The 'unrealizable chimera': workers' housing in nineteenth-century Mulhouse

Abstract
Between 1853-95, the Société mulhousienne des cités ouvrières [SOMCO] constructed over 1,200 houses, which were sold by annuities to the workers of the town of Mulhouse. The scheme was influenced by unique local characteristics in Mulhouse, as well as international developments in reformed housing. The innovations made at Mulhouse in terms of architectural forms, financing and worker ownership made it internationally renowned by the end of the nineteenth century. Reformers marvelled at the transformation of 'prolétaire' into 'propriétaire', and called for widespread emulation. But in these calls for emulation of the 'Mulhouse System', these reformers neglected the importance of the specific local conditions in Mulhouse that had facilitated the scheme's inception and success. This article will show the importance of these local factors and their significance to the innovations of the *cités ouvrières* of Mulhouse, which explain why this meant that attempts to imitate elsewhere were doomed to failure.

The 1867 *Exposition Universelle* in Paris was the first international exhibition to dedicate an entire section to the subject of workers' housing, as part of the exhibition organizer Frédéric Le Play's focus on industrial relations and social reform.[1] Contributors to *Groupe X – Classe 93* were encouraged to exhibit examples of 'Housing characterised by cheapness united with conditions of hygiene and well-being'.[2] One of the full-scale models built for the exhibition on the Champ de Mars was a block of four houses from the *cités ouvrières* of Mulhouse. Since 1853, the Société mulhousienne des cités ouvrières (SOMCO), under the direction of the industrialist, philanthropist and mayor Jean Dollfus, had built 800 houses for the workers of this Alsatian textile town. Innovative in their focus on single-family dwellings and private gardens, the greatest advancement in the *cités ouvrières* was the ability for workers to become homeowners after fifteen years of payments.

The Mulhouse scheme was just one of several French models on display at the exhibition. Yet, even before Dollfus recreated one of his blocks of four houses on the Champ de Mars, the *cités ouvrières* of Mulhouse were already internationally renowned as one of the most successful examples of employer-constructed housing. When it had been announced in 1866 that there would be a section devoted to housing at the Paris exhibition the following year, the special correspondent for the British *Daily News* declared that 'Saltaire may compete with Mulhausen

[sic]… MM. Dolfus… Titus Salt, and others may cross swords'.[3] Dollfus and his scheme were positioned as the French equivalents of the British philanthropist Titus Salt and his textile workers' town of Saltaire near Bradford. The Mulhousian *cités ouvrières* had earned this reputation through years of successful operation and praise throughout reform circles. Dollfus was keen to highlight that the model he built on the Champ de Mars was to be more than just a theoretical, architectural design as to how to solve the housing problem: this was to be evidence of how he and his colleagues had already solved it. To this end, Dollfus brought a family from his factory in Mulhouse to live in one of the houses for the duration of the exhibition, with visitors able to see the worker at home in these houses.[4] This had the desired effect of evoking the impact of his houses on the daily lives of his workers in Mulhouse. Dollfus and his scheme won a gold medal for the section, and the model was widely praised by visitors. One of these visitors, Paul Laurencin, noted that Mulhouse deserved praise not only for 'the excellent moral and social principles which it has spread' but also because it 'has demonstrated the practical solution [to the housing problem] by the construction of the *cité ouvrière* in the suburb of Mulhouse'.[5]

In Laurencin's comments, we see the attractiveness of Mulhouse to contemporary reformers: the housing scheme appealed because it united ideal principles with practical implementation, it merged utopia with reality. The model on the Champ de Mars was indicative both of a uniquely successful, localised scheme in Mulhouse, but also of the possibility that housing schemes could realize the lofty visions of social reformers. At a time when other philanthropic housing schemes in Europe were limited in their scale, architectural designs, and homeownership elements, observers could point to the successes of Mulhouse as evidence that the dream of healthily-housed, home-owning workers was not unattainable. 'These [housing] companies are difficult', wrote the author of an article about a nascent Belgian housing scheme in 1866 Liège, 'but the Society of Mulhouse proves that they are possible'.[6] The Mulhousian *cités ouvrières* came to be

held up as the ideal solution to the housing problem beyond Alsace and even France, and the scheme's successes became evidence that this ideal was achievable.

Notably, despite the wide-ranging praise for the Mulhouse scheme both at the 1867 exhibition and beyond, it did not lead to wholesale transformations of approaches to workers' housing, especially regarding worker-homeownership. This article will examine the tensions between Mulhouse's tangible successes at the local level, and its reputation as a universal solution which failed to translate into widespread emulation on a European level. In 1882, almost thirty years after SOMCO's foundation, the social reformer Edmond Demolins lamented that there had been 'a lacuna' in the development of worker-owned housing schemes in France since the Mulhousian innovations. Writing about a new housing scheme just outside Paris, Demolins hoped that a second, successful scheme with worker homeownership at its core would prove to other reformers that it was not 'an unrealizable chimera to want to make the worker the owner in his home'.[7]

The Mulhouse scheme is important precisely because of this failure to inspire meaningful national imitations: the Mulhouse model of housing never became the French or European model, despite the wealth of reform discussion devoted to praising it. This was directly because of the set of local conditions that led to its creation in the first place. Through analysing municipal and departmental archival sources, international newspapers and printed journals, this article will seek to restore the uniqueness to the Mulhouse model; to show why what succeeded in Mulhouse was inimitable elsewhere.

The first section of this article will focus on the distinct set of local characteristics in mid-century Mulhouse. A booming textile town with history of municipal independence combined with the presence of a closed caste of interrelated, philanthropically-minded industrial elites, Mulhouse

was a perfect incubator for the housing scheme that would follow. The second section will focus on the housing scheme itself. The inspiration for the *cités ouvrières*, as well as its major innovations and successes, all relate to the unique characteristics of Mulhouse. The third section will show how and why the *cités ouvrières* achieved such an international reputation, and how this reputation led to calls for emulation. The final section will explore the failure of these calls for emulation, through examining the limited examples of imitations of the Mulhouse scheme. Cost of land impeded imitation in older, larger cities, while industrialists who admired the architectural advances of the Mulhouse scheme were less eager to cede homeownership to their workers. Rather than treating the Mulhousian *cités ouvrières* as an isolated example or as a missed opportunity in the history of French housing, this article will show that its greatest legacy was through becoming 'the Mulhouse system' – a tangible example of success that reformers used to defend their ideals against the limitations of reality when it came to housing the workers of late-nineteenth-century Europe.

I

The housing scheme in Mulhouse emerged from a unique combination of rapid population growth and a close-knit, philanthropic elite that dominated the town's industry and municipality. In January 1798, the city-republic of Mülhausen relinquished centuries of municipal independence when the *Grand Conseil* voted overwhelmingly in favour of integration into France.[8] Since the foundation of the first textile printing factory in 1746, the town's industry had boomed, with fifteen cotton factories by 1768, and twenty-six by 1787.[9] With the encircling French borders restricting further growth, the town's elites made the decision to privilege industrial prosperity over municipal independence, and voted to join France.[10] Whether presented as a voluntary annexation or an overdue 'reunion', the island of independence in

French Alsace brought its burgeoning industrial prowess to the post-Revolutionary French state, yet it retained much of its spirit of difference.[11]

At the time of this integration, Mülhausen was ruled by an oligarchy made up of a handful of ancient families. Of the c. 6,000 inhabitants in 1798, 177 held some form of public office; the five families of Schlumberger, Hofer, Dollfus, Heilmann and Kœchlin accounted for a third of these offices.[12] These municipal elites were also responsible for driving the industrial expansion of the town: the first factory in 1746 had been founded by Jean-Jacques Schmaltzer, Samuel Kœchlin and Jean-Henri Dollfus. This group of families had close cultural and political ties to the Swiss confederacy that continued after the 'reunion', with children still sent to school in Switzerland rather than in Paris.[13]

The Calvinism of the Mulhousian leading families also marked them out from their French peers. In Alsace in 1801, of a population of 520,000, only 18,000 were Calvinists, concentrated around the 'Protestant oasis' of Mülhausen.[14] This is not to say that these leading families tried to isolate themselves completely from the French after the reunion. Indeed, the use of French was assiduously cultivated by the elites to strengthen business ties with Paris. While it would not be until 1848, the fiftieth anniversary of the reunion, that the name of the town would officially be changed from Mülhausen to Mulhouse, the town had been referred to in political and business discourse by the French pronunciation for years.[15]

The same leading families that had ruled the city-republic, had founded the first factories and had voted to 'reunite' with France continued to dominate both municipal and industrial spheres throughout the nineteenth century. Unlike elsewhere in France, where David Gordon has shown that the rise of a new economically dominant class challenged the ancient authority of traditional families, the monopolization of the new industry in Mulhouse by these same families served to

strengthen the power of the established oligarchy.[16] Having avoided the turbulent early years of the Revolution and the Terror, old families such as Dollfus and Kœchlin could endure unscathed unlike other provincial elite families. Mulhouse saw a shift only in the context of power, rather than in the location of power, as these old ruling families concentrated their attentions on expanding the town's industry in the nineteenth century.[17]

Endogamy and large family-sizes within the relatively closed caste of Mulhousian elite families contributed to a strengthening of their power. The co-founder of the first factory, Samuel Kœchlin, had seventeen children, while one of his sons, Jean, married a Dollfus and had eleven children survive to adulthood.[18] The overlap of business and family is reflected in the names of the prominent Mulhousian firms: Kœchlin Frères, Dollfus-Mieg et C^{ie}, Kœchlin-Dollfus et C^{ie}, Thierry-Mieg et C^{ie}, to name just a few.[19] This combination of an early implementation of industry in Mulhouse with a set of homogenous, interfamilial businesses meant that, by the 1830s, the leading industrialists were in the second or third generation, and were willing to cooperate with one another: both factors that aided Mulhouse's industrial growth and successes in the nineteenth century.[20]

While Mulhouse was no longer an independent city-state, these same families continued to monopolise municipal offices. Eleven Dollfus family members ruled as *bourgmestre* or mayor between 1618 and 1869, covering 125 of the 251-year span, while ten of the twenty-one mayors between 1798 and 1870 bore the names of Kœchlin, Dollfus, or a combination of the two.[21] These Calvinist families therefore constituted a stable 'fabricantocracy' that held the industrial, social and governing power of Mulhouse as they had for centuries.

This spirit of independence was notable to outsiders. Due to its increase in size and industrial prowess, Mulhouse was named as a sub-prefecture in the Haut-Rhin in November 1857. The

new sub-prefect's first report to his superiors in April 1858 dedicated several pages to 'the spirit of Mulhouse'. To begin, he claimed that 'French sentiment does not exist in Mulhouse. This town is a vast factory, the owners of which belong, in their hearts, their minds and their language, to a foreign and Protestant race'. All that had changed since the reunion of 1798 was that these men were now 'industrial lords' instead of *bourgmestres*: they 'remain impenetrable to the French idea'. Even though mayors were appointed by the prefecture as elsewhere in France since 1831, the mayor and his councilmen spoke to the representatives of departmental government 'not as equal to equal, but as superior to inferior'. To the new sub-prefect, talking about Mulhouse was not quite as extreme as to talk of 'an enemy country', but certainly of a 'foreign' one.[22]

There was therefore an undeniable continuity in this caste from the eighteenth to nineteenth centuries that was remarkably unique in comparison to other French cities. The same could not be said for lower down the social ladder in Mulhouse, where rapid population growth led to drastic instability and change. No longer restricted by borders and tariffs, Mulhouse's industry and population saw one of the fastest expansions in all of nineteenth-century France. Its population of c. 6,000 in 1800 increased over tenfold by the end of the Second Empire in 1870.[23] This rapid population growth was not due to natural increase but to migration, as workers from surrounding Alsace and from across the Rhine moved to Mulhouse in search of employment.[24]

Due to this rapid population growth, housing conditions in Mulhouse were amongst the poorest in the country. Workers either lived in villages surrounding Mulhouse and walked for up to three hours a day to get to and from the textile factories, or they crowded into the expensive existing housing in the town's old medieval centre. These conditions were illustrated at a national level when, in 1840, the Parisian hygienist Louis-René Villermé published his national study of textile workers in France. He described the 'miserable dwellings' he had seen in Mulhouse during two

visits in 1835 and 1836, where 'two families slept, each in a corner, on straw thrown on the floor and held in place by two planks'.[25] The result of these poor conditions, according to Villermé, was drunkenness and general moral depravity.[26] Accentuating this problem was the instability of the workforce in Mulhouse. In 1866, reformer Eugène Véron referred to this as 'an incessant renewal of misery'. Once migrant workers gained sufficient skills, they would leave Mulhouse in the knowledge that they could command a higher wage elsewhere in France. For every skilled worker who left, there was 'a constantly rising stream of poor, without work or bread' flowing into the town to take their place at the bottom rungs of the social ladder.[27] Mulhouse had a rapidly growing, yet renewing, workforce, with no ties to the town, and little choice but to live in the poor conditions until they gained the skills necessary to move on once more.

This constant influx of workers had a marked impact on the demography of the town. In 1800, there were around six hundred Catholics, or one in ten, but by 1851 the 24,000 Catholics in Mulhouse now made up two-thirds of the total population.[28] The bilingual Calvinist elites' privileging of French as the language of business and high culture saw a further emphasising of class divisions, as the majority of these new Catholic workers spoke only German or Alsatian.

As these workers flooded into the town, or left in search of better pay and living conditions elsewhere, the fabricantocracy were further reinforcing their closed caste through an exclusive associational culture. The Masonic lodge 'La Parfaite Harmonie' was founded in early 1809 by seventeen young Mulhousians, and counted 245 members by 1835.[29] Closely related was the founding in 1826 of the Société Industrielle de Mulhouse (SIM) by twenty-two young industrialists. This society had for its goals the advancement and propagation of industry, the creation of a library and monthly bulletin, the instigation of a prize for industrial and scientific inventors and, most importantly, the proliferation and consolidation in the workers of a love for work.[30] SIM fast became central not only to the associational activity of the fabricantocracy, but

also to the very identity of the town itself. Mayors, such as André and Émile Kœchlin (mayors from 1830-43 and 1843-8 respectively) were prominent members of SIM, and the building of SIM formed one of the main frontages of the neo-classical *Nouveau Quartier*, built in Mulhouse from 1826.[31] It was through SIM that some of the most impressive schemes of nineteenth-century philanthropy would be initiated.

The range of social and cultural differences between the ancient Calvinist elite and the new Catholic workforce may have contributed towards the former's enthusiasm in pursuing philanthropic schemes. Elsewhere in France or further afield, industrial paternalism and philanthropy often occurred between employers and employees who shared a common identity. In Patrick Joyce's study of paternalist cotton magnates of nineteenth-century Lancashire, he noted that there was an extraordinary calm in the relations between industrialists and workers due to fact that often this relationship was one of 'emotional identification', where the worker 'acquiesced in his own subordination'.[32] Shared community identities, such as religious denomination and language facilitated a greater social peace. In Mulhouse, where there were not these common links for 'emotional identification', the fabricantocracy strove harder in even grander schemes of paternalist philanthropy to tie their workforce to their town and factories.

The members of SIM undertook a variety of philanthropic activities throughout the nineteenth century, ranging from providing schools and popular instruction through to housing. As many of the industrialists who were members of SIM were related through business or marriage, the SIM amplified philanthropic schemes beyond single employer-employee benefits: industrialists would band together and embark on town-wide, pan-company schemes for improvement. The reputation of SIM became such that, while these activities were often focused at improving local conditions, their work received attention and even funding from wider France and Europe. Alphonse Kœchlin's foundation of an asylum for the blind at nearby Ilzach in 1857 offers an

illustration of this wide interest. In the 1857-8 report on the asylum, published by SIM, Mulhousians accounted for 9,050 Fr. of the 13,624.30 Fr. total of subscriptions, with other subscriptions coming from twelve additional towns only, primarily in Alsace and neighbouring Franche-Comté, Basel, Westphalia and Württemberg.[33] By 1862-3, however, Mulhouse's share of the 12,287.15 Fr. had shrunk to 6,419 Fr., with subscriptions coming from forty-one other towns, as far afield as Paris, Rouen and London.[34]

By mid-century, Mulhouse may have no longer been an independent city-republic, but it still retained many unique features that marked it out from other French industrial towns. The endurance and homogeneity of the town's industrial and municipal elite, the rapidity and instability of the town's population growth, and the establishment of a hub for philanthropic worker-improvement schemes all laid the groundwork for the later success of the housing scheme in the Second Empire. Moreover, the established international reputation of SIM would contribute to the legacy of the housing scheme beyond France.

II

The 1840s saw a growing movement in France concerning improving housing conditions. Studies such as Villermé's had drawn attention to the impact of poverty and poor housing on health, while charitable groups like the social Catholics gathered around the de Melun brothers urged the state to intervene in tackling poor housing.[35] This culminated in the passing of the Melun Law of 13 April 1850 on unhealthy housing (*logements insalubres*).[36] This law, while hampered by those in the National Assembly who opposed infringing on property rights, permitted municipalities to set up commissions to visit unhealthy housing, to order improvements to be made, and to forbid inhabitation of the worst cases.[37]

But, running parallel to these national developments in managing existing housing, the philanthropic elites of Mulhouse were investigating how best to build improved new housing. The publication of Villermé's *Tableau* in 1840 and the projection of the poor housing condition of the town's workers on a national level had embarrassed this elite, who considered themselves as philanthropically enlightened. The mayor during Villermé's visit, André Kœchlin, had built between 1835-36 twelve three-storey houses for his workers with a flat on each floor, housing thirty-six households in all.[38] The flats were rented at rates of 12-13 Fr. per month, under half those of the private market.[39] The houses were complete by Villermé's second visit in 1836 and, even within his misery-laden report of 1840, Villermé was able to find positives in Kœchlin's innovations, describing these houses as a perfect success.[40]

These houses barely scratched the surface of the problem in Mulhouse and soon the SIM turned to international developments for inspiration. On 24 September 1845, members of SIM gathered to hear a paper by Daniel Dollfus-Ausset, one of their founding members.[41] Having just returned from England, Dollfus-Ausset outlined the work of an architect, Henry Roberts, and the London-based Society for the Improvement of the Conditions of the Labouring Classes (SICLC), which had been founded the year earlier.[42] Roberts, who has been described as 'a real pioneer of housing design, the father of the whole working class movement', had planned a number of model flats in London.[43] Each dwelling was to be clean and spacious. What's more, SICLC was philanthropic but not charitable – houses were funded by shareholders, who received a limited five per cent return on their investments, coining the phrase 'five per cent philanthropy'.[44] Dollfus-Ausset declared that the plans that Roberts was producing looked extremely promising, and would be likely to exert 'an immense influence on the workers, with regard to their physical, intellectual, and moral development'.[45] SIM agreed to follow the developments closely.

Roberts' work increased in scale throughout the 1840s until he drew the attention of Prince Albert, who commissioned a model block house to be built in Hyde Park, outside the main exhibition building for the 1851 Great Exhibition.[46] The house, built in 1850, contained two flats at the ground floor, and two at the first floor, and was accompanied by a pamphlet by Roberts titled *The Dwellings of the Labouring Classes.* This pamphlet was more than just a description of the models in Hyde Park: it was a manifesto for reformed housing construction. Roberts covered everything from mandatory minimum ceiling heights to improve air circulation, to the importance of the 'preservation of domestic privacy and independence of each distinct family' in blocks of accommodation and the 'separating of the sexes, so essential to morality and decency' within individual dwellings themselves.[47]

Dollfus-Ausset was not the only man on the continent interested in Roberts' work. Louis Napoléon, who had followed the development of the SICLC during his exile in London in the 1846-48, commissioned a translation of Roberts's pamphlet and ordered its distribution throughout France, to inspire a French response to the housing question.[48] Generally, when prefectural authorities in industrial departments like the Nord received the translations, they eagerly passed them along to municipalities, and even requested further copies.[49] When it reached the prefecture of the Haut-Rhin, however, the general council agreed at a meeting of 28 August 1850 that they expressed 'sympathy for efforts undertaken by Mr Roberts of London', but that there was no money in their budget for the 'propagation of this work', because of more pressing concerns.[50]

The industrialists of Mulhouse did not need their departmental authorities to distribute the translation, however, as they had a copy of the original. Another founding member and former president of SIM was in London and visited the houses at the Great Exhibition.[51] Jean Zuber fils, who had himself built some model housing next to his paper factory in nearby Rixheim

between 1844-51, presented a paper at SIM on 24 September 1851 where he described the work of Roberts in London.[52] Declaring that 'to procure housing that is salubrious and at a low price for the working class is one of the most useful and praiseworthy preoccupations of the philanthropist', Zuber showed his assembled peers the English version of *The Dwellings of the Labouring Classes* that he had brought back with him.[53] Zuber urged for serious consideration on the topic to be pursued and, nine months later, a report on the subject by Dr Achille Penot instigated the formation of SOMCO by Jean Dollfus in June 1853.[54]

The founding of this housing scheme was therefore driven by a combination of the international reach of the SIM and the urgent need to improve local housing conditions in Mulhouse. When it came for Dollfus to begin construction, there were three main factors of SOMCO that built upon existing reform debates and established the Mulhouse scheme as a leading innovator in Europe: the architectural form of the houses, the financing model of the Société, and the ability for workers to become homeowners.

When SOMCO was founded, there were two dominant models of new workers housing, one motivated by cost efficiency, the other by idealistic moral reform. The former were large blocks of individual dwellings or apartments; the latter was the isolated single house. The apartment block made sense in large cities like London, Paris and Marseilles, where the price of land was a key factor. The Cité Napoléon in Paris, built from 1849 to house around five hundred workers, was a prominent example of this form, but it was deeply unpopular amongst workers and reformers alike. Workers rejected the overt security motivations of such schemes, which were often accompanied by strict regulations; reformers, meanwhile, feared the immorality and fermentation of socialism that would come from workers sharing a staircase.[55] The scheme was ultimately a failure, and plans to build similar models throughout Paris were abandoned.

Roberts, despite building some of his models in the block form, held the individual house as the absolute ideal. The isolated house would be able to improve hygienic conditions as well as restoring the sanctity of the working-class family unit. The moralising motivations of the isolated form were extremely prominent in the debates on architectural form in SIM between Zuber's meeting in 1851 and the foundation of the SOMCO in the summer of 1853.[56] Land was also much cheaper in Mulhouse than in the larger, older cities, therefore the economic factors that made the block model attractive did not apply.

The models that SOMCO eventually chose for construction were designed by the local architect Emile Muller. Muller shared Roberts's belief that housing was more than an architectural question: improving the physical condition of workers through better housing would improve the moral and social conditions as well.[57] Muller decided on two different forms for the houses in the *cités*. The first was inspired by Zuber's models near his factory: rows of terraced houses, back to back, each with its own strip of garden at the front. The second style was a block of four houses, which became known as the 'carré Mulhousien'. This style involved a plot of land with a central building of either one or two storeys divided into four equal sections, so that each individual dwelling had two outward-facing walls and access to a garden.[58] While evidently influenced by Roberts' call for single-family dwellings as an ideal, the architectural style of these houses was also influenced by local vernacular styles, combining the previous housing innovations of Zuber with old Alsatian rural cottages.[59] Again, we see how the Mulhousians combined international reform debates with distinctly local characteristics. By building in the single-family house style, SOMCO was already realizing reformers' ideals.

After the designs had been finalised, SOMCO worked quickly. As a growing city surrounded by undeveloped, rural land, SOMCO was able to build on a large scale for a relatively cheap price. The Society built almost two hundred houses by the spring of 1854, and eight hundred by 1867,

all in the area in the north of the town close to Dornach.[60] There were two clear *cités*, divided by the north-south canal that ran through Mulhouse. The first *cité ouvrière* comprised 186 houses, built between 1853-4 on a plot of land of five hectares.[61] While the back-to-back style was cheaper to build, the 'carré Mulhousien' was preferred in general. Offering two outward faces, a larger garden and a greater circulation of air and light meant that the 'carré Mulhousien' was a more hygienic design. When SOMCO began construction on the second *cité* of fifty-five hectares to the west of the canal in 1855, both styles were adopted, though the terrace ceased to be used after 1857 in order to maximise the ameliorating benefits of the houses of the *cités ouvrières*.[62] Alongside houses, SOMCO built extensive bathing and washroom facilities, as well as a restaurant and bakery, which offered food at subsidised prices.[63] Dollfus and Muller had effectively built a new town within the city of Mulhouse with their *cités ouvrières*.

The second innovative factor of SOMCO was its financing model. Jean Dollfus adopted a similar model with SOMCO to Roberts' 'five per cent philanthropy'. Instead of being tied to any one factory and acting as a form of positive paternalism, SOMCO was a separate company, funded by shareholders. Initially, there were twelve shareholders, accounting for sixty shares of 5,000 Fr. each; this number grew to twenty shareholders and seventy-one shares, totalling 355,000 Fr.[64] Of the original sixty shares, Jean Dollfus held a majority of thirty-five; the others belonged to other prominent members of SIM.[65] Dollfus even went one step further than Roberts when he limited returns to just four per cent.

This financing model differentiates the Mulhouse scheme from other nineteenth-century paternalist housing schemes that had single industrialist patrons, such as the Familistère at Guise. The housing scheme was pioneered by the majority shareholder Jean Dollfus, but it was funded by a group of industrialists who, were it not for the close interfamilial ties of the fabricantocracy, would otherwise have been industrial rivals.

Bullock and Read, in their study of nineteenth-century housing reform, argued that French municipalities failed to act concerning housing in the nineteenth century, so the onus fell on isolated industrialists or philanthropic societies like the SOMCO.[66] However, in Mulhouse, the lines between individuals and societies, and between industrial and municipal were blurred due to the domination of power by the fabricantocracy. Two of the original shares of the SOMCO were purchased by Joseph Kœchlin-Schlumberger, mayor of Mulhouse between 1852-63. He was succeeded as mayor by Jean Dollfus, the main shareholder of the SOMCO, who remained as mayor until 1869.[67] While this overlap did not have any direct bearing on the foundation or operation of SOMCO – this was still a private initiative rather than a municipal one – the mayors' roles as major shareholders meant that the *cités ouvrières* were a source of high priority in Mulhousian municipal government.

An example of this overlap of the private action of SOMCO and the municipal governance of the town came in January 1860. The mayor, Kœchlin-Schlumberger, wrote to the prefect of the Haut-Rhin to communicate the latest results of the town's *commission des logements insalubres*, which had been set up after the 1850 Melun Law. Instead of listing houses and their hygienic faults, as he had done on previous reports, Kœchlin-Schlumberger drew direct attention to two houses in the *cités ouvrières* that had been deemed unhealthy because of overcrowding. Overcrowding had obvious implications for the hygienic conditions of these houses, but it also indicated that the owners of these houses had sublet space to people beyond their own family. This was in direct disregard of SOMCO's regulations, which forbid subletting in the interests of preserving the moral benefits of the single-family unit.[68] Kœchlin-Schlumberger asked the prefect to forbid habitation of these houses until the extra beds were removed. He finished his letter: 'The *cités ouvrières* have been built in the interests of the health of the workers and it is essential that they are maintained in this condition for this purpose and, for these reasons, I would particularly urge

the full adoption of the conclusions reached by the commission'.[69] The mayor was exerting his political power to ensure the continued healthy and moral operation of the housing scheme of which he was a shareholder.

As important as the local characteristics of the funding system were, SOMCO also relied on government subsidies in its early years. In autumn 1853 and spring 1854, SOMCO received two subventions of 150,000 Fr. from a fund that Napoléon III had set up in January 1852 to encourage housing construction in France.[70] These early government subsidies were useful for both Napoleon III and for SOMCO. The government could champion the success of the scheme at Mulhouse as deriving from the benevolence of the Emperor, whereas the local paternalists were able to build on a larger scale, and therefore provide for a greater proportion of their workers.[71] But these subventions were not crucial to the later growth of the *cités ouvrières*, as shown by the abandonment of the cheaper back-to-back block after 1857. They helped with initial investment, but were not essential to the later construction of hundreds more houses.

The third and most unprecedented innovation at Mulhouse was that, for six or seven francs more a month on top of their regular rent, a worker would become the proprietor of the house. After a deposit of between 250-300 Fr., the workers would typically pay between 20-30 Fr. per month, which represented between 11.4-17.1 per cent of a qualified Mulhousian worker's salary.[72] After fifteen years, the renter became a homeowner.[73] More than just offering the opportunity to own a house, this philanthropic measure intended to instil the bourgeois pride and value of property-ownership in the working classes.[74]

This was profoundly unique compared to contemporary industrialist-led projects. While other schemes aimed to improve the moral and social condition of workers through more salubrious dwellings, the idea of giving the opportunity of homeownership to the workers removed the

overt socially controlling elements that employer-owned housing embodied. Social control was exerted differently at Mulhouse: whilst ownership was ceded to the workers, they were tied to remaining in Mulhouse long enough to pay off their fifteen years of payments, solving the 'incessant renewal of misery'.

Like savings societies or pension funds, the introduction of this let-to-buy feature aimed at inspiring thrift and savings in the working classes. By 15 September 1857, 158 families had committed to buy a house, with this figure rising to 320 by the end of 1859, and 548 by the end of 1863.[75] The ability to fix migrant workers to remain in Mulhouse for the fifteen years required to pay the annuities towards house ownership provided the stability that had been missing during Mulhouse's turbulent early growth, and meant that leading industrialists would be able to retain their skilled workers. Although the price of these houses meant that only skilled workers could afford to live in them, the idea was that these houses could also serve as an inspiration for those lower down the social ladder.

The *cités ouvrières* of Mulhouse therefore signalled an important set of innovations in the nineteenth-century housing movement. While Mulhouse was not the only town to encounter the problems of overcrowding and poor housing, and the elites were not alone in their following of Henry Roberts' activities, the *cités ouvrières* offered a unique response to the housing problem. Unencumbered by high land costs, SOMCO could build in the reformers' ideal house form and, because of a philanthropically-minded fabricantocracy that had developed over generations, SOMCO could serve as a company with many shareholders in the city's industrial and municipal elite. Finally, the problems of a rapidly growing and rootless workforce motivated the introduction of homeownership, as a way to tie skilled workers to the city. As the *cités* grew, SOMCO's innovations and successes drew the attention of contemporaries from throughout Europe.

III

As we saw earlier, Jean Dollfus and his *cités ouvrières* arrived at the 1867 *Exposition Universelle* in Paris with a well-established international reputation. This was, in part, due to the actions of Dollfus and his architect Muller in spreading awareness of the scheme through reform-minded circles in Europe throughout the 1850s and 1860s. At the 'Exposition d'économie domestique' in Brussels in September 1856, those present described the *cités ouvrières* of Mulhouse as 'the most complete' realization of workers' housing in France. Attendees were able to examine a 1/100th scale cardboard model of the first *cité ouvrière*, as well a copy of Muller's book, *Habitations ouvrières et agricoles*, which contained several detailed architectural plans.[76] In the same year, Jean Dollfus served as vice-president of the 'Congrès de bienfaisance' at Frankfurt in 1856.[77] Both Muller and Dollfus had an opportunity to share their work with Henry Roberts, who had been such a source for inspiration. At the 1856 'Congrès international de bienfaisance' in Brussels, Muller spoke to an audience that included Henry Roberts about his achievements at Mulhouse.[78] Dollfus presented a paper at a later congress in London in June 1862, which led Henry Roberts to proclaim to the audience that he 'considered the arrangements at Mulhouse surpassed everything of the kind that had been attempted elsewhere'.[79] He went on to praise the innovative let-to-buy system and called for its emulation in England.[80] Dollfus and Muller were leading the housing reform discussion in mid-century Europe. More than just the best that France could produce, the Mulhousian *cités ouvrières* became the best example of reformed housing in Europe.

It was not just through Dollfus and Muller that news of the *cités* spread. This reputation was enhanced through the reports of visitors to the *cités ouvrières* who stressed the transformative element of homeownership on workers who would, presumably, otherwise be spending their time and money drinking. When Victor Duruy, the French Minister for Education, visited

Mulhouse in 1864, he asked to meet a worker who lived in one of the houses of the famous *cités ouvrières*. He met a woman, and asked her where her husband spent his evenings. He was surprised when she answered: 'With us, since we have our house'.[81] Here, the combination of a pride of homeownership and a desire to save money had resulted in a worker eschewing the allures of the cabaret for the moral comfort of the family.

This anecdote was shared far and wide beyond Mulhouse as proof of the reformative power of improved housing and of homeownership on the habits of the working classes.[82] Scientific magazines reprinted the story, alongside developments in botany and zoology, to show the scientific marvel of the worker-homeowner.[83] Because of the concrete savings goal that homeownership provided, workers would prefer to save their money than spend it in the cabaret or brasserie.

But if the worker was not out drinking, they were not left unoccupied: the gardens of the *cités* provided an alternate use of their leisure time, and this was something else that observers acknowledged. A traveller from Paris visited the *cités ouvrières* in summer 1860 and praised the father of one family on the quality of his garden.[84] The visitor reported that the father then replied with 'evident satisfaction' that the garden was well-cultivated because he was the owner of both house and garden.[85]

Reformers seized upon the ability of gardens to provide the fathers of the family an alternative space for evening leisure time. Jules Simon, in his 1861 work *L'Ouvrière*, dedicated a long passage to the importance of the gardens in the Mulhouse scheme as keeping the *pères de famille* away from the drinking establishments:

> The father, after his work, is no longer obliged to choose between a garret and a cabaret; there is not a cabaret in the town which is as gay as his house. If he has some time to kill before his dinner, he takes his spade to the garden… It is happiness and work for all the home, because the *mère de famille* loves to weed and rake her garden, and the boys eagerly bring water.[86]

The houses of Mulhouse and their gardens were portrayed as literally rooting an unstable workforce, and keeping workers away from the immoral space of the cabaret. Simon was an enthusiastic supporter of the transformative nature of Mulhouse's homeownership and private gardens. When he wrote the entry on workers' housing developments for Maurice Block's *Dictionnaire générale de la politique* in 1873-4, Simon described the transformation from 'prolétaire' to 'propriétaire' that Mulhouse embodied as the absolute ideal.[87]

It was not just the moralising elements that drew the attention of observers. The Mulhouse scheme was seen to be a way to tackle the threat of socialism in the workers. When the Paris correspondent for the Liège-based *La Meuse* wrote in an article about possible solutions to prevent workers from striking, he noted that 'everyone knows the *cités ouvrières* of Mulhouse'.[88] As the threat of socialism loomed in the final decades of the century, the Mulhouse System was repeatedly evoked. In November 1878, Jean Dollfus, who now sat in the German Reichstag following Alsace's annexation in 1871, delivered a speech during the debate on the Anti-Socialist Bill in which he declared that 'the best way of combatting socialism is to ameliorate the moral and physical conditions of the population… [In Mulhouse we] have tried in the first place, to make the workers in factories proprietors'.[89] This was a view shared by his peers in German housing reform. In the same year, the Hamburg author Julius Schultz published a book entitled: *The Mulhouse System of Workers' Housing: A Call for the Emulation of This Humane Means of Combating Socialism*.[90]

Reports of the successes of the Mulhousian *cités ouvrières*, both by their founders and by visitors, helped raise this housing scheme to a panacea in international reform discourse. Workers were socially stabilized, politically pacified and even displayed a sense of pride about the houses they owned. This reputation inevitably led to attempts to replicate the successes of this scheme elsewhere, though these attempts were limited at best. In the final section, we shall see how, without the distinct local conditions in Mulhouse, most imitations elsewhere were restricted from the start.

IV

SOMCO was a private company, but it was supported by the municipality of Mulhouse. As a result, requests for plans came in from prefects and mayors who wished to make similar projects elsewhere in France. The prefect of the Nord wrote to his Haut-Rhin colleague on 11 April 1854 asking for copies of SOMCO's plans so that he might encourage similar developments in the textile hubs of Lille and Roubaix.[91] Applications also came from Grenoble as early as 22 July 1854, for the purpose of building in the town in a related style.[92] Similarly, in November 1860, the prefect of the Gironde wrote to his Haut-Rhin colleague, declaring that the municipality of Bordeaux 'has just begun to study the question of the creation in Bordeaux of workers' *cités* on the model of those already installed in Mulhouse'.[93] None of these requests resulted in any largescale imitations.

Part of what made the Mulhouse scheme so successful in Mulhouse was the shared desire of the overlapping municipal and industrial elites to improve housing. When prefects and mayors requested plans, they were unsuccessful in inspiring the industrialists of their towns to build to a similar extent. There were examples of small-scale implementation, such as the nineteen houses in the carré-Mulhousian style encircled by gardens constructed between 1861-3 in Bordeaux by

M. Patto or the fifty-five houses that were built in 1875 in Nancy and sold to the workers by monthly payments.[94] The limited scale of these projects however shows how important the overlap between business and municipal leadership at Mulhouse was to larger expansion.

A further limit to imitation of the Mulhouse scheme was the price and availability of land. Mulhouse had only begun expanding its borders from its absorption into France in 1798, therefore there was an abundance of cheap land upon which to build its new workers' town. Shapiro has shown that, for all its appeal as an ideal, the Mulhouse model was simply financially unviable in large cities, like Paris or London, where land was much more expensive.[95] The land on which the *cités ouvrières* of Mulhouse were constructed cost about 1 Fr./m^2, whereas the land on which the failed Cité Napoléon was constructed cost 75 Fr./m^2.[96] While reformers throughout Europe praised the architectural form of the Mulhouse scheme's houses and the transformative nature of worker ownership, there were elements that were just irreplaceable in larger and older cities.

It was not just departmental and municipal authorities who expressed an interest in the Mulhousian plans. Industrialists who set up new workers' towns near their factories turned to the Mulhouse scheme for imitation. The director of the glassworks of St. Gobain at Chauny sent a letter to the mayor of Mulhouse in December 1857, stating his company's intention to build a large *cité ouvrière*, and requesting details of the Mulhouse scheme.[97] He went on to build 1,256 houses in the Mulhousian style, though they were not sold to workers: they remained under company ownership.[98] Similarly, at Noisiel-sur-Marne in the 1870s, while the houses for 1,700 workers in the *cité ouvrière* resembled those at Mulhouse, ownership remained with the Menier chocolate factory.[99] Both companies were happy to imitate the hygienic and architectural innovations of such an internationally-renowned scheme as Mulhouse, but these were not pan-company building societies like SOMCO or Roberts' SICLC. As a result, the industrialists

wanted to retain a more direct control over their workforce by not selling their houses. They were content with well-housed workers, rather than morally-elevated *propriétaires*.

This is by no means an exhaustive list of the attempted or limited imitations of the *cités ouvrières*. But in examining their failures, we can see once again how important the local conditions of Mulhouse were to SOMCO's successes. Notably, the closest imitations of SOMCO were installed in the surrounding industrial towns in the Haut-Rhin: at Guebwiller (1854), Beaucourt (1864), and Colmar (1866).[100] These towns also tended to be dominated by Protestant industrialists with a mostly Catholic migratory workforce, and many of these Alsatian industrialists were honorary members of SIM. These similarities facilitated an easier introduction of the Mulhouse scheme.

Each of these Alsatian imitations were funded by subscriptions, with one major shareholder, like Jean Dollfus at Mulhouse. At Guebwiller, Jean-Jacques Bourcart alone drove the initial building before the Société des Cités Ouvrières de Guebwiller was founded in 1860. In a tract published by Bourcart in 1866, the aim of providing a unifamilial house form and garden at the *cité ouvrière* was to instil in the worker 'the love of property and the desire to save'.[101] This Guebwiller example allowed the extra monthly payments towards homeownership that were so inherent to the Mulhouse scheme.[102] At Beaucourt, a similar document detailing establishments for the workers of Japy F^{res} et C^{ie} showed how houses were made available for purchase at 20.10 Fr. a month for eleven years.[103] These houses were built in lines, completely isolated, or in the Mulhouse style of four units grouped together.

It was only in the towns surrounding Mulhouse that had the most similar set of conditions, and which were under the umbrella of the activities of Mulhouse's Société Industrielle, that the most meaningful direct imitations of the scheme were implemented. When Demolins wrote in 1882

that there had been a gap in the progression of worker-owned housing since SOMCO's foundation in 1853, he accurately highlighted the failure of Mulhouse to spark widespread emulation.

The Mulhousian *cités ouvrières* and the failure of attempts to imitate them offer an interesting alternative to the history of European housing reform. Here was an appealing innovation that came from the periphery, but it was a scheme that was successful in Mulhouse, because of a combination of distinctly Mulhousian factors. This model was impractical in cities with expensive land prices, and required a level of philanthropy on the part of the industrialists who would give workers ownership of the houses that just was not echoed by those who sought to emulate certain parts of the scheme.

And yet, the undeniable success of the Mulhouse scheme in Mulhouse offered reformers proof that their moralising ambitions of making the worker a homeowner were not utopian. Because of the combination of the Mulhousian *cités ouvrières*' successes at the local level and its subsequent international legacy, reformers could use the idea of the 'Mulhouse System' to continue to argue for homeownership into the final decades of the century, despite the continued and repeated failures of attempts to replicate these successes to a large scale elsewhere.

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