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Literacy and Health Inequalities in Housing: Investigating thermal and noise vulnerability

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Abstract

Since the 2000s, several international studies have shown that housing is an unevenly distributed determinant of physical and mental illness. To understand how social inequalities in health are linked to social inequalities in housing, the SAPHIR research program is studying buildings sampled according to their date of construction, subject to different thermal and noise standards. Through individual and group interviews, it identifies “places and issues,” “critical situations” and “trade-offs” resulting from “residential stress.” Using three buildings located in the center, periphery and southwest suburbs of Paris, two forms of social inequality in housing health are analyzed: fuel poverty and poor soundproofing. When incorporated with the quality of the built environment, factors such as housing choice, control over the environment and ability to plan for the future are reflected in residents’ literacy, which is highly developed at opposite ends of the socioeconomic spectrum. This leads us to question the notion of “spheres of justice” in the field of social housing, and the third-party role of researchers working with tenants and landlords.

Keywords

1. Health
2. Housing
3. Fuel poverty
4. Soundproofing
5. Residential stress

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Introduction

Cities that were once transformed by the 19th-century hygienist thought are today undergoing a new wave of reflections as part of local responses to environmental impacts and difficulties accessing health services (APUR, 2018). The current trend towards health-focused urban planning echoes concerns over massive inequalities experienced during the COVID-19 pandemic (Burgel 2021; Burgel et al. 2020) and the lockdown, prompting planners to think differently about urban spaces (Grant, 2020). Spatial justice, which links social justice to living space, cannot be

achieved without rethinking the dialogue between health and its relationship to the city and to housing. Doing so reveals long-standing inequalities surrounding access to health, housing and environments, along with difficult social conditions that give rise to feelings of injustice.

While reflections surrounding citywide planning are increasingly taking into account health, is the same being applied to the inside of homes? In the 2000s, research showed that prolonged exposure to poor quality air inside of housing was a risk factor for contracting respiratory illnesses (Fisk, Lei-Gomez and Mendell, 2006; Roda, 2012). Heating issues have a negative impact on concentration, breathing and stress (Ortiz and Bluysen, 2022). Soundproofing affects sleep and alertness (Basner et al., 2014). Exposure to pollutants such as airborne particles is associated with increased mortality (Brunekreef and Holgate, 2002), as is contact with construction and coating materials causing allergic reactions (Bornehag et al., 2005). Although researchers have developed quantitative indexes to evaluate housing quality from a hygienic perspective (Chu et al., 2022), they take little account of residents' lived experiences, which also impacts the ways in which they perceive their health. Poor soundproofing and fuel poverty have an impact on feelings of good or bad health, even in the most vulnerable households. Already in 2005, research surrounding energy efficiency in housing highlighted that inhabitants that were satisfied in terms of their heating system were more likely to feel in control of comfort in their homes and, in turn, stated being in better health (Harrington et al., 2005). Recent studies have also shown that the inability to control radiator noise in housing has an impact on the mental health of residents (Wilson and Fijalkow, 2023).

The COVID-19 pandemic underlined the issue of health in housing (Grant, 2020), increasing the value of private space, assumed to protect people from the virus and provide mental comfort during the lockdown (Jasiński, 2022). It also highlighted the necessity to identify today's comfort needs, as traditional indicators for household hygiene facilities prove themselves outdated. It would appear that the ideas initiated with the hygienist movement, such as overcrowding and room lighting measures, are no longer sufficient in identifying inadequate housing (Fijalkow 1998, 2021). Housing has become a public health issue, manifesting at an individual level through the desire for decent heating and air quality, a healthy noise environment and the absence of pollution (Wilson and Fijalkow, 2023). These factors are linked to both objective measures that can be quantified using tools and data, as well as subjective feelings of well-being.

Ironically, French research has seldom investigated the interior housing environment in France, despite it having been identified as a source of exposure to health risks in the 1980s. For example, lead poisoning from the paint in many homes caused a particularly large scandal (Fassin, 2003). Ginot and Peyr's analysis of 234 letters from Aubervilliers social housing tenants highlight the mention of health issues in addressing their elected officials (2010). The report describes a range of challenges faced by residents (cold, pests, general squalor, overpopulation, noise) that affect both the mental and physical health of residents (stress, fatigue, anxiety, interpersonal issues, etc.).

Thus, if social inequalities in housing have an impact on social inequality in health, what do residents have to say about it? How does this differ depending on residential situations and context? Our aim is to show that residents' narratives about how they feel in their living spaces reveal social and health inequalities, giving rise to different feelings of injustice depending on the type of building (location, insulation, soundproofing, etc.). Based on three social housing buildings

selected according to the date of construction (with varying soundproofing and heating standards), we have chosen to explore the different spheres of justice identified by Michael Walzer (2013). In his view, injustices can be suffered in one sphere (insulation and heat problems) while benefits can be gained in another sphere (living in a beautiful neighborhood). In seeking to understand the relationship between housing quality and health conditions, our interviews in these sample buildings revealed “places and issues” and “critical situations”. Similarly, we note a series of “trade-offs” on the part of residents (Fijalkow and Wilson, 2024) involving spatial justice, i.e., the fair or unfair distribution of resources and disturbances on the scale of individual homes, buildings and neighborhoods. Thus, the aim of our research is to show different forms of literacy (Sørensen et al., 2012) highlighted in residents’ accounts, illustrating their ability to identify, understand and evaluate information relating to their health in housing (Fijalkow and Wilson, 2023) in order to make the best possible decisions: move out, protest, or adapt, according to Hirschman’s theory from 1970.

This seems essential at a time when more than 98% of homes are said to meet hygiene standards. However, criticism of housing quality cannot remain unheard. Aside from the four million inadequately housed people in France, as identified by the Fondation Abbé Pierre, the construction industry is under pressure from public authorities to adopt increasingly sophisticated technical energy performance systems to tackle the climate crisis, further reinforcing disparities and feelings of inequality and even injustice. The very term “poor housing” faces some resistance from those concerned with official statistics (Driant 2022). For example, the national housing survey conducted by INSEE in 2019 shows that the main shortcomings identified by residents relate to thermal comfort and sound insulation, two forms of inequality with health implications that are of particular interest to this study.

SAPHIR: A narrative methodology searching for “residential stress”

To grasp perceptions of health inequality in housing, the SAPHIR (Santé, Paris, Histoire, Immeuble, Résidentiel; Housing, health and residential narratives in Paris) action-research program, funded by the Agence Régionale de Santé Ile-de-France (Ile-de-France Regional Health Agency) since 2022, uses a quantitative methodology based on listening to inhabitants. It consists of carrying out a series of building monographs, combining research on building histories and collective memories with that of interviews. As a first phase, “educational cafés” were organized, whereby informative resources were used to discuss the effects of housing quality on mental and physical health. Since 2024, this information has been compiled onto a poster, which has also been turned into a leaflet that we distribute during educational cafés and in the mailboxes of each building. The aim is to raise awareness of the issues and to encourage participation in individual interviews.

Image 2: Educational Tools: Poster and leaflet

During the project’s second phase, resident trajectories, housing and neighborhood practices, as well as health-related issues and perceptions were explored with tenants. Living surveys were also conducted, aiming to map housing layouts to better understand spatial use, room versatility, occupant density and so on. The results of these interviews and surveys are compiled into sheets that describe “places and issues,” which can be windows, elevators, balconies, stairs, heat and common areas. These “places and issues,” which can be windows, elevators, balconies, stairs, heat and common areas. These “places and issues,” are often the topic of anecdotes, rumors and specific meanings which are outlined in these sheets. They are also subject to resident “trade-offs,” especially when the space becomes “*contradictoire*,” to quote Henri Lefebvre in Busquet (2012). Based on our research, examples include opening a window to air out and in turn letting in pollution; blocking the vents to retain heat; heating the apartment to dry laundry, etc. Through the stories of the tenants we interviewed, both individually and collectively, we are able to use the notion of health to address the issue of housing quality.



Image 3: educational café (left), focus group (right) ©SAPHIR, 2023–2024

The three social housing buildings were built during three different eras and in three different geographical areas, and are occupied by diverse populations. The first building is typical of Paris’s

“Ceinture Rouge”¹ social housing, the second is located in a central, gentrified area of Paris, and the third is in a south-west working-class suburb.

	Ceinture Rouge social housing block	Social housing, 5th District of Paris	Social housing, south-west suburbs
Year of construction	1935	1980	2023
Number of housing units	80	160	95, of which 47 are labeled “Health,” and 14 are accessible
Population and socioeconomic status	Elderly Middle class	Elderly couples and young couples with children Upper-middle class	Young couples with children and the elderly Lower class
Occupation status	Social rental housing	Social rental housing	The 47 Health units are social rental housing
Spatial layout	Closed courtyard 8 stories Closed residence	Closed, but connected to the neighborhood (sports facilities) 7 stories Closed residence	3 buildings (Health) 4 stories Common area Open residence
Heating type	Individual gas heat	District gas heating provided by the Compagnie Parisienne de Chauffage Urbain	Individual heat - electric
Housing type	1 to 3 bedrooms— sometimes dual aspect—without balconies	1 to 5 bedrooms— dual aspect—with balconies	1 to 5 bedrooms— sometimes dual aspect—balconies in certain units

The buildings have been anonymized to preserve a degree of freedom in reporting on the relationship between tenants and managers. These three sites, classified here by the date of construction, are examples of the disparities found in social housing in the Ile-de-France region.

1. The first social housing block, typical of the 1930s communist Parisian style, enjoys excellent access to transport, shops and services. It is “protected” by the City of Paris, labeled as 20th-century heritage as a legacy of early century social housing policies. Built according to 1935 standards, the building offers minimal comfort by today’s standards (no individual toilets). Further, the dwellings are not very adaptable to today’s housing practices and have no balconies. Today, these buildings are inhabited by middle-class

¹ Translated as the “Red Belt,” this refers to traditionally working-class communes of the Ile-de France region where the French Communist Party was highly present from the 1920s until the 1980s.

people, with a high proportion of elderly residents. The red-brick façade prevents exterior renovations that would alter the architecture; the narrow interior makes interior renovations difficult to imagine (Wilson and Fijalkow 2024). It is also worth noting that the social landlords of these buildings only receive state subsidies for exterior energy renovation.

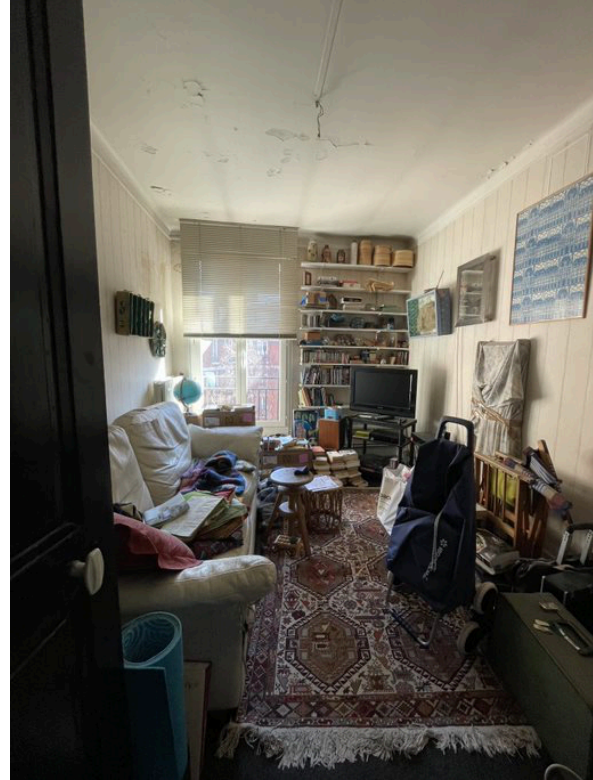


Image 4: building façade (left). Use of rugs for soundproofing (right) ©SAPHIR, 2023

2. Constructed in the late 1970s, this modern-architecture social housing complex in Paris's fifth district features tiered terraces surrounding a courtyard with greenery and a tennis court. It currently reflects the transformation of the Mouffetard District, a central and historically working-class area of Paris, close to the Jardin des Plantes. The building contributed to the gentrification of this area, with the City of Paris using the building as a pioneering site, allocating its housing to middle and upper socioeconomic households who were thought to vote in favor of the municipal majority of the time. However, following this wave of settlement, a more sociologically diverse population began to move in. The building's residential history and its location, in what is now an affluent part of town, weigh heavily on the collective dynamic. A tenants' association, which is highly cohesive and constantly writing to, exchanging information with and filing complaints against the landlord, acts as a co-owners' committee and view the landlord as a service provider.



Image 5: Building façade (right). Oxidized heating taps (left), a source of tenant frustration and dissatisfaction © SAPHIR, 2023.

3. This intergenerational and accessible housing residence, scheduled for completion in 2023, is located in the south-western suburbs of Paris (Yvelines department). The building benefits from a “health” label, concentrating on social support for residents. The developer and social manager brings together three complementary businesses: insurance and retirement, care and assistance, and housing. Its three buildings constitute social rental housing, intermediary rental housing and home ownership. These “accessible” housing units target the elderly and disabled (14 of the 95 units are reserved for tenants aged over 65 and/or disabled). An outreach manager accompanies these populations, operating out of the common room (40 m²), which is a space offered to residents by the landlord. The buildings were constructed according to the latest thermal and noise standards, featuring many home automation features, such as in the window shutters, a double thermodynamic flow system (CMV), doors with security codes and individual heating thermostats. Some of the homes have balconies, in addition to the outdoor communal areas that open onto the city.



Image 6: Building façade (left). Kitchen radiators (right) are a source of tenant frustration and dissatisfaction with its loud CMV ©SAPHIR, 2024.

In all three cases, and from a methodological point of view, the “educational cafés”, individual interviews and focus groups enabled us to identify “places and issues”, that reflect, “critical situations”. The latter is identified as the result of contradictory imperatives concerning energy consumption, bill reduction, soundproofing and the quest for individual and collective well-being. In such a context, “residential stress” is observed, representing the reaction and expression of residents regarding their basic needs and difficulties in finding a solution to “critical situations”. As a result, residents lose the ability to make their housing a meaningful choice, to feel in control over their environment, to adapt it in the long term, and to maintain their ability to respond to the demands of housing managers (Fijalkow & Wilson, 2023 b). To shed light on such “residential stress,” we drew on residents’ narratives, which reveal different levels of housing and health literacy.

As the graph below illustrates, the search for an ideal temperature is rooted in very practical issues, involving both “places and issues” and “trade-offs”. In this context, thermal and noise issues are often intertwined.

**The Quest for Ideal Comfort:
The case of heating**

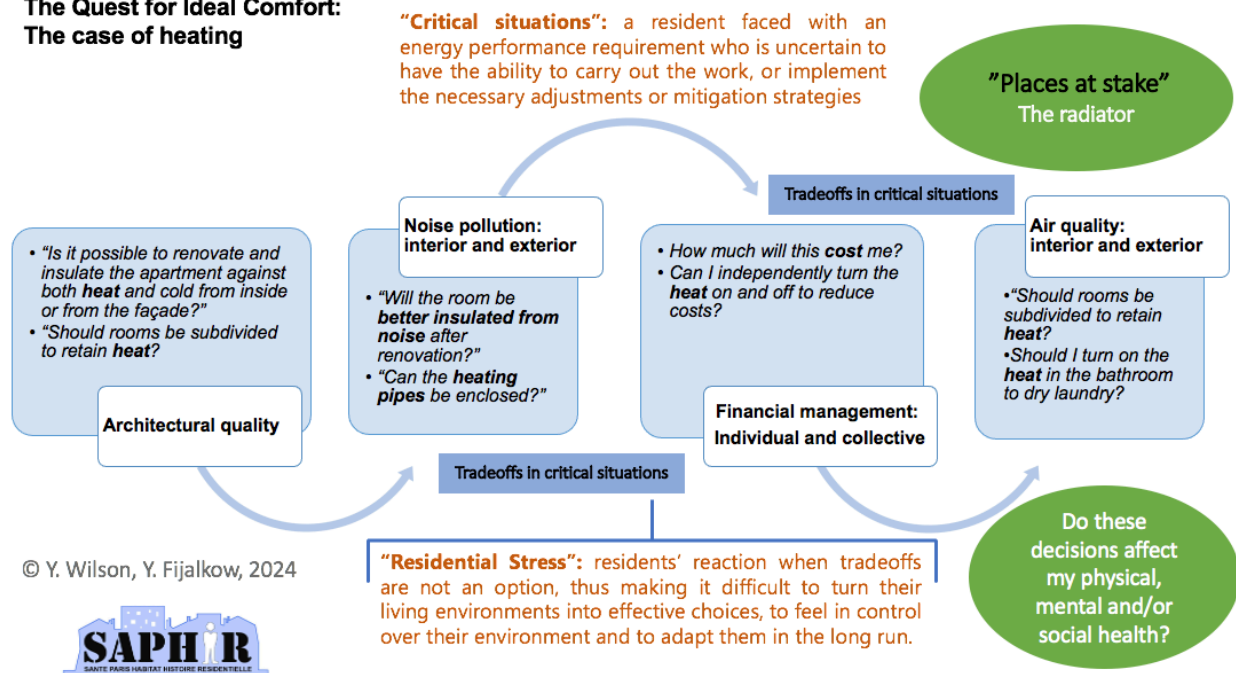


Image 7: The quest for ideal comfort: The case of heating ©SAPHIR, 2024

Thermal Inequality: Radiators, walls and heat blankets

In the ceinture rouge social housing block, the heat system relies on individual gas heat distribution. As of autumn 2023, feelings of vulnerability surrounding the rising price of energy had led to “residential stress” (poor sleep, anxiety, fatigue). Thus, we observed an increase in do-it-yourself and caulking practices while other tenants decided to “heat less,” creating discomfort and problems with concentration, especially for young people and those working from home. Many of the tenants interviewed found it difficult to pay the rent, openly stating how the recommended 19 degrees is not enough. Rachele (50, hospital worker, single mother of a teenage boy) spoke to us about the price of heating being excessive for social housing, mentioning the case of her neighbor as an example. “She wants to leave even though she likes it here. Not because of the rent, which is okay, but when you include gas, it’s crazy. Everyone puts aside a gas budget. . .” This restraint created by the energy context has led residents to buy electric blankets. Although considered thermally efficient, the housing has a number of shortfalls (narrow rooms, poor soundproofing) which have prompted them to look for alternative accommodation. During interviews, multiple residents stated that their radiators had never been bled, despite this being the landlord’s responsibility. Delays for repairs are often long, only for the work to be sometimes deemed unfeasible by housing managers. Tenants are therefore forced to take repairs into their own hands. According to tenants, the greatest “residential stress” comes from the landlord’s lack of a clear energy renovation plan. Thermal renovation from the outside seems difficult, due to the building’s heritage status. Interior insulation is also an obstacle, due to the narrowness of the rooms, along with the landlord’s financial and logistical challenges in temporarily rehousing residents. Without a solution, residents feel abandoned. For these middle-class tenants, the location and heritage status of the building are inhibiting factors. These exchanges, however, allowed a

number of respondents to draw up a shared diagnosis, identifying noise, ventilation and heating problems; yet mobilization remains low. Certain tenants experience this situation as unjust, paying expensive heating costs for “architectural beauty.” The high summer temperatures, on the other hand, seem to be well tolerated on the whole. Nevertheless, when it comes to thermal issues, residents have different reactions. According to our survey, older tenants adopt an “Exit” tactic (Hirschman, 1970), falling back on individual strategies to solve their problems. Although some try to “make their voices heard”—especially those who recently arrived—the prevailing attitude is one of resignation.

During the winter, the social housing block (1980) in the city center uses collective gas heating, supplied by district heating company Compagnie Parisienne de Chauffage Urbain. In recent years, however, the handling of the central boiler room has led to recurrent heating malfunctions. This fundamental “space and issue” creates differentiation between the various levels of the building. According to tenants, the heating pipes have never been cleaned, causing limescale build up and making it difficult for heat to circulate within the buildings. As a result, the upper floors are not heated as well as the lower ones, the latter of which suffer from the high temperatures required to keep the top floors sufficiently warm. “It gets too cold in winter. It was 16.5° inside the apartment, so that’s not okay. And every time we complain, it takes two days for the heat to go back up” (Daphné, 45, daycare director living on the fourth floor). Tenants state that they have no control over their radiators, due to the oxidation of the taps. For tenants living on the lower, and therefore overheated floors, the inability to regulate heat is seen as wasteful. Jean-Claude (68, civil servant in the building sector), who lives on the first floor above the boiler, explained to us that he leaves the windows open during the winter because it gets too hot in his apartment. For residents on the upper floors, temperature dissatisfaction is a source of annoyance, given the bills they pay for insufficient results, creating the need to dress warmly. Among these relatively affluent social classes, the main source of dissatisfaction is the loss of control over their homes. In the summer, the building’s concrete structure and large windows fail to provide adequate insulation against heat, respondents unanimously describing it as unbearable. The effects of heat on their well-being were often emphasized, whether in terms of mental health, comfort or even physical health. Even so, renters do not appeal to the landlord as they do for the cold. Instead, they employ a variety of individual strategies, such as resorting to other appliances (fans, ceiling fans, mist) and traditional techniques (closing shutters, making drafts), or simply fleeing this “unlivable” environment to friends’ houses or secondary homes. A young couple uses fans in their apartment and limits direct sunlight. While this strategy is essential for one person’s sleep, it also reduces the well-being of the other, who is deprived of the light needed to work and feel at home. Ultimately, apartments on the lower levels, which have no access to direct sunlight, seem to have a better quality of life because they are better heated and not directly exposed to the summer heat. Conversely, apartments on the upper levels, which enjoy a “pleasant view of the Jardin des Plantes,” are never able to achieve satisfactory warmth in winter and, in summer, the heat makes their homes uncomfortable.

In the recently built social housing complex in the south-west suburbs of Paris, the first educational café discussions centered around building orientation and its effect on thermal insulation issues. Moreover, it appears that some of the apartments on the top floor have not been insulated, if not an entire building. As a result, we met a number of residents who were eager to understand the reasons for these defects, which are the fault of the contractor, but for which the social housing

landlord has been blamed. One tenant said that “the windows aren’t fitted properly, and so they don’t sit perfectly together and let air through.” This tenant also expressed disappointment over the technical inspections not targeting problematic units. A collective of tenants speculated about the building’s construction, stating, “Construction works like that too. You build the first, second and third floors, then you realize some materials are missing, but you carry on anyway.” Brigitte (70, retired) says she hasn’t been able to keep herself warm all winter. “You can’t imagine how much I’ve paid in electricity bills, not to mention the fact that I’ve constantly been ill with respiratory problems, and everyone knows it.” The building has received a “health” certification, and the landlord has put up a number of messages in the common areas to encourage residents to consume less energy and exercise more. They read: “Consume calories, not electricity.” Or “Take the stairs rather than the elevator.” In the staircase, each step is decorated with colors and messages that add to the aesthetic appeal and encourage residents to use them more often. The buildings are equipped with home automation tools, such as networked, remote-controlled electrical appliances. Tenants have a hard time using this technology: “The radiators are hard to understand, to get them to work. Towel dryers are the same. You’d need a master’s degree to use them.” The double thermodynamic flow CMV (supplementary heating system in winter and air conditioning systems in summer) used in these buildings is a source of confusion for the group of residents interviewed. They admit to being unfamiliar with how it works, and not knowing whether they have CMV or an air-conditioning system in their apartment (Fijalkow et Maresca 2019).

These inequalities mirror the findings of the French National Observatory on Fuel Poverty (ONPE), which estimates that three million households are in a situation of fuel poverty, and that 69% of the French population restrict their heating to avoid high bills (ONPE Tableau de bord de la précarité énergétique, 2021). Several surveys show that, in homes with excessive energy consumption (problems of thermal insulation, air infiltration through windows, leaks and dampness in walls), families monitor their consumption due to the financial strain of energy bills (Robert 2021; Stojilovska, Yoon, and Robert 2021). Some residents resort to energy restriction and expense reduction strategies, cutting back on daily showers, modifying their diet (limiting meals or eating only cold meals), or using additional appliances (electric blankets, etc.). Others resign to paying the extra costs, leading to major financial difficulties and severe “residential stress.” In this respect, today’s notion of energy efficiency ignores the daily practices residents used to reduce their bills, accentuating a feeling of powerlessness in the face of a climate challenge seen as a distant reality (Fijalkow and Maresca 2019).

Noise Inequality: Windows, Pipes, Machines and Common Areas

In the ceinture rouge social housing block, the topic of noise is mentioned in every discussion, even if there is no unanimous criticism surrounding the issue. The most frequently cited problem is the creaky wooden floor, which transmits noise when walked on by neighbors and causes tension. Some tenants have installed linoleum floors but have seen no difference. The landlord is often accused of not taking responsibility for this issue, which disrupts individual and collective peace and quiet. One tenant even mentions hearing the elevator from one of her rooms, stating, “It’s terribly noisy.” Apartments overlooking the inner courtyard are quieter. However, some tenants complain about the noise from the common areas, particularly the garbage room. She mentions young people partying in the courtyard, preventing her from sleeping, and that her son’s

bedroom window overlooks the street, which is very noisy. A friend of hers installed “a special window like the ones used around airports,” which provides added comfort.

In the social housing building in the center of Paris, residents frequently mention the lack of soundproofing. Although double-glazed windows reduce outside noise, they increase sensitivity to noise in the building. One tenant is only bothered by the couple upstairs, who have recently moved in and throw parties regularly, resorting to using earplugs to limit noise pollution at night. Another tenant (Anne, 72, an artist and musician) complains about the building’s poor insulation, its overall low construction quality, and the noise that travels through the building “from the bottom to the top.” She explains, “It’s like all social housing buildings, Paris Habitat and others. . . they haven’t always been built with quality materials. It’s a well-known fact that noise travels upwards from one floor to the next. So, I hear the floor above, the floor below hears me, and so on.” While she knows her downstairs neighbors and “has a lot of sympathy for the architect,” his wife suffers from a disruptive mental disorder. “It happens quite frequently, around two or four in the morning, that I’m woken up because she speaks so loudly. Not to say that she screams.” The poor soundproofing and overall noise pollution from the neighborhood also impacted her professional life when she was working from home. She cites the bedroom as the noisiest room. In addition to noise pollution inside the building, she also complains about parties: “Every night, until two or four in the morning, there is a lot of ruckus [imitates music] . . .and, in the evening until late, you can feel the house tremble.” A couple (aged 45, teachers) expressed very different feelings. The woman felt it was very quiet, while the man noted the day-to-day noise: “With the heater turned on, the sound comes through the pipes.” While the overall environment of the residence remains very calm, even picturesque with the surrounding Jardin des Plantes, proximity to the hospital constitutes a source of noise pollution for the tenants: “All the ambulances go there.”

During the educational café at the social housing in the south-western suburbs of Paris, a number of critical comments were made about the quality of the buildings. For these residents, the noise problem seems particularly sensitive, and immediately brings up the question of mental health. As soon as we had explained the research project, Julie (delivery girl, 45) expressed her strong dissatisfaction with noise problems and the manager’s lack of response. “You can hear the front doors, you can hear the garbage room, you can hear the neighbors, you can hear the doors creaking. It’s very, very difficult, but I haven’t had any response except ‘the insulation meets standards, blah, blah, blah. . .’ So, I ask them what the standards are, but they are unable to provide them, and they say they did it [the test] when the building was empty. Of course, when it’s empty, there’s no noise. And all this has an effect on mental health.” Her comments opened up a debate among the tenants present, who not only questioned the construction of the buildings, but also reported on the landlord’s calls for them to be considerate and minimize interior noise. For example, Sonia (45, mother) asserts, “Of course it creates tension! Earlier, I could hear some noise. . . The neighbor wasn’t doing anything special, she’s allowed to vacuum, but it woke up my daughter.” She adds, “They didn’t install any insulation. When you hit the wall, it’s hollow.” She also blamed the landlord, adding: “They know how our walls were made. . . This is a botched job.” The tenants feel like they are under house arrest, and Julie dreams, “If I could leave and go and live in the Château de Versailles, if I had the money, I’d do it right away. It’s because of money that I’m stuck here.” Séverine (55) is a regional assistant for the APF France Association, working with disabled people. During the individual interview, she commented: “There’s a defect in the walls, I can hear the elevator noise from my room. Access to the balcony is very dangerous because the

step is more than 25 cm high, and I always have to keep the shutter closed because of the neighbors across.” Alarmed by the heating noise, Anne-Sophie called in a technician who advised her to heat the house for 2–3 hours to avoid the whistling, “which is unbearable,” she insists. Julie, Sonia, Séverine and Anne-Sophie believe they have a legitimate right to point out these malfunctions, and have decided to raise their “voice” (as Hirschman, 1970, put it) based on factual criteria: “building standards.” The tenants of these newer homes feel a strong sense of injustice in not being listened to by the manager and feel ignored by the inadequate responses of the landlord and technicians. They recognize that they belong to different social classes, and that they face their own specific problems. However, they agree on the need for “unity” to “shout louder” and be heard by the landlord.

These interview results reflect noise insulation problems, which are indicative of inequalities in housing. Indeed, while over 20% of households complain about noise, 33% of the poorest households experience this problem (Damon 2023; Godefroy et al. 2007). According to Bruitparif (2019), noise levels lead to segregated processes, with wealthier households avoiding areas around airports, for example. As a result, properties in noisy locations are sold and rented at lower prices). Noise especially has an impact on health: more than 100,000 years of healthy life are estimated to be lost in the Ile-de-France region due to noise, particularly from transport (BruitParif, 2019).

Conclusions

Based on these buildings, three criteria helped us to understand why residents tend to stay, whether by choice or by constraint: a feeling of control over their environment, being able to imagine a future in their living spaces, and being able to respond to the demands of housing managers. In the social housing on the outskirts of Paris, time has given tenants a certain amount of leeway when it comes to carrying out work and dealing with management. They remain in their homes despite soaring energy prices and feelings of having to put up with the landlord’s uncertainties when it comes to renovation projects, which are both necessary and complex. Tenants in the central Paris building are satisfied, even happy, with the prime location of their apartment, despite the fact that they have no control over certain “spaces and issues,” such as heating and windows. This is not the case for tenants in the south-west suburbs, who are unable to take ownership of their space, even though the apartment is supposed to meet the latest sustainable housing standards. Having just been allocated a new home, these residents find it difficult to move.

To account for this “residential stress,” levels of housing and health literacy are most developed on opposite sides of the socioeconomic spectrum: in the building in central Paris, residents of higher socioeconomic status follow the trend of seeking well-being, and in the social housing building in the south-western suburbs, tenants build a narrative showing how construction flaws impact their bodies, through respiratory illnesses and mental stress. In the social housing on the Paris outskirts, where socioeconomic status is less polarized, health literacy in housing is less pronounced. The narratives of these residents reveal a subtle sense of health, which interviews helped to render more explicit.

These three sites correspond to different spheres of justice (Walzer 2013) at the level of the city and the building, and within the social housing system itself. In short, the social housing building in the south-western suburbs illustrates, through the words of its residents, the injustice of a

“botched” building in which the social landlord failed to ensure the contractor’s compliance with specifications. The educational café we organized gave residents the opportunity to express their feelings of non-recognition and injustice. Aware that they have no choice but to stay, they understand fragile position of the landlord with regard to building standards. They therefore refuse to resign themselves and demand to play a role in voicing their complaints. In the outer Parisian social housing building, the feeling of injustice is linked to uncertainty regarding renovation work, and also to the lack of recognition thereof. Tenants seek to develop their own skills, and some are ready to leave. As for the building in central Paris, the feeling of injustice stems from the random distribution of housing that is well heated and ventilated in summer. Distribution of such housing does not follow rules of wealth or social capital, but rather stems from a system they have no control over, and from a landlord whom they consider as a mere service provider.

“Places and issues” provide a means of understanding. Various forms of “trade-offs” show that health and housing inequalities overlap in terms of both the quality of the built environment and the literacy of residents. Observation and residents’ narratives reveal a range of attitudes, from restraint to accommodation to the search for additional comfort, depending on the level of their concern for health. Our research shows how, alongside social inequalities, resolving “critical situations” such as opening windows or turning on the heat reflects “trade-offs” that focus primarily on health rather than on finances or efficiency.

As researchers, our approach serves to raise awareness among tenants, and to be a third party for landlords, helping to ensure that matters are discussed with occupants. Consequently, health, which is universal and pays attention to minor details, plays a fundamental role in the transformation of housing policies and practices aimed at respecting human life.

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