), 26.
41. Peter Rawstorne, "Centre Beaubourg," *Architectural Design* 42 (July 1972), 407.
42. Silver, *The Making of Beaubourg*, x.
43. See Elise Vincent, "Les mineurs non accompagnés interdits d'accès au Carrefour de Rosny-2," *Le Monde*, 8 December 2006. On 7 December 2006, the Ligue des droits de l'homme Fédération 93 issued a press release denouncing this practice as illegal and "intolerable."
44. Projects are reprinted in Frédéric Lenne, ed., *Paris-les Halles: Concours 2004. AJN Jean Nouvel, MVRDV Winy Maas, OMA Rem Koolhaas, SEURA David Mangin* (Paris: Le Moniteur, 2004).
45. Two particularly clear arguments in favor of Koolhaas's project are Françoise Fromonot, *La Campagne des Halles: Les nouveaux malheurs de Paris* (Paris: La Fabrique, 2005) and Sarah Whiting, "Bellyache [Les Halles, Paris]," *Log* 4 (2005).