

Learning From Amateurs

How Madrid Balcony Appropriations can Instruct Architects

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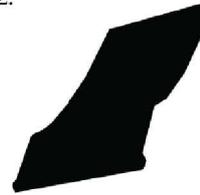
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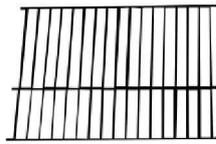
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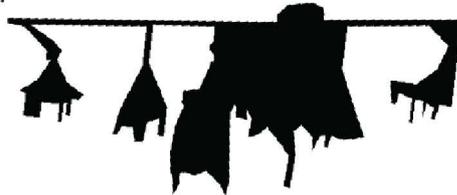
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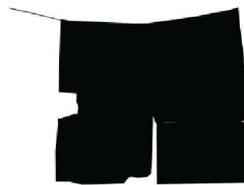
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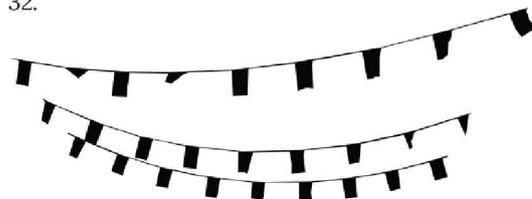
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How Madrid Balcony Appropriations Can Instruct Architects

Mary Elizabeth Perez

Student ID: 5771595

MSc Architecture, Architectural Design Crossovers Graduation Studio

Delft University of Technology, 2023 - 2024

Mentors

Agnes van der Meij - Design Mentor

Freek Speksnijder- Building Technology Mentor

Joran Kuijper - Research Mentor

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Abstract

An analytical collection of theoretical, psychological, and methodological research applied to spatial appropriation. Understanding our innate need to modify existing conditions to satisfy personal needs begins with understanding user perception and action to uncover the user's needs and motives. This research is explored on the balcony and applies its history and multi-programmatic character to understand the residents of the Lavapies Neighborhood in Madrid. Site visit research and interviews reveal how locals reflect, project, and respond to the current situations of their personal and communal needs through balcony and gallery appropriations. Utilizing the *Catalogue of Balcony Appropriations*, the main visual supportive source of my field research and site understanding, revealed seven reasons for spatial appropriation. The analysis of these seven derived four general conclusions that can be applied to *learn from the amateurs* of other locations.

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Photographed by author



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Photographed by author

Prelude

A Personal Prelude

For several years now, I've cultivated a fascination for the intimate interactions people have with the world. The informal, usually spontaneous and instantaneous, additions and adjustments people apply to their surroundings. Formally called 'spatial appropriations', these moments can be defined as the "act in which people use public [or private] spaces to carry out individual or collective activities other than the purpose that the space was originally designed for"¹. Spatial appropriations are often a result of an individual's unique perception and interpretation of their environment to create a solution for their current needs or desires². Whether it be in public urban spaces, like attaching a hammock across two trees in a park, or in a private residential setting, like hanging a curtain to divide a shared room, appropriations are practiced in all settings around the world.

I have been photographing spatial appropriations and have generated a collection of images capturing unions between people, their needs, and space - here are selected images from my photo archive. These photographs present the playful and resourceful aspects that spatial appropriations embody; creating lively cities using the full extent of a building. This creative use of existing conditions and tools results in a tight bond between the site and user - making spatial appropriations the essence of humans inhabiting their built and natural environment.

Spatial interactions display more than just jury-rigged³ solutions to an individual's needs and desires. These innovative solutions are pure insights into humanity's innate creative and self-expressive desires that also demonstrate our cultural spatial connections passed through time. Anthropological research suggests that cultural experiences and memories, amongst other formative factors, play a significant role in shaping how individuals perceive their surroundings⁴. Appropriative strategies vary on the performer's unique and case-dependent personality, interests, culture, age, economic, political, and regional factors⁵. For that reason, no two appropriations are the same. Therefore, making the ability to sympathize and perspectivize the building occupant and their living habits a valuable skill for designers. Architect and environmental psychologist Karen Frank elaborates how if designers distance "oneself from one's own experiences[, it] creates a

¹Lara-Hernandez, Antonio. "Institute of Mobility and Urban Territorial Development in Yucatan, Urban Resilience Research." IMDUT, Yucatan, Mexico, 2018.

https://pure.port.ac.uk/ws/files/8856885/Understanding_the_temporary_appropriation.pdf

²Lara-Hernandez, Antonio. "Institute of Mobility and Urban Territorial Development in Yucatan, Urban Resilience Research." IMDUT, Yucatan, Mexico, 2018.

³Jury-rig (verb), to erect, construct, or arrange in a makeshift fashion (Merriam-Webster).

⁴Lieberman, E. James. Nisbett, Richard E. The Geography of Thought: How Asians and Westerners Think Differently ... and Why. (Brief Article). Library Journal 128.3 (2003): 156. Print.

⁵Vygotsky, L.S., et al. Mind in Society: The Development of Higher Psychological Processes. United Kingdom, Harvard University Press, 1978.

distance from the experiences and feelings of others as well. Then we all live 'out there', in a world of objectified knowledge, on the outside of our own experiences, with little empathy for the experiences of others"⁶. This consequentially impacts the resulting architecture from embodying its human-centric potential to enhance and support its user's goals.

The research paper's title, *Learning from Amateurs*, stems from the central concept of understanding and applying appropriative strategies to the architectural design process. The term *amateurs* refers to the performers or building occupants and their informal solutions catering to their needs and desires. The presented theoretical frameworks and methodological approaches suggest that within 'amateur' spatial interactions lay the fundamental principles needed to create authentic, personal, yet universally applicable, architecture. These principles are exercised in the photographic analysis of my site visit, present in the *Catalogue of Balcony Appropriations*, which derives the seven spatial qualities of balcony appropriations and their embedded origins and intentions. These conclusions yield four broader conclusions of spatial appropriation that apply not only to the Lavapies neighborhood in Madrid but also to other urban areas.

Problem Statement

Though the majority of building occupants spatially appropriate, most existing residential architecture fails to accommodate this behavior. Which restricts residents' ability to modify and adapt their living spaces according to their needs.

The Lavapies locals face similar appropriation limiting building conditions and their yearning for a more personalized and modifiable building is visible through their abundance of makeshift interventions on balconies and gallery spaces.

Using this problem statement to guide my research, I begin my study on spatial appropriation by delving into its fundamental principle: the fulfillment of individuals' needs and desires.

⁶ Franck, Karen, and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed., Wiley, 2000.

Theoretical Framework

Needs

Spatial appropriation is a prevalent and essential response to existing architectural conditions - a solution that effectively caters to the individual's needs and wants. *Needs* are defined as "a physiological or psychological requirement for the well-being of an organism"⁷ and are exercised in Abraham Maslow's paper *A Theory of Human Motivation*. Maslow's hierarchy of needs (1943) states that human needs are "arranged in a hierarchy, with physiological (survival) needs at the bottom, and the more creative and intellectually oriented 'self-actualization' needs at the top"⁸. Figure 6 illustrates the original theory (1943) in a pyramid where the above level can only be achieved by satisfying the previous. In 1970, Maslow re-evaluated 'self-actualization' and elaborated on the growth journey adding cognitive, aesthetic, and transcendence needs⁹. Figure 7 depicts the revisited hierarchy (1970) and highlights the transition between deficiency and growth emphasizing the importance of self-improvement for a fulfilling life¹⁰.

The hierarchy of needs is a theoretical framework that identifies the essential qualities for life, and when applied to the architectural setting, it is evident that all physiological needs are satisfied in a typical dwelling through architectural features and building components (Fig. 8). Though satisfying this baseline fulfills residents' physiological requirements, providing the minimum features does not guarantee the environment will support their journey toward fulfilling psychological needs. Figure 8 elaborates on the spaces, features, and tools commonly sought after to meet user preferences and support their pursuit of fulfillment. Though certain features are considered unnecessary, some deem these amenities indispensable due to their integral role in their lifestyle¹¹. While the elements constituting human needs are universal, desires carry personalized significance based on diverse criteria.

⁷ Merriam-Webster. "Need Definition." *Merriam-Webster Online Dictionary*, 2024.

⁸ Mcleod, Saul. "Maslow's Hierarchy of Needs." *Simply Psychology*, 21 May. 2018. <https://canadacollege.edu/dreamers/docs/Maslows-Hierarchy-of-Needs.pdf>

⁹ Mcleod, Saul. "Maslow's Hierarchy of Needs." *Simply Psychology*, 21 May. 2018.

¹⁰ Maslow, A.H. "A Theory of Human Motivation (1943)". *Psychological Review*, 50, 370-396.

¹¹ Mcleod, Saul. "Maslow's Hierarchy of Needs." *Simply Psychology*, 21 May. 2018.

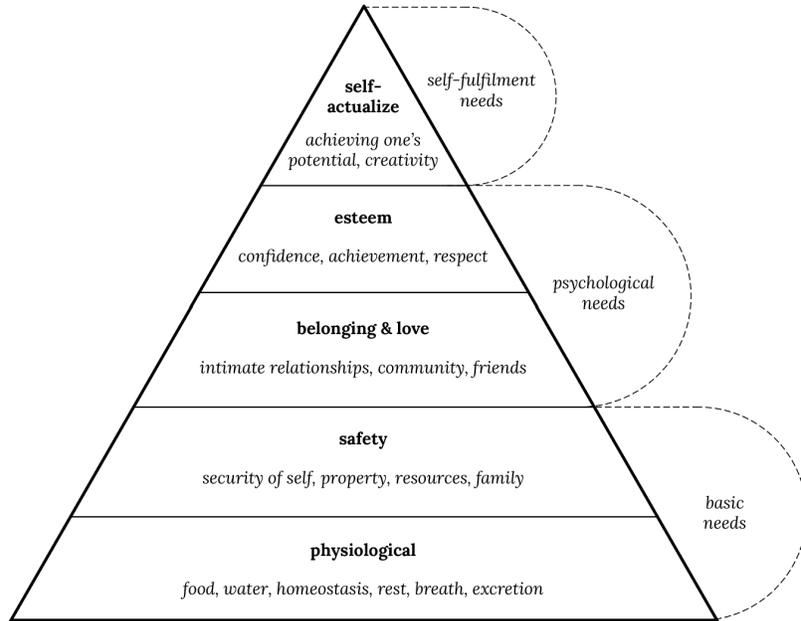


Figure 6 Perez, Mary. *Maslow's original Hierarchy of Needs (1943)*. Information supplied by Maslow's *Theory of Human Motivation* ¹².

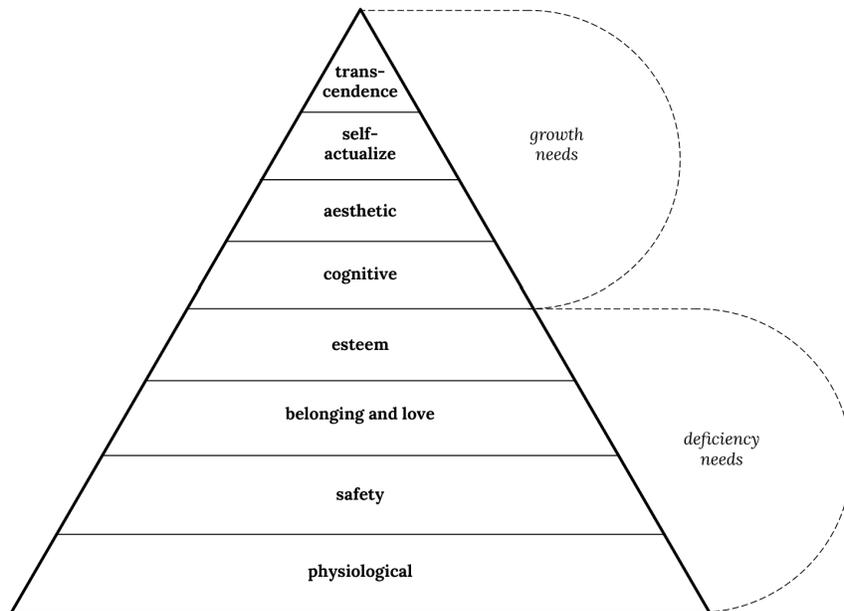


Figure 7 Perez, Mary. *Maslow's revised Hierarchy of Needs (1970)*. Information supplied by Maslow's *Theory of Human Motivation* ¹³.

¹² Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

¹³ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

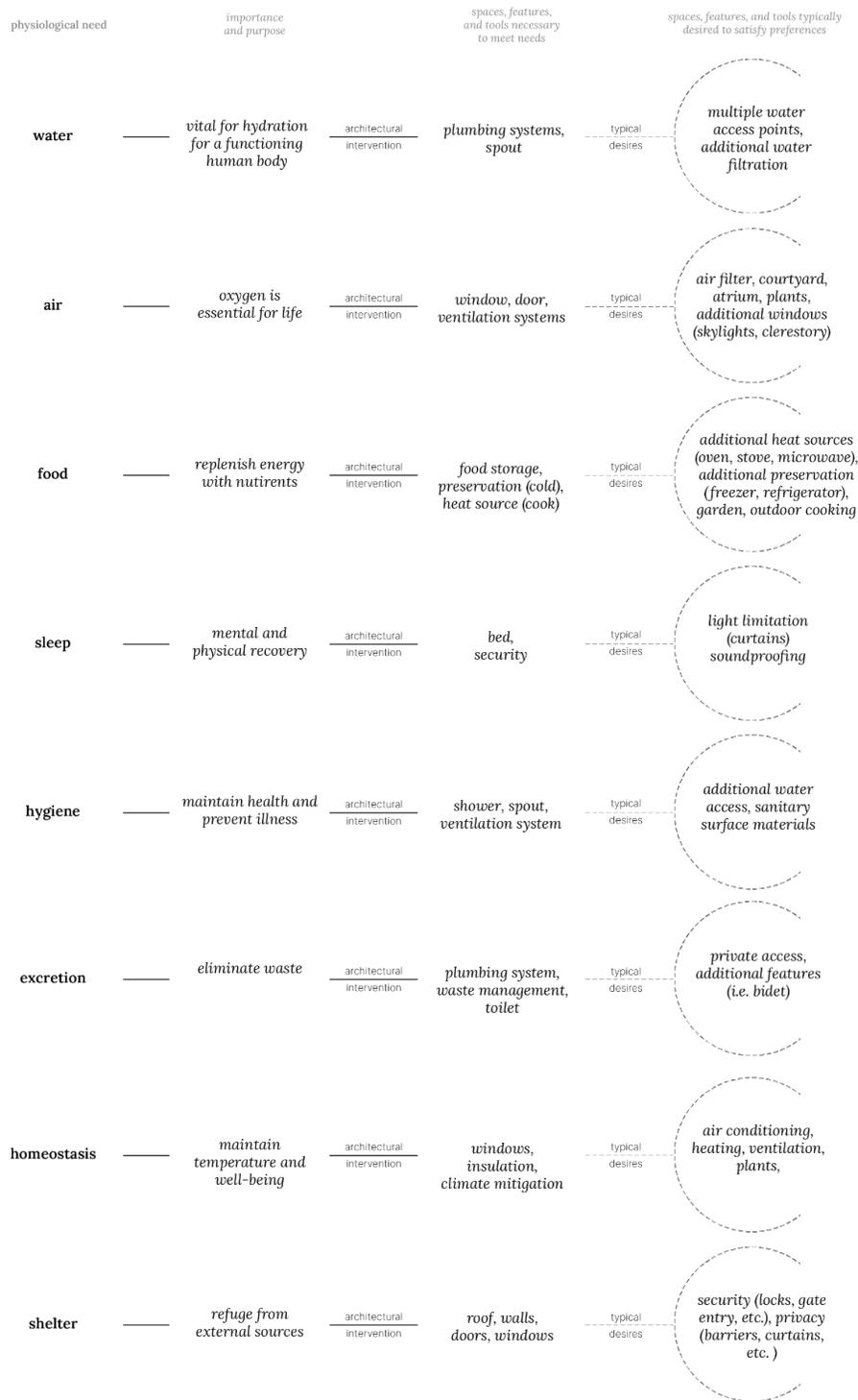


Figure 8 Perez, Mary. *Basic Needs Applied to the Architectural Setting*. Information supplied by Maslow's *Theory of Human Motivation*¹⁴.

¹⁴ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

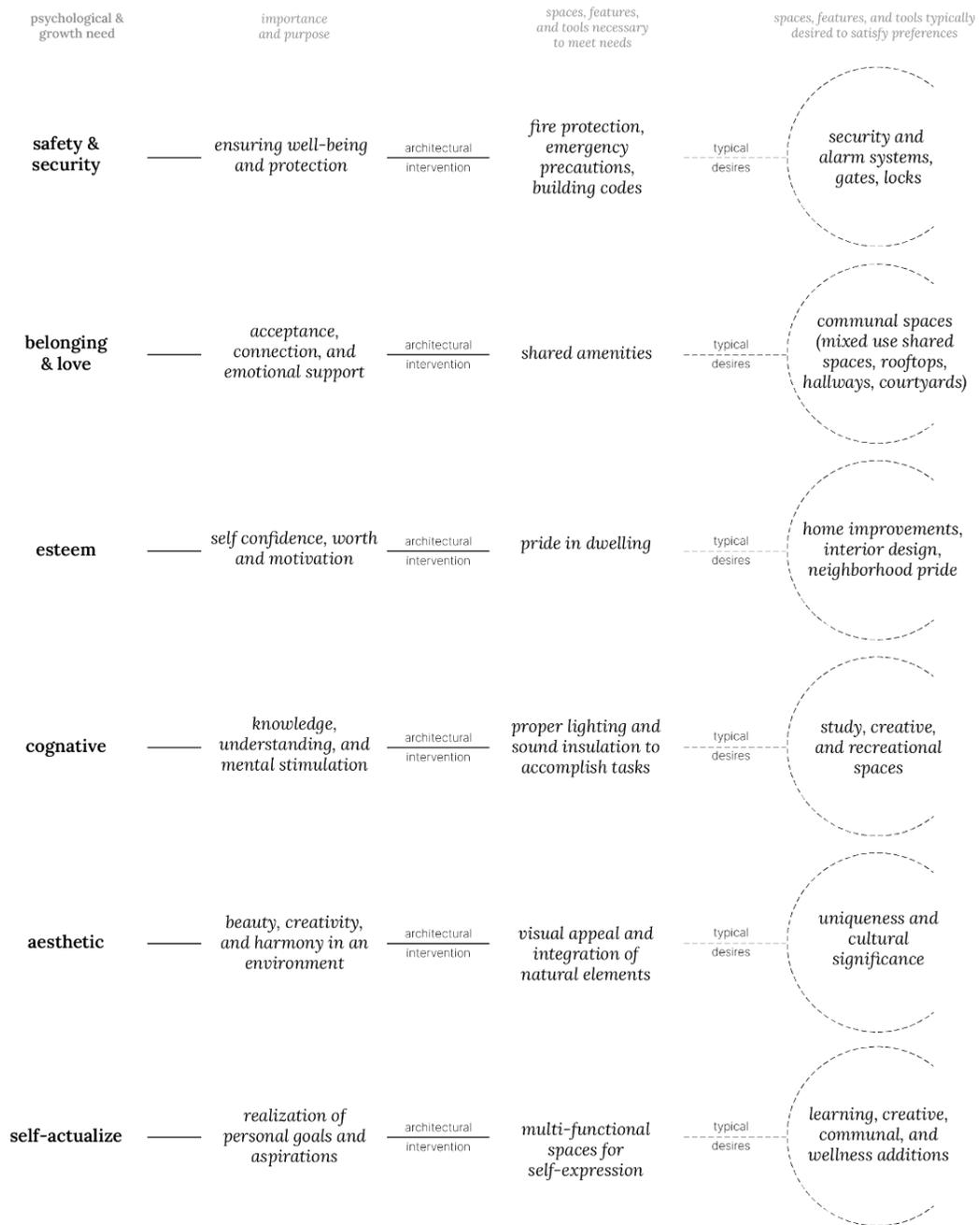


Figure 9 Perez, Mary. "Deficiency and Growth" Needs Applied to the Architectural Setting. Information supplied by Maslow's *Theory of Human Motivation*¹⁵.

¹⁵ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

Desires

Although there is a standard baseline for human physiological and psychological needs, people possess unique preferences that shape their manifestation. Maslow elaborates that “the specific form that these needs will take will of course vary greatly from person to person”¹⁶. To elaborate, these preferences and the conditions to satisfy the individual vary on an array of factors such as personality, experience, age, location, culture, and economic background¹⁷. Figure 9 highlights psychological needs, their application to architectural settings, and potential desired qualities and features. Because of individual preferences, the standard dwelling may not adequately meet everyone's needs, prompting users to modify their homes to satisfy their essential psychological and developmental requirements for a fulfilling life. Though many of these needs are sourced from beings and communities, the surrounding architecture can be tailored to foster feelings of safety, belongingness, love, esteem, and even self-actualization for the user¹⁸.



Figure 10 Gîrbovan, Bogdan. *Level 9. "10/1"*, 2008, <https://www.a-c-d.net/10-1-bogdan-girbovan/>

¹⁶ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, p.382.

¹⁷ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, p.370-396.

¹⁸ Mcleod, Saul. "Maslow's Hierarchy of Needs." *Simply Psychology*, 21 May. 2018. p.8



Figure 11 Gîrbovan, Bogdan. *Level 10. "10/1"*, 2008, <https://www.a-c-d.net/10-1-bogdan-girbovan/>

Photographer Bogdan Gîrbovan demonstrates this principle in *10/1* (2008). The artist, residing on the top floor of a 10-story building, asked his neighbors living in the below units to photograph them in their flat¹⁹. This project showcases how individuality prevails despite the monotonous Romanian Soviet-influenced apartment design²⁰. The photographs capture how habits and lifestyles consistently shape spatial arrangements, showing that personalization cultivates a deep sense of attachment, effectively extending oneself into the space²¹.

The human need to personalize stems from our inherent territorial instincts to control space and foster our cultural and social identity²². This is particularly challenging in apartments due to the building owner's strict modification policies in rental agreements. Though it's reasonable to uphold existing conditions, restricting tenant interaction with architectural features disconnects human connection to self and space²³. Edward Hall puts it best explaining: "Even as we occupy a public place temporarily, possibly a seat on a bus or train, the space immediately around us, our 'personal space' is a kind of inside, an inside we carry with us, bounded invisibly but symbolically"²⁴. Architecture holds our individual and shared memories giving spaces and items sentimental value. Spatial

¹⁹ Gîrbovan, Bogdan. "10/1 by Bogdan Gîrbovan", *Art Ctrl Del*, Mar 2018, www.a-c-d.net/10-1-bogdan-girbovan/.

²⁰ Gîrbovan, Bogdan. "10/1 by Bogdan Gîrbovan", *Art Ctrl Del*, Mar 2018.

²¹ Whyte, William H. "The Social Life of Small Urban Spaces: Project for Public Spaces", 2018.

²² Rapoport, Amos. *The Meaning of the Built Environment: A Nonverbal Communication Approach*. United Kingdom, University of Arizona Press, 1990.

²³ Hall, Edward. *The Hidden Dimension*. Garden City, New York: Doubleday, 1966.

²⁴ Hall, Edward. *The Hidden Dimension*. Garden City, New York: Doubleday, 1966.

interventions self-express and extend thoughts and needs to the physical realm²⁵ - making these moments a vulnerable glimpse into one's mind. Lobell explains how "understanding the psyche...and spatial archetypes are expressed most directly through architecture....When it is at best, a mediator between self and the cosmos"²⁶. Lobel refers to the dwelling as being the most authentic medium of self-projection considering the user's vulnerability²⁷. This is especially relevant considering it is projected that the upcoming generation will move on average 15 times²⁸. This new-nomadic culture is becoming increasingly frequent making the process of *homification*²⁹ more pertinent. Nonetheless, these restrictions have resulted in a surge of "renter-friendly" modifications and affordable apartment interventions. Understanding the motivations behind spatial appropriation lays the groundwork for exploring the methods and circumstances needed for it to occur.

How to appropriate

Appropriation applies an intentional and strategic arrangement of space to reflect personal or collective identity, fostering a sense of user belonging and practicality. Architectural theorists explain appropriations can manifest in numerous ways such as through personalization, maintenance, and activity³⁰. Appropriations naturally arise as a response to dissatisfaction with the existing conditions and how we respond depends on our interpretation of the world.

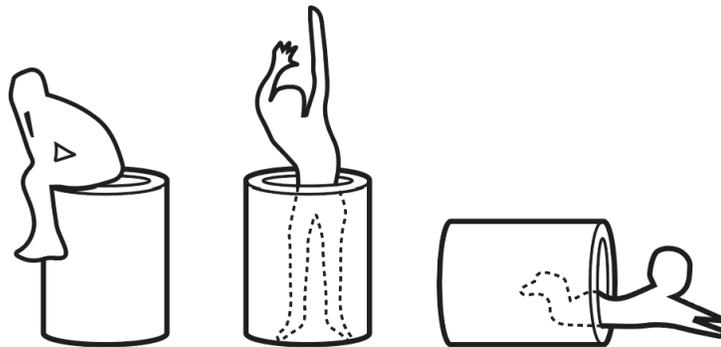


Figure 12 Perez, Mary. *Visualized Theory of Affordances*. April, 2024.

²⁵ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.78

²⁶ Lobell, Mimi. *Spatial Archetypes*. Revision, 1983, 6:2. p.70

²⁷ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.78

²⁸ Herwig, Oliver. *Home Smart Home: How We Want to Live*. Birkhauser, 2022, p.29.

²⁹ Homification refers to the process of making a dwelling curated to the liking of the resident.

³⁰ Grauman, Carl F. "The Concept of Appropriation and Modes of Appropriation of Space," *Appropriation of Space* (1976), <https://iaps.architecture.net/doc/oai-iaps-id-iaps-00-1976-009>.

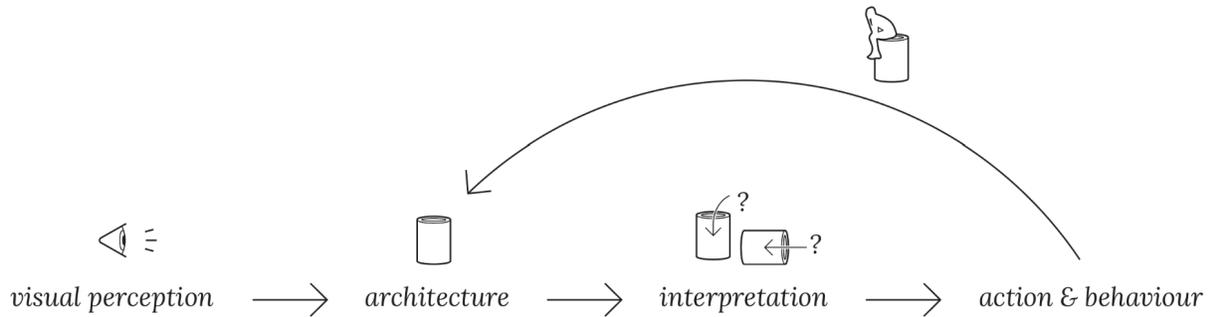


Figure 13 Perez, Mary. *The Sequence of Architectural Connections Within the Theory of Affordances*. April, 2024.

The theory of affordances, proposed by James Gibson in 1969, states that perception determines how to interact in an environment and with objects³¹ (Fig. 12). Therefore, if perception precedes action then the built environment informs perception (Fig. 13). However, spatial interpretation can't always be anticipated due to individual conception³². Therefore, behavioral observation places authentic insight into an individual's instinctive perception of space. This notion that 'actions speak louder than words' is supported by psychology research³³. Tversky explains how our physical relationship with the world is stronger than our ability to construct concepts through verbal communication³⁴. This concept pertains to spoken language's limitation in accurately conveying human thoughts and perceptions into speech³⁵. This often results in generalizing and categorizing thoughts³⁶, forming labeling constraints, which inevitably hinders people from experimenting with their spaces in unforeseen ways. Spatial appropriations, however, challenge the bestowed programmatic titles.

³¹ Gibson, J.J. *The Ecological Approach to Visual Perception* (1979). Boston: Houghton Mifflin, p.223.

³² Wells, A.J. "Gibson's Affordances and Turing's Theory of Computation." *The London School of Economics and Political Science*, 2002.

³³ De Witte, Melissa. Stanford University. (2019). *To Understand How People Think, Look To Their Actions, Not Their Words*. Stanford News. news.stanford.edu/2019/08/02/thinking-faster-words/

³⁴ Tversky, Barbara (2019). *Mind in Motion: How Action Shapes Thought*. Hachette UK.

³⁵ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.92

³⁶ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.92



Figure 14 Tomiyasu, Hayahisa. 'TTP' (2018), published by MACK
<https://museemagazine.com/culture/2018/11/7/reviewl-ttp-by-hayahisa-tomiyasu>



Figure 15 Tomiyasu, Hayahisa. 'TTP' (2018), published by MACK
<https://museemagazine.com/culture/2018/11/7/reviewl-ttp-by-hayahisa-tomiyasu>

Hayahisa Tomiyasu photographs the theory of affordances in a practical setting in *TTP* (2012-2016). From the window of his bedroom, Tomiyasu captures the table tennis court located in the adjacent park throughout the years and seasons showcasing the infinite ways urban furniture can be used and perceived despite its intended design³⁷. This series demonstrates how interpretation grants versatility and how individual perception can influence and *be* influenced by others. Austin Kleon, author of *Steal Like an Artist*, describes the artist as a “collector of ideas”³⁸. He emphasizes the importance of drawing inspiration and knowledge from others since “every new idea is just a mashup or a remix of one or more previous ideas”³⁹. This implies that creativity stems from existing things or ideas - meaning that people need a defined architectural framework to appropriate. Put simply, the architect's role is to provide the space (the canvas) on which the inhabitant (the artist) can create.

This concept inspired numerous architects, notably Herman Hertzberger and his advocacy for polyvalent spaces. Hertzberger defines these as spaces that “generate specific responses to each new situation”, “handle unexpected applications”, and “take up ever new content and still remain itself: inclusiveness as a structure open to interpretation”⁴⁰. He proposes designed spaces that are multi-functional and uniquely perceived by users, and do not assume the behavior of people⁴¹. Sensitivity to detail in the design process creates tangible and personal spaces that define the project’s ‘grand gesture’⁴² and effect on the location⁴³. Recognizing how appropriations emerge and serve residents as coping tools highlights their pivotal role in daily life and the influential role of designers. Therefore, exploring how architects can better understand “the amateurs” begins with uncovering the origins of the architect and user disconnect.

³⁷ Schatz, Amy. “TTP by Hayahisa Tomiyasu.” *Musée Magazine*, 3 Dec. 2018, museemagazine.com/culture/2018/11/7/reviewl-ttp-by-hayahisa-tomiyasu.

³⁸ Kleon, Austin. *Steal like an Artist: 10 Things Nobody Told You about Being Creative*. Workman Publishing Company, 2022. p.13.

³⁹ Kleon, Austin. *Steal like an Artist: 10 Things Nobody Told You about Being Creative*. Workman Publishing Company, 2022. p.9.

⁴⁰ “Herman Hertzberger: Polyvalence.” University of Pretoria, University of Pretoria, 2016, repository .up.ac.za/bitstream/handle/2263/27690/03chapter3.pdf?sequence=4&isAllowed=y.p.154

⁴¹ Hertzberger, Herman, et al. *Lessons for Students in Architecture*. Uitgeverij 010, 1991. p.214.

⁴² Lamb, Robert. McCormick, Joe. “The Psychology of Architecture, Part 1”, Stuff to Blow your Mind, iHeart Podcast, December 2019.

⁴³ Goldhagen, Sarah Williams. *Welcome to Your World: How the Built Environment Shapes Our Lives*. Audiobook, 2019.

Theorizing the Architect and User Disconnect

The architect and user disconnect has existed since the profession's establishment and has accumulated barriers that hinder mutual understanding⁴⁴. Two distinct aspects explain the neglect of user perspectives in large projects: surface and underlying factors.

Surface

The disconnect between the architect and user lies in their shared inability to verbally communicate desires, concepts, and overall project vision⁴⁵. The AIA⁴⁶ acknowledged the industry's lack of client integration and updated the standard contract's requirements to promote flexibility and client tailoring⁴⁷. Though these adjustments enhanced the client-architect relationship in private projects, designers struggle to integrate personalization practices in projects catering to diverse occupants, like apartments.

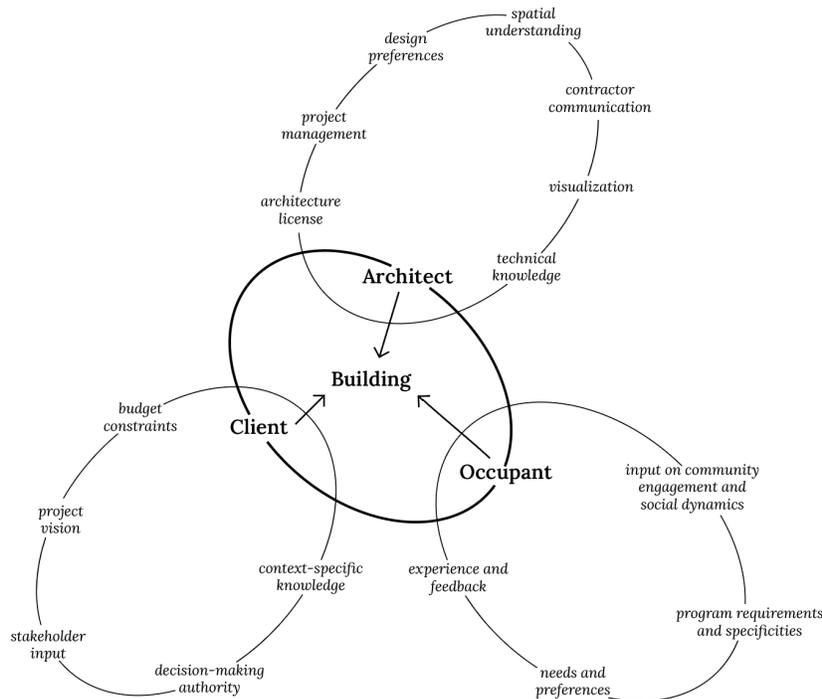


Figure 16 Perez, Mary. *The Architect, Client, and User Exchange of Knowledge*. 2024.

⁴⁴ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.10.

⁴⁵ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.25.

⁴⁶ American Institute of Architects. "AIA 2030 Commitment by the Numbers: Post-Occupancy Evaluation." 2023, .aia.org/showcases/6526947-aia-2030- commitment-by-the-numbers-post-oc

⁴⁷ Pressman, Andy. *Curing The Fountain Headache: How Architects And Their Clients Communicate*. 2nd ed., Sterling Publishing Co., 2006. p.xii

Figure 16 illustrates the design process' mutual exchange of expertise and perspectives making all stakeholders rely on each other for project execution⁴⁸. The diagram (Fig.16) highlights how dependencies are primarily architect and client-related and often exclude the occupant. Commercial and residential projects, like apartment buildings, notably lack narrative-based design since most clients aren't end-users - resulting in limited interaction between the designer and future occupants.

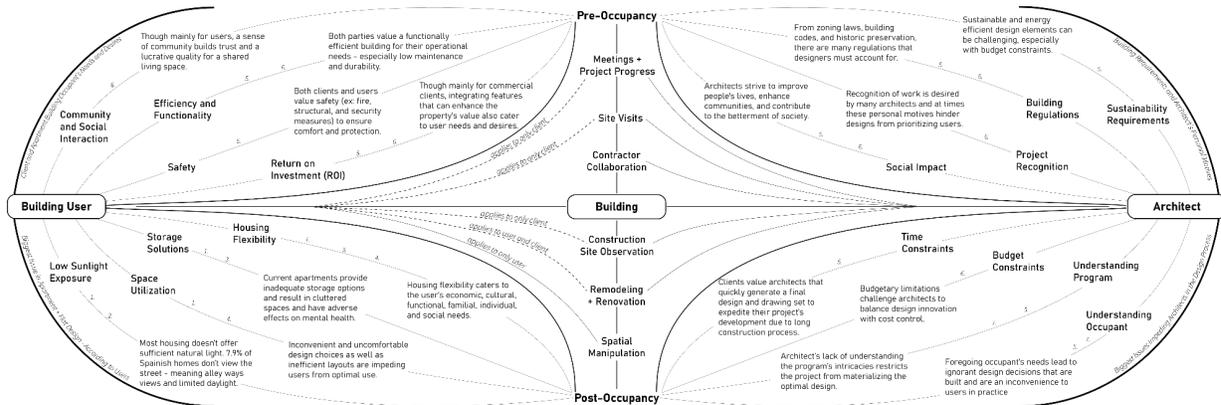


Figure 17 Perez, Mary. *The Architect and User Relationship to the Building*. 2023.

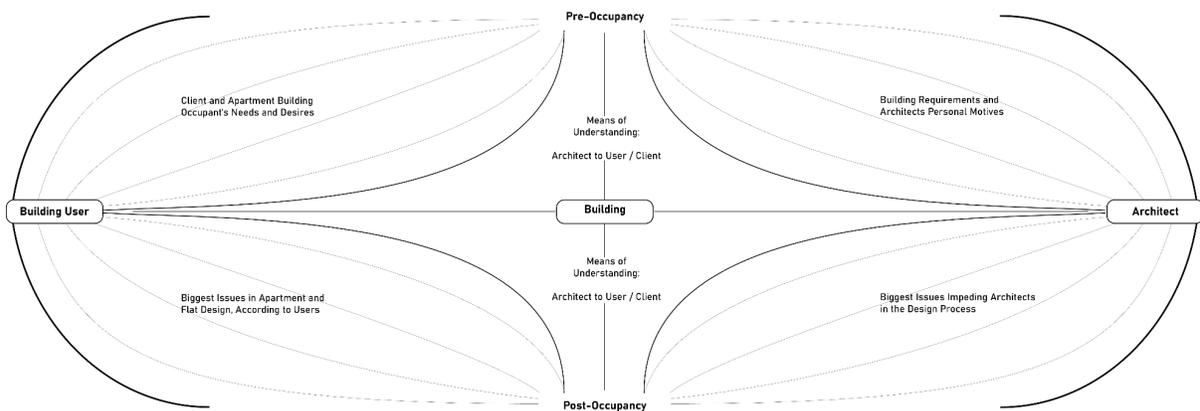


Figure 18 Perez, Mary. *Conceptual Understanding of 'The Architect and User Relationship to the Building' Diagram*. 2023.

Figure 17 illustrates the intersections and differences between the architect and user as well as the related contributing factors. The diagram differentiates the role of 'client' and

⁴⁸ Pressman, Andy. *Curing The Fountain Headache: How Architects And Their Clients Communicate*. 2nd ed., Sterling Publishing Co., 2006. p.xv

'user' through dotted and filled lines in the central building process analysis. This diagram visualizes the *needs* and *desires* of the architect and occupant and shows how the building is the uniting factor of all elements (Fig. 18). The building materializes the qualities, feelings, preferences, and emotions of future occupants. These diagrams demonstrate how user integration into the established client and architect dynamic is difficult, especially considering the prioritization of time efficiency and profit maximization⁴⁹. This often leads designers to prioritize the interests of investors and clients over the occupants. The architect's challenge then lies in their ability to set personal initiatives and preferences aside⁵⁰ to integrate users' experiences, knowledge, and familiarity with the space⁵¹.

Underlying

The architect's challenge to create user-centric architecture extends beyond the evolving field and priorities: it's rooted in the designer's ability to perspectivize the subject. Karen Franck, architect, professor, and environmental psychologist, theorizes that this lack of sympathy in the design process can be incepted during the formative years of architectural education where "students are encouraged to forsake the values of their own culture to adopt those of the transnational culture of architecture which... are expected to be universal in their application"⁵². Frank implicates a "devaluing of their own experiences and those of the very people in their home communities whom they may later serve"⁵³. The ability to empathize is sourced from memory and experiences, meaning architecture amalgamates the architect's personal experiences, schooling, research, and exposure to the project's program⁵⁴. In other words, architecture will always be shaped by its architect's memories, cultural perception, and more. For that reason, humanization and a narrative-based design process are pivotal.

This concept is best summed in these words:

"...give up your technical attitude and try to understand the other person for whom you are creating something" - Jim van Os⁵⁵

⁴⁹ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.28.

⁵⁰ Pressman, Andy. Curing The Fountain Headache: How Architects And Their Clients Communicate. 2nd ed., Sterling Publishing Co., 2006. p.xxiii

⁵¹ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.28.

⁵² Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.17

⁵³ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.17

⁵⁴ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.18

⁵⁵ Alkemade, Floris. Rewriting Architecture : 10+1 Actions: Tabula Scripta/FlorisAlkemade [and 3 others];Contributions by Floris Alkemade [27 others]. 2020. Print.pg.315

There's an increase in methods bridging the designer and user psyche, such as Participatory Action Research (PAR) which integrates public opinion⁵⁶. Developed in the 1940s, PAR involves collaboration between researchers and participants to devise context-specific solutions using quantitative and qualitative means⁵⁷. PAR is commonly employed in the early design stages through local interviews and surveys⁵⁸. While effective in gathering information, it can be unreliable due to its commonly limited reach and need for diverse participation to gather meaningful results⁵⁹. Though conversation effectively gathers opinions, Tversky's aforementioned research proves actions, not words, communicate perception⁶⁰. Given that many occupants may not have experienced their optimal living environment conducive to their spatial flow, employing observational and perceptual strategies can comprehensively tailor spaces to users.

Learning from user interaction in existing buildings, such as through Post-Occupancy Evaluation (POE), can supply architects with authentic reactions and data. POE occurs during the post-construction period and consists of building performance and efficiency tests that intend to uncover unsuspected issues⁶¹. Thorough POE is less attentive to personal user satisfaction⁶², noting spatial efficiency is valuable considering that "Europeans spend 90% of their time indoors"⁶³. Implementing interactive methods, like POE, proves to be one of the most effective ways to learn and retain information⁶⁴.

The John Dewey theory, popularized as the 'learn-by-doing' approach, centers on experience and involvement with those directly affected by the issue at hand. Dewey elaborates how research "must represent present life" and is only through immersive practice, analysis, and application that this knowledge can occur⁶⁵. Observing the subject's unique spatial interactions reveals glimpses of the user's preferences. When combined with verbal information collection methods, like PAR, it provides a comprehensive behavioral understanding. Unfortunately, PAR or POE is neither required

⁵⁶ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.26.

⁵⁷ Macbeth, Sarah. "Participatory Action Research." Participatory Action Research and Methods. [www.participatorymethods.org/glossary/participatory-action-research#:~:text=Participatory%20Action%20Research%20\(PAR\)%20is,change%20it%20for%20the%20better](http://www.participatorymethods.org/glossary/participatory-action-research#:~:text=Participatory%20Action%20Research%20(PAR)%20is,change%20it%20for%20the%20better).

⁵⁸ Franck, Karen A., and Sommaruga, Howard. "Design through Dialogue: A Guide for Clients and Architects." Amazon, Wiley, 2010, p.26.

⁵⁹ Carleton Faribault School. Participatory Action Research" Carleton Faribault School, 2023, participatoryactionresearch.sites.carleton.edu/about-par/

⁶⁰ Tversky, Barbara (2019). *Mind in Motion: How Action Shapes Thought*. Hachette UK.

⁶¹ Kennett, Earle. "Post Occupancy Evaluations." Whole Building Design Guide, www.wbdg.org/resources/post-occupancy-evaluations. 2021.

⁶² Oseland, Nigel. *A Practical Guide to Post-Occupancy Evaluation and Researching Building User Experience*. Routledge, 2024.

⁶³ EVIA, "Indoor Air Quality." The European Ventilation Industry Association (EVIA), EVIA, 2023.

⁶⁴ Dewey, J. (1938). *Experience and education*. New York: Macmillan.

⁶⁵ Dewey, J. (1897). *School Journal* vol.54 (1897), p.77-80 <http://dewey.pragmatism.org/creed.htm>

nor common in the field and is an extra service⁶⁶ that owners or clients are not enticed to pay unless necessary⁶⁷. Accessible and effective integration of these practices into the design process could enable architects to leverage insights and craft tailored spaces.

Danish architecture firm 3XN values observational practices and incorporates 'behavior checks' into their project timeline⁶⁸. Behavior checks revisit past projects, observe the buildings in use, and propose architectural adjustments if needed⁶⁹. This observational process has resulted in detail-oriented improvements such as integrating wider handrails in a school so kids can safely slide down the railing⁷⁰. Interventions like this exhibit architecture's intrinsic user-centricity and ability to assess general public observations and apply them to the individual conditional scale. This tool is pivotal for understanding the occupants of projects with private and public qualities, such as apartments.

This theoretical and methodological understanding supports the practice of narrative-based observational techniques to comprehend user idiosyncrasies. Through the applied practice of my research, I explore the degree to which it can be applied to architecture, without overgeneralizing or specifying, and the extent this process can be replicable. In the context of this project, focusing on occupants of Spanish flats, I analyze spatial appropriations on balconies given their significant role in Spanish culture and urban landscapes. The following chapter explores the historical and contemporary usage of balconies to establish a foundational understanding, which will later inform analytical support during site analysis.

⁶⁶ AIA, American Institute of Architects. "AIA 2030 Commitment by the Numbers: Post-Occupancy Evaluation." The American Institute of Architects, 2023.

⁶⁷ Booth, Michael. "How Architecture Shapes Behavior", Lets Talk Architecture, Danish Architecture Center, Aug 2020 open.spotify.com/episode/7vlzAm8Q6lg99SLHOM6COW?si=8Odsn3k4QLW9k0jQYpm0xw.

⁶⁸ Booth, Michael. "How Architecture Shapes Behavior", Lets Talk Architecture, Danish Architecture Center, Aug 2020.

⁶⁹ Booth, Michael. "How Architecture Shapes Behavior", Lets Talk Architecture, Danish Architecture Center, Aug 2020.

⁷⁰ Booth, Michael. "How Architecture Shapes Behavior", Lets Talk Architecture, Danish Architecture Center, Aug 2020.

Applied Research

Balconies as a Frame of Reference

The balcony can be defined as:

“An external platform at an upper floor level with a balustrade to the open sides projecting from or recessed from an external wall and included in this definition generally accessible rooftop terraces and galleries and loggia.”⁷¹



Figure 19 Manet, Edouard. *The Balcony*. Manet.Org, 1868, Musée d'Orsay, Paris, France.

⁷¹ “Balcony.” *The International Property Measurement Standards (IPMS) of Residential Buildings*, 18 Aug. 2021, www.designingbuildings.co.uk/wiki/Balcony.

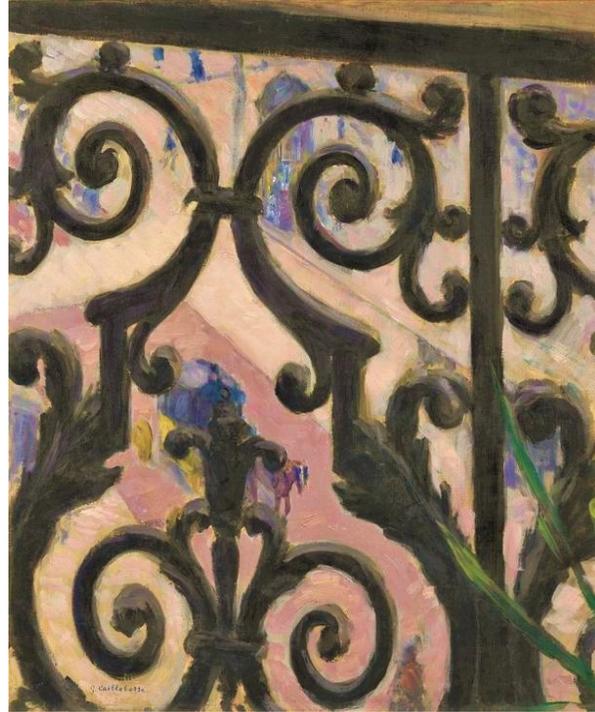


Figure 20 Caillebotte, Gustave. *View Seen Through a Balcony*. 1880, Paris, France. Van Gogh Museum, Amsterdam.

The balcony's program-defying ability results in a flexible space that can shapeshift uses and is evident throughout history. The 19th-century balcony appeared in bourgeois residences and embodied their desire to showcase themselves and their luxurious lifestyle⁷². The balconies, positioned above city streets, were symbols of their social superiority⁷³ (Fig. 19). The political realm harnessed this power to project authority over crowds and spread ideologies intimately and effectively⁷⁴. This political energy can be seen today via posters and flags expressing residents' allegiance⁷⁵. Balconies bridge the gap between private and public realms providing residents with a unique blend of intimacy and connection to the bustling street life below⁷⁶(Fig. 20). Creating a sense of participation without fully immersing in the public domain. Besides social and cultural significance, balconies demonstrate practicality through their natural cooling capabilities,

⁷² Arte. TV. "Living Outside - the Balcony, Arte.TV Documentary." YouTube, 10 Feb. 2024, www.youtube.com/watch?v=riEYON1Lqhl&ab_channel=ARTE.tvDocumentary.

⁷³ Arte. TV. "Living Outside - the Balcony, Arte.TV Documentary." YouTube, 10 Feb. 2024.

⁷⁴ Arte. TV. "Living Outside - the Balcony, Arte.TV Documentary." YouTube, 10 Feb. 2024.

⁷⁵ Origoni, Matteo, and Carlotta Origoni. "A Brief History of the Balcony: From Ancient Persia to the Covid-19 Pandemic." *Domus, Italy, Domus*, 3 Apr. 2020.

⁷⁶ Daybell, James, and Sam Willis. *Balconies!, Histories of the Unexpected*, Apr. 2020, <https://open.spotify.com/episode/7vnpD3aT2XqFU2OiQycDOD?si=0h7-5udxT7y1y2aA-55rig&nd=1>.

provision of light, and improved indoor air quality⁷⁷; which are especially beneficial for regions with Mediterranean-like climates, such as Spain⁷⁸.

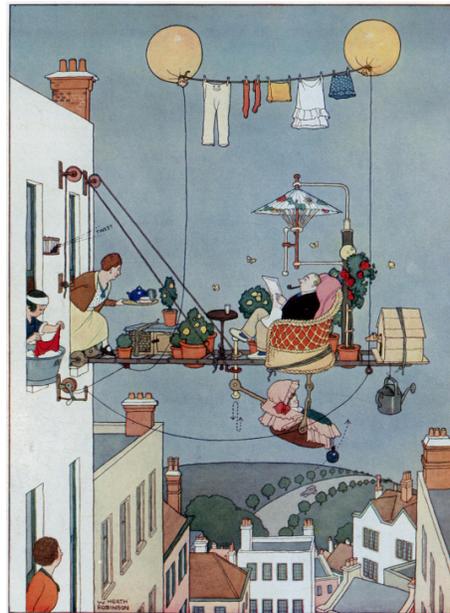


Figure 21 Robinson, W. Heath. *How to Live in a Flat*. Hutchinson & Co., Ltd, 1937.

Above all, its shapeshifting character permits users to apply various functions to satisfy their evolving needs and lifestyles. The cartoon (Fig. 21) playfully encompasses its adjustable nature and blurs the line determining indoor and outdoor functions. Madrileños especially embrace an indoor-outdoor lifestyle⁷⁹ often extending typical interior features and qualities to the outdoors, whether it be in private or shared spaces. The pandemic's 'stay-at-home' order sparked a re-discovery of the balcony as it challenged occupants' creativity and capabilities, proving that restrictions can't hinder personal or social agendas⁸⁰. Quarantine has been anything but limiting to what this space could be and even reverted habitants to previous outdated uses - like communicating with neighbors⁸¹. As society and people's needs evolve, balconies will adapt to meet these emerging demands. Considering its programmatic evolution, balconies are *the* lens for perspectivizing Madrileño's relationship to the built environment, community, and lifestyle.

⁷⁷ Ribeiro, Catarina, et al. "A Review of Balcony Impacts on the Indoor Environmental Quality of Dwellings." *MDPI*, 11 Aug. 2020, www.mdpi.com/2071-1050/12/16/6453.

⁷⁸ Ribeiro, Catarina, et al. "A Review of Balcony Impacts on the Indoor Environmental Quality of Dwellings." *MDPI*, 11 Aug. 2020

⁷⁹ Jones, Jessica. "Why Flats Dominate Spain's Housing Market." *BBC Worklife*, BBC, 28 Feb. 2022, www.bbc.com/worklife/article/20200506-why-do-flats-dominatespains-housing-market.

⁸⁰ Daybell, James, and Sam Willis. *Balconies!, Histories of the Unexpected*, Spotify. Apr. 2020.

⁸¹ Avermaete, Tom. "Viral Balcony: A Celebration of the Balcony in Times of Pandemic." *Viral Balcony – ETH Zurich Repository*, Mar. 2020, repository.avermaete.ethz.ch/research/viral-balcony/.

The Madrid Balcony and Its Effect on Lavapies



Figure 22 Perez, Mary. *Typical Madrid Building Facade*. Lavapies, Madrid. 2023.

Madrid features two main variations of the balcony: private and public. The typical private balcony is no deeper than 1.5m and no wider than 2.5m⁸² due to city limitations placed on balcony protrusions⁸³ (Fig. 22). Its size, however, does permit doors to be fully extended for optimal airflow. Some balconies feature miradores, or enclosed balconies, that expand interior living spaces and moderate thermal comfort⁸⁴. Private balconies are consistently used despite their limited size, yet not all have one. In Madrid, “20.3% of apartments are interior facing”⁸⁵ indicating their view is the inner city block or the adjacent building; often leading those without balconies to occupy shared outdoor spaces, like galleries.

Gallery spaces are the protrusions that do not span the entire building footprint and are open to the levels below⁸⁶. These shared balconies are used for more than just circulation, especially within the Corrala⁸⁷. The Corrala is a Spanish building typology, containing corridors and a central courtyard, and was affordable housing for the influx of migrant

⁸² Smektala, Marta. *Observed Balcony Dimensions*. *Research Gate*, 2022, www.researchgate.net/figure/Observed-balcony-dimensions-and-shape-schedule_fig1_359421588.

⁸³ Abaco Advisors. “Extensions: Closing in a Balcony or Terrace in Spain”. *Spain Explained*, 2019.

⁸⁴ O’Sullivan, Feargus. “The Best Kind of Balcony for Outdoor Living Depends on the Climate.” *Bloomberg*, Bloomberg, 29 Oct. 2023.

⁸⁵ Letón, Sandra López. “Coronavirus Crisis Reveals Poor State of Spanish Apartments.” *EL PAÍS English*, 7 May 2020, english.elpais.com/economy_and_business/2020-05-07/coronaviruscrisis-reveals-poor-state-of-apartments-in-spain.html.

⁸⁶ “Gallery Definition.” *Designing Buildings, the Construction Wikipedia*, 5 Nov. 2020. www.designingbuildings.co.uk/wiki/Gallery_definition.

⁸⁷ Lopez, Cano. “El Corralon: La Corrala de La Calle Carlos Arniches N.3y5”. *Madrid Historico*, 2000.

workers and their families coming to Madrid in the 1600's⁸⁸. Many corralas are still occupied today and the majority, around 500⁸⁹, are located in the Lavapiés area.

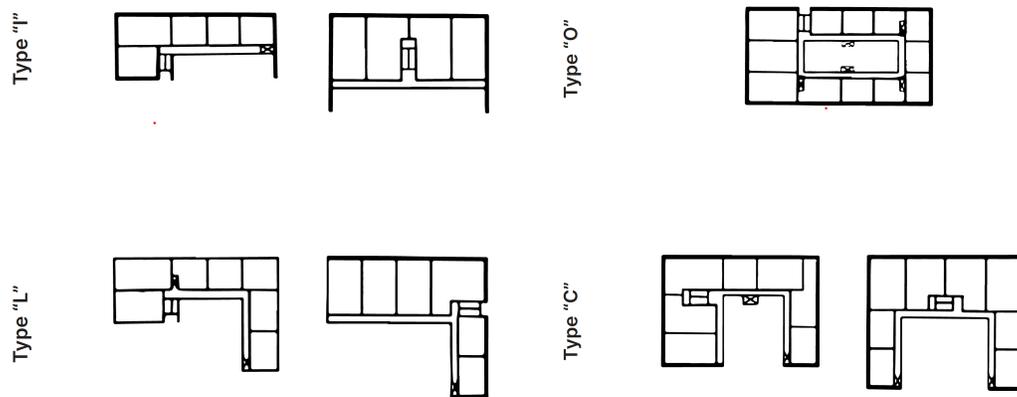


Figure 23 Lopez, Cano. *Four Corrala Types. El Corralon: La Corrala de La Calle Carlos Arniches N 3 y 5*. Madrid Historico, 2000.

Corralas have always harvested a feeling of community, largely due to the shared gallery space⁹⁰. The first Corralas had a communal bathroom at the end of each floor's corridor, leading residents to share responsibilities and collaborate⁹¹ (Fig. 23). Rather than street views, galleries provided residents with views of the inner courtyard and the main entrance, creating a sense of security and familiarity⁹². The central courtyards and galleries were populated with residents' items for hobbies and socialization; in other words, fulfilling residents' needs of belonging and self-fulfillment⁹³.

⁸⁸ Madrid No-Frills. "Explore Madrid's Charming Workers' Housing." MNF, 22 Sept. 2021, madridnofrills.com/corralas-madrids-charming-working-class-housing/.

⁸⁹ Madrid No-Frills. "Explore Madrid's Charming Workers' Housing." MNF, 22 Sept. 2021,

⁹⁰ Lopez, Cano. "El Corralon: La Corrala de La Calle Carlos Arniches N.3y5". *Madrid Historico*, 2000.

⁹¹ Maria Jesus. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

⁹² Maria Jesus. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

⁹³ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 24 Victoria, Martinez. *Casa del Chapiz, Beginning of the 20th century. El Independiente de Granada.*

Considering typical corrala apartments averaged 30m² ⁹⁴, it's no surprise that residents projected onto the communal spaces. Figure 24 depicts residents utilizing shared spaces by creatively using the existing structure for impromptu rope suspensions, often requiring resident collaboration to implement. This collaborative environment fosters strong interpersonal bonds within the building.

Spain continues to exhibit strong apartment communities despite present-day impediments like urban densification⁹⁵. The Lavapiés neighborhood is abundant with spatial adjustments and makeshift additions, making it an ideal learning ground for its resourceful residents. Architectural features like balconies and galleries supply a medium for users to balance their personal needs and external elements, fulfilling what I have concluded to be seven common needs for space appropriation.

During my site visit, I captured approximately 350 balcony appropriations and selected 62 for detailed examination in the *Catalogue of Balcony Appropriations* (Appendix C). This research, combined with interviews and site observations, forms a comprehensive framework for analysis and drawing substantiated conclusions. Each photograph was categorized and assessed for its condition, user approach, and intent, uncovering trends that reveal the origins, motivations, and strategies. This investigation identified seven primary motives driving the residents of Madrid, especially in Lavapiés, to appropriate

⁹⁴ Madrid No-Frills. "Explore Madrid's Charming Workers' Housing." MNF, 22 Sept. 2021,

⁹⁵ Jones, Jessica. "Why Flats Dominate Spain's Housing Market." BBC Worklife, BBC, 28 Feb. 2022, www.bbc.com/worklife/article/20200506-why-do-flats-dominatespains-housing-market.

their spaces: spatial constraints, productivity, leisure, climate, privacy, security, and community engagement.

Lavapiés has a history of spatial appropriation and its evolution in appropriation directly correlates with the changes in its public and private spheres (Fig. 24). The aforementioned psychological studies confirm that such appropriations are shaped by cultural and environmental factors, underscoring the importance of understanding the local cultural and social dynamics⁹⁶ to comprehend the underlying motives. Lavapiés, a densely populated and culturally diverse area, boasts a dynamic community life. Figure 25 presents a collaged diagram of the city's defining elements and addresses its pressing challenges. The neighborhood grapples with the impacts of tourism, rising rents, gentrification, increased crime rates, and evictions⁹⁷. However, it also showcases the community's resilience and participation through local organizations and home-based businesses⁹⁸. The collage illustrates the residents' active involvement in shaping their environment, notably through guerrilla gardens that transform vacant lots into communal spaces⁹⁹. The community's eagerness to contribute and find new areas for expression is evident. This context forms the foundational understanding delving into the *Seven Spatial Qualities*.

⁹⁶ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.18

⁹⁷ Movimiento Contra la Intolerancia. "Lavapiés, Un Barrio Ejemplo de Convivencia En Madrid." *youtube*, www.youtube.com/watch?v=Aqe92AzqOVE&ab_channel=MovimientoContraLaIntolerancia.

⁹⁸ Telemadrid. "Reporteros 360: El Nuevo Lavapiés." YouTube, Reporteros 360, 17 May 2017, www.youtube.com/watch?v=ieilCEyMmyY&ab_channel=Telemadrid.

⁹⁹ Madrid No-Frills. "The Fight to Reclaim Madrid's Abandoned Plots, One Plant at a Time." *MNF*, 14 Feb. 2024, madridnofrills.com/madrids-abandoned-plots/.



Figure 25 Perez, Mary. *Lavapies Neighborhood Site Analysis: Collage and Demographic.* 2024.

Site Visit: Seven Spatial Qualities

1 Space Limitations

Spatial limitation is defined when residents utilize balcony spaces as extensions of their indoor storage (Fig. 26). Users also use gallery spaces (Fig. 27) and interact with the building facade, adding hooks or other attachment means. Many residents leave their items in the communal gallery spaces, forming trust between residents. Common examples of items include dressers, bed frames, bikes, cabinets, bookshelves, and ladders. Our societal demand for material goods has drastically increased considering that "a century ago, an ordinary household contained perhaps 200 objects. Today is 20 times that - 10,000"¹⁰⁰. Despite this increase, apartment sizes are decreasing due to a rise in city densification making it harder to store items¹⁰¹. This relates to the aforementioned concept of items possessing sentimental value and holding productive functional use that makes it essential for the owner to easily access¹⁰²; thus making the balcony and gallery an accessible solution satisfying self-fulfillment and security needs¹⁰³.



Figure 26 Perez, Mary. *Appropriation 13: Catalogue of Balcony Appropriations*. 2024.

¹⁰⁰ Herwig, Oliver. *Home Smart Home : How We Want to Live*. Birkhauser, 2022.pg.35

¹⁰¹ United Nations, "Article Viewer: United Nations iLibrary." *UN iLibrary*, 29 Aug. 2019, www.un-ilibrary.org/content/books/9789210043137/read.

¹⁰² Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.18

¹⁰³ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 27 Perez, Mary. *Appropriation 23: Catalogue of Balcony Appropriations*. 2024.

2 Productivity

Productivity is defined when balcony spaces are used to accomplish daily tasks - most notably laundry. Drying laundry is one of the most recognizable features in Lavapies and methods vary from line, suspended drying racks, carousels, and more. Whether it's store-bought or impromptu makeshift solutions, all utilize existing architectural or structural features. Figures 28 and 29 capture optimized spatial conditions to accomplish user productivity goals. In my interview with Dani, a Lavapies apartment resident, he mentioned how it's common for residents to share tools and that he shares a vacuum and mop with his next-door neighbor and it is stored in the hallway¹⁰⁴. Productivity emerges as the predominant need and can be explained by understanding Spanish culture. Spanish Architect Cristina Acha explains that Spain's social scene lives in public spaces separating "homes from more sociable activities, which makes our homes a place of more domestic chores"¹⁰⁵. Accomplishing tasks satisfies our growth needs for personal goals and confidence¹⁰⁶, making the balcony and gallery valuable for esteem and cognitive needs.

¹⁰⁴ Dani. *Interview with Dani: Interview with Lavapies Residents*. Nov. 16, 2023.

¹⁰⁵ Jones, Jessica. "Why Flats Dominate Spain's Housing Market." BBC Worklife, BBC, 28 Feb. 2022, www.bbc.com/worklife/article/20200506-why-do-flats-dominatespains-housing-market.

¹⁰⁶ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

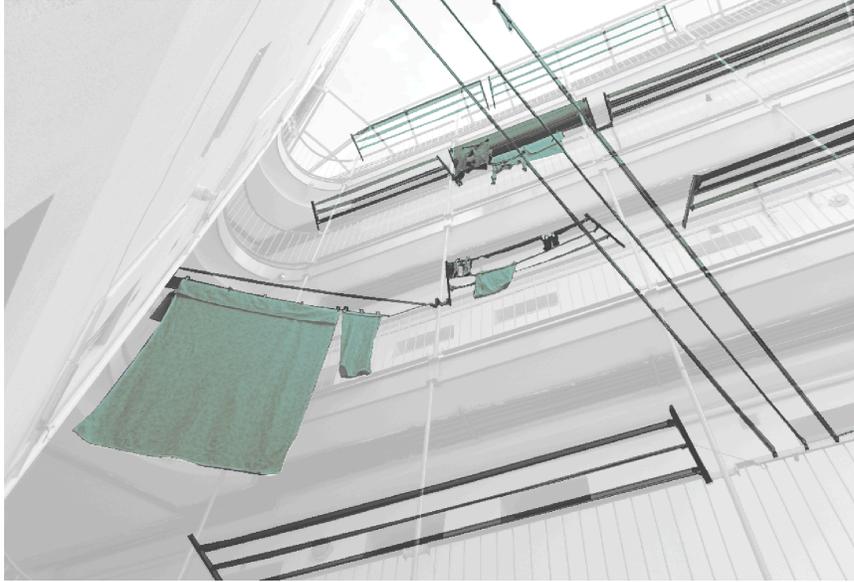


Figure 28 Perez, Mary. *Appropriation 46: Catalogue of Balcony Appropriations*. 2024.

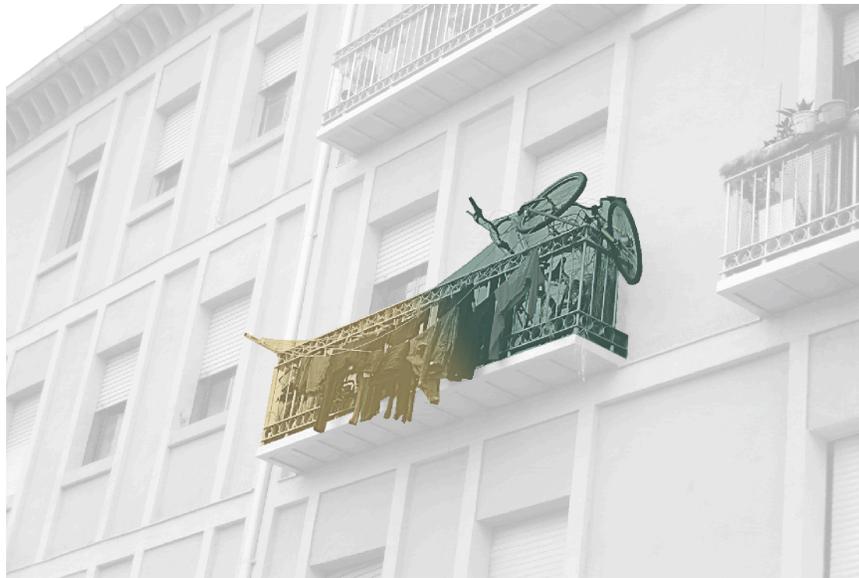


Figure 29 Perez, Mary. *Appropriation 30: Catalogue of Balcony Appropriations*. 2024.

3 Leisure

Though Madridenos prefer to spend time outside in public spaces¹⁰⁷, many enjoy their balcony space for hobbies such as tending plants or exercising. Locals creatively transform their limited spaces into personal escapes. Such as using structural elements to hang a hammock (Fig. 30) or converting air conditioning units into seating (Fig. 31). This relates to the balcony's history of city life escape and provides a relaxing oasis and vessel for self-expression. This makes balcony leisure appropriations an accessible solution that satisfies cognitive and self-actualizing needs¹⁰⁸.



Figure 30 Perez, Mary. *Appropriation 8: Catalogue of Balcony Appropriations*. 2024.

¹⁰⁷ Jones, Jessica. "Why Flats Dominate Spain's Housing Market." BBC Worklife, BBC, 28 Feb. 2022

¹⁰⁸ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 31 Perez, Mary. *Appropriation 59: Catalogue of Balcony Appropriations*. 2024.

4 Climate

Among many things, the balcony's most pivotal function is its climate mitigation efforts aided by Persianas. Persianas, or blinds, are originally made of thin wood slats and shield the sun's rays from overheating the interior all the while permitting a cool breeze¹⁰⁹. Rising temperatures are a pressing issue affecting Spain considering the rise in average temperatures¹¹⁰ making natural cooling more necessary than ever. Since the evolving climate is inevitable, some users responded with makeshift solutions to comfortably use their private or shared outdoor spaces (Fig. 32). Figure 33 captures how people value these private moments in climate refuge and make accessible solutions that satisfy their physiological needs¹¹¹.

¹⁰⁹ O'Sullivan, Feargus. "The Best Kind of Balcony for Outdoor Living Depends on the Climate." Bloomberg, Bloomberg, 29 Oct. 2023.

¹¹⁰ IEA. "Spain Climate Resilience Policy Indicator – Analysis." IEA, 16 Aug. 2021, www.iea.org/articles/spain-climate-resilience-policy-indicator.

¹¹¹ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 32 Perez, Mary. *Appropriation 9: Catalogue of Balcony Appropriations*. 2024.



Figure 33 Perez, Mary. *Appropriation 40: Catalogue of Balcony Appropriations*. 2024.

5 Privacy

Privacy can be defined when users appropriate balcony spaces to prevent outside visibility. Railing screens appear to be the most common solution and have a variety of materials including bamboo, mesh, plastic, and faux plants (Fig. 34). The need to conceal has socially evolved from its historic origin of being a display medium. Interviews with locals showed that blinds are simultaneously used as privacy enforcers. Shira, a Lavapies resident, pointed out that apartments facing inner courtyards mostly keep persianas down to prevent neighbors from looking directly into their homes¹¹². This privacy priority makes it difficult to enjoy the natural sunlight entering their apartments¹¹³. Observations make it clear that Lavapies residents value privacy and their limiting conditions lead users to sometimes compromise or combine needs. Thus making privacy a multi-functional solution that addresses security and self-actualizing needs for self-expression in solitude¹¹⁴.



Figure 34 Perez, Mary. *Appropriation 11: Catalogue of Balcony Appropriations*. 2024.

¹¹² Shira. *Interview with Dani: Interview with Lavapies Residents*. Nov. 16, 2023.

¹¹³ Shira. *Interview with Dani: Interview with Lavapies Residents*. Nov. 16, 2023.

¹¹⁴ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 35 Perez, Mary. *Appropriation 12: Catalogue of Balcony Appropriations*. 2024.

6 Security

Safety is a pressing issue for the neighborhood, considering that 40%¹¹⁵ of Madrid's police force is stationed in Lavapiés; the common crimes being pick-pockets, break-ins, and vandalism¹¹⁶. Safety appropriations appear on balconies in the form of barred windows. According to a local property agency, insurance companies only consider covering the cost of theft if the home features security bars¹¹⁷ - making its installation beneficial for insurance precautions (Fig. 36). My interview with Paul, another resident of La Corrala de Ribera de Curtidores, highlighted that security often overlaps with storage solutions. Figure 37 captures a moment of people utilizing heavy storage organizers to ensure trespassers will not enter their gallery balcony¹¹⁸. Maria-Jesus, a 68-year-old corrala resident in Lavapiés, explained how robberies typically occur in the entrance hallways, or *portals* in Spanish, where residents are cornered and forced to hand over valuables¹¹⁹. The contrast between the feelings of safety, privacy, and community inside and outside the building is striking. Inside, residents trust one another and openly share spaces and belongings. Though modern dwellings fulfill basic physiological needs, safety is inadequately addressed and often appropriated in Lavapiés despite being a base-forming need¹²⁰.

¹¹⁵ Madrid No-Frills. "The Police in Lavapiés Are Not Here to Protect US." *MNF*, 4 Apr. 2024,

¹¹⁶ Madrid No-Frills. "The Police in Lavapiés Are Not Here to Protect US." *MNF*, 4 Apr. 2024,

¹¹⁷ Uno Casa. "Why Do Spanish Properties Have Bars on the Windows Spain Guides." *1Casa*, 19 Jan. 2021, www.1casa.com/view-blog-post/11-spain-guides-why-do-spanish-properties-have-bars-on-the-windows.html

¹¹⁸ Paul. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

¹¹⁹ Maria Jesus. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

¹²⁰ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 36 Perez, Mary. *Appropriation 20: Catalogue of Balcony Appropriations*. 2024.



Figure 37 Perez, Mary. *Appropriation 27: Catalogue of Balcony Appropriations*. 2024.

7 Community

The previous conclusions and analysis feature one common thread: sensitivity to community. Community is cultivated through appropriations in shared spaces like galleries, courtyards, and pathways and utilizes features such as railings and columns to attach community-oriented items (Fig. 38). My interviews with locals brought forth a third space, outside of the gallery and balcony, that unites people: shared private courtyards. Maria-Jesus invited me into her home and showed me how she and her friend, living in the unit below, invented a pulley system to pass items using a bag and rope¹²¹. Figure 39 is the window she uses to lower items into the below garden space that her friend and adjacent resident share (Fig. 40). Maria informed me that neighbors share these spaces and devise ways to divide or coexist within them. These shared private courtyards, however, are situational and a result of property division and wall placement¹²². These observations prove that architecture can be a responsive and conscious space for sub-communities; thus providing an accessible solution satisfying human needs of belonging and aesthetic to unite people through common interests¹²³.



Figure 38 Perez, Mary. *Appropriation 32: Catalogue of Balcony Appropriations*. 2024.

¹²¹ Maria Jesus. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

¹²² Maria Jesus. *Interview I Conducted with Corrala Residents*. Ribera de Curtidores, Nov. 16, 2023.

¹²³ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.



Figure 39 Perez, Mary. *View of Maria's Apartment: Shared Courtyard No.1.* 2024.

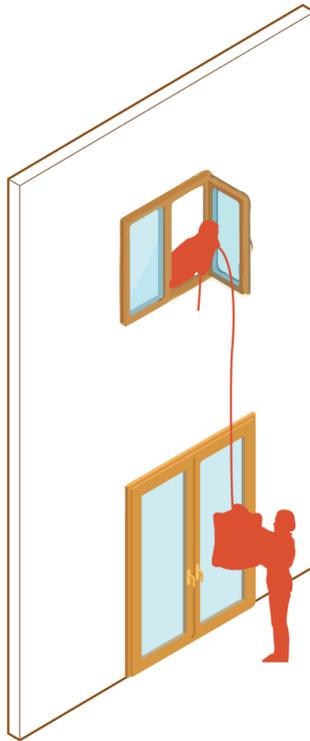


Figure 40 Perez, Mary. *Graphic of Maria and Neighbor's Pulley Appropriation.* 2024.

Four Conclusions from *Seven Spatial Qualities*

Learning from 'the amateurs' in Lavapies provided the *Seven Spatial Qualities*. These are particularly fruitful considering the neighborhood's dense and dynamic appropriative community shaped by high exposure to others' actions. Through this assessment, four overarching conclusions emerge encompassing the reasons for spatial appropriation in Lavapies. The following four conclusions form an analytical framework applicable beyond Lavapies to other cities. Though some observations are Madrid-specific, such as its climate and social context, the uncovered motives represent universal human responses to common trends.

1. Individuals appropriate because existing conditions do not cater to their needs and desires.

Spatial appropriations are direct responses to existing conditions that inadequately fulfill resident's needs¹²⁴. My research, interviews, and balcony observations reveal that the user's spatial reaction is determined by their unique factors such as culture, experience, perspective, and the prevailing issues facing the community. Spatial appropriations have become their instant and affordable coping strategy to make their home tailored to them. Figure 41 lists the seven spatial qualities and applies them to the architectural setting revealing how it satisfies human needs and desires¹²⁵. Spatial appropriations are essential responses and will continue to persist to preserve user-centricity in the built environment.

¹²⁴ Franck, Karen and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed. Wiley, 2000. p.18

¹²⁵ Maslow, A.H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

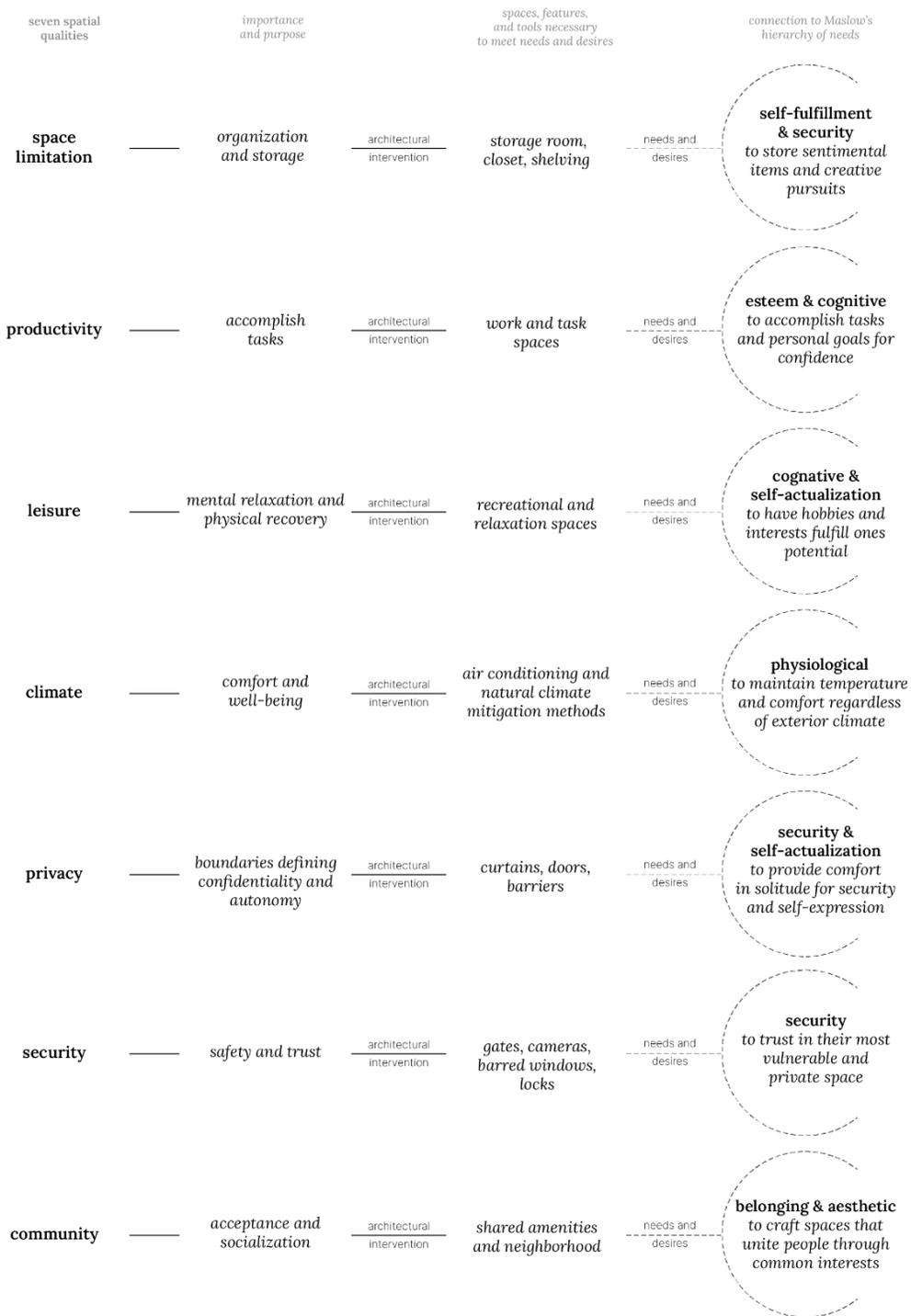


Figure 41 Perez, Mary. *The Seven Spatial Qualities applied to Maslow's Hierarchy of Needs*. 2024.

2. Madrileños use outdoor spaces interchangeably with indoor programs, therefore people need private outdoor access to fulfill intimate needs.

Balconies bridge the home's comfort and privacy with the rambunctious spontaneity of city life. Since Madrilenos seize the Mediterranean climate and prefer socializing in public spaces¹²⁶, the home should reflect and be an accommodating tool for this lifestyle. As evident in the fifth spatial quality, many residents value privacy and appropriate railings to be covered - underscoring the desire for more privatized outdoor access. Although all seven spatial qualities utilize outdoor spaces, apartments rarely provide an entirely private outdoor space. As demonstrated in the analysis of the *Catalogue of Balcony Appropriations*, numerous appropriation needs intersect, merging indoor and outdoor services in both shared and private settings (Fig. 42). Though this indoor-outdoor lifestyle particularly caters to the Spanish culture, the multi-program principle is relevant and applicable to other settings.

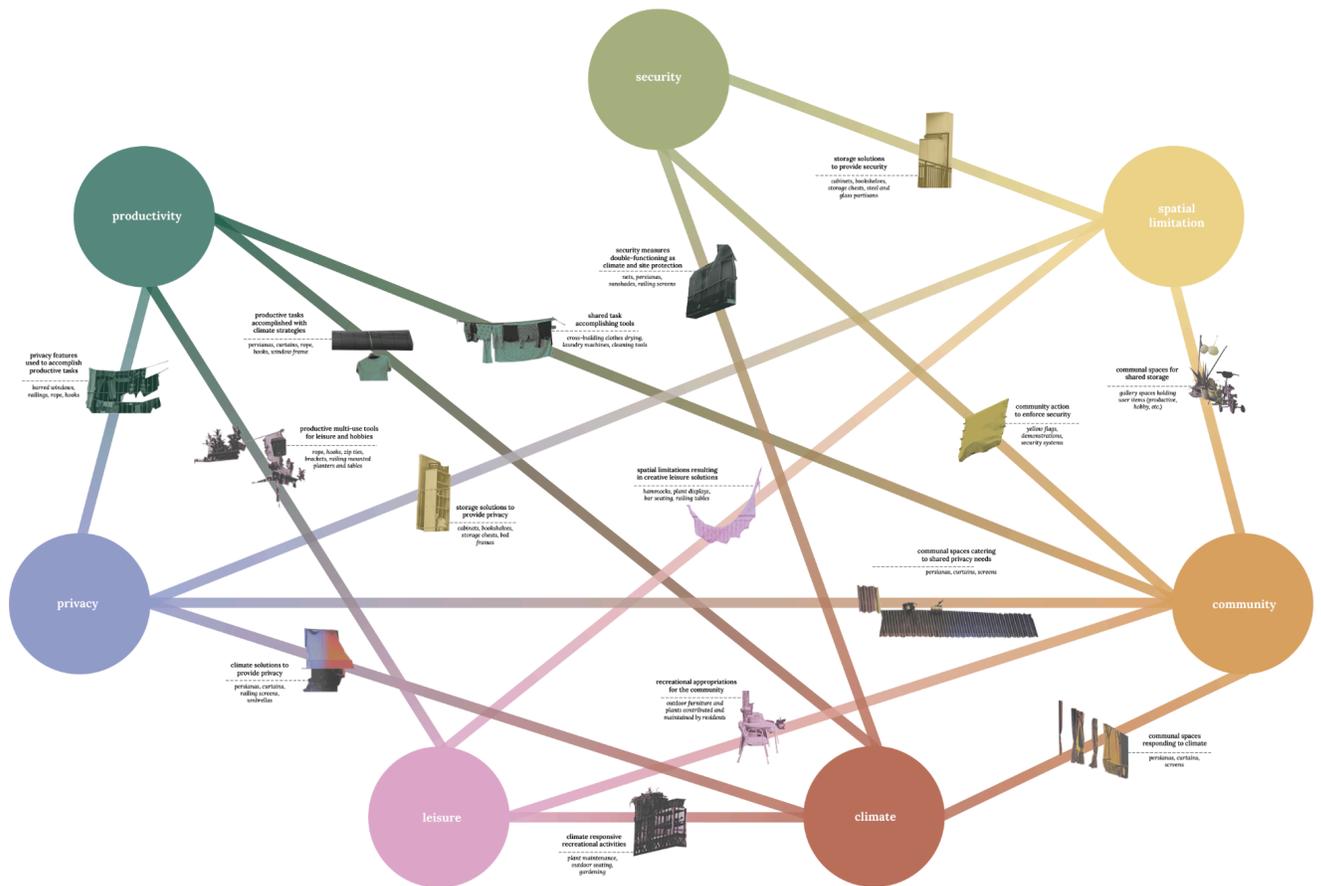
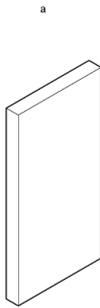
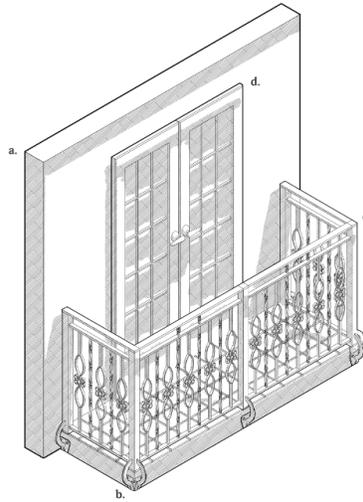


Figure 42 Perez, Mary. *Comparison Diagram of the Seven Spatial Qualities*. 2024.

¹²⁶ Jones, Jessica. "Why Flats Dominate Spain's Housing Market." BBC Worklife, BBC, 28 Feb. 2022, www.bbc.com/worklife/article/20200506-why-do-flats-dominatespains-housing-market.

3. All cases of balcony spatial appropriations involve a modification or adjustment of an architectural feature

The photo analysis has brought forth one prevailing theme: all users interact with or modify an architectural feature. Current apartment designs have limited points of interaction that facilitate building appropriation. Unfortunately, many renter's agreements prohibit further interaction, limiting residents' intervention potential. Figures 43 and 44 note the typical existing conditions in Lavapies residential buildings to understand the framework that determines their appropriative potential. These diagrams highlight the typical residential architectural qualities and features of balconies and gallery spaces that residents commonly interact with. Though balcony railings have the most accessible design, users interpret other architectural and structural moments to execute their creations.

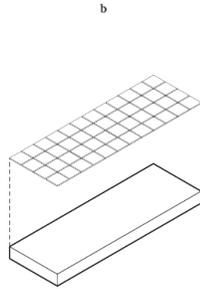


facade

madrid building facades are typically stucco, brick, concrete, wood, ceramic tiles and stone

forms of appropriation

screws, nails, anchors, niches adhesive hooks and other forms of attachment for functional use

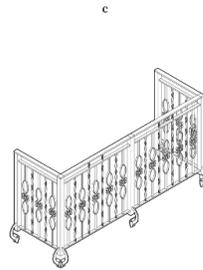


floor

typical madrid balcony protrusions extend no more than 1.5 meters in depth and 2.5 meters in width

forms of appropriation

utilizing floor space for practical purposes or substituting tiles with alternative flooring

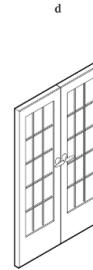


railing

madrid's typical balcony railings feature intricate Spanish detailing and craftsmanship, often crafted from iron.

forms of appropriation

hanging, tying, bolting, and other attachment methods to host imposed function



doors

double doors are commonly installed on balconies, enabling them to fully open up the floor space

forms of appropriation

installing shutters, window film, persianas, and other methods for climate control and privacy

Figure 43 Perez, Mary. *Exploded Isometric Diagram of Typical Lavapiés Residential Balcony Appropriation Architectural Features and Qualities.* 2024.

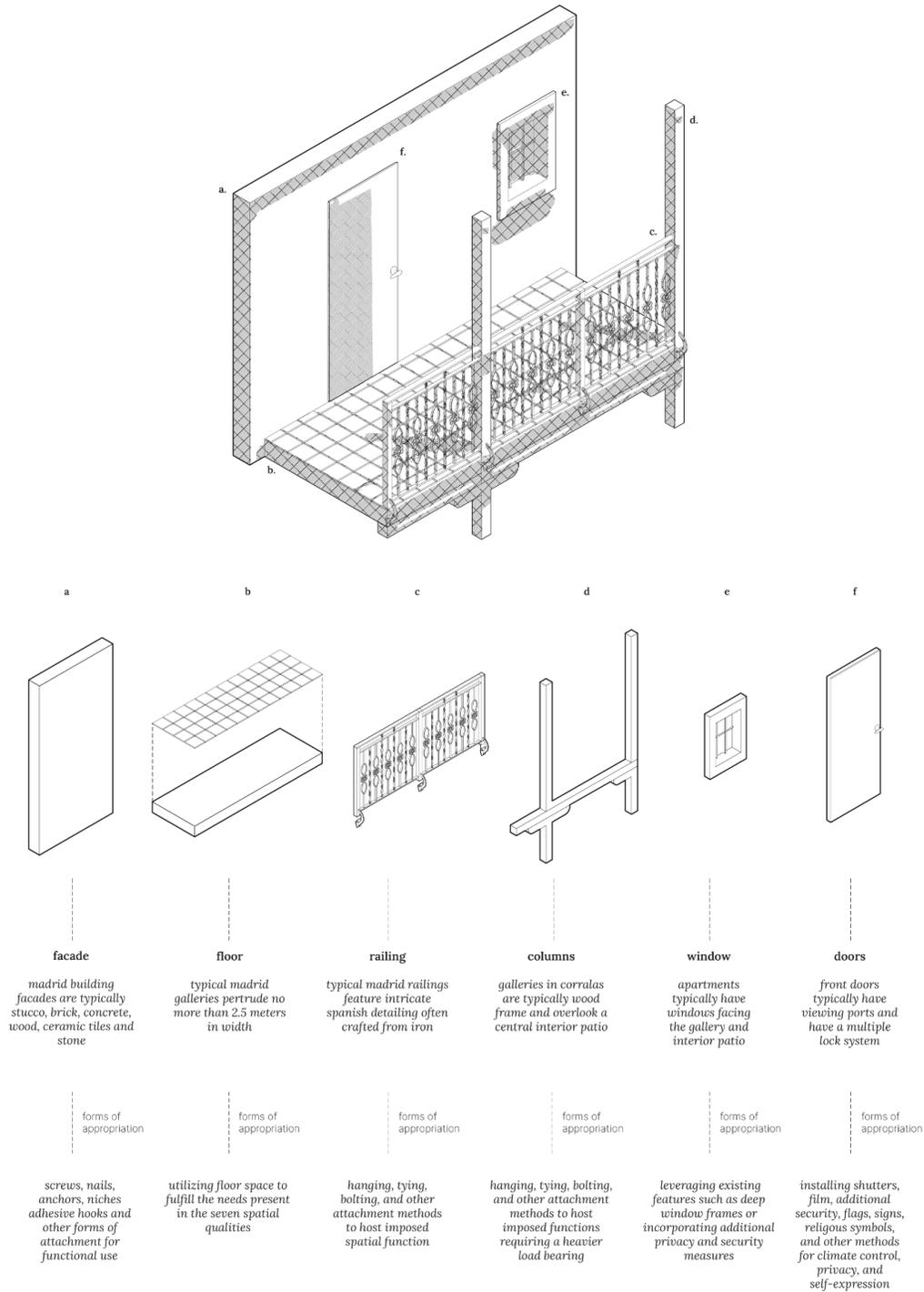


Figure 44 Perez, Mary. *Exploded Isometric Diagram of Typical Lavapiés Residential Gallery Appropriation Architectural Features and Qualities*. 2024.

4. Regarding shared appropriative spaces, like galleries and courtyards, the fewer people allowed, the more likely and lively the spatial appropriations will be.

My site visit, interviews, and behavioral research have revealed that individuals tend to be more self-expressive in more private settings. Restricting spatial access fosters trust in the environment, enabling them to achieve optimal conditions for self-expression and spatial adjustment freedom. An example demonstrating this is the shared private courtyard in La Corrala Ribera de Curtidores (Fig. 45) where residents crafted intimate spaces with individual appropriations in shared environments. Despite initially being a result of ownership changes and considered a leftover space, it has evolved into a vibrant and cherished area where two households share and coexist. This 'third space', besides the balcony and gallery, reveals un verbalized sentiments regarding the degree of self-expression in shared spaces and can inform designers how to craft spaces that embrace and optimize appropriation.



Figure 45 Perez, Mary. *View of Maria's Apartment: Shared Courtyard No.2.* 2024.

Epilogue

Reflection and Architectural Position

The research process and results on balcony appropriations have shifted my perception of how people navigate space. Throughout my architecture career, I've been fascinated by interactive and multi-functional designs with special attention to the role of details. My most memorable spatial experiences occur in the intimate moments of projects permitting exploration and interaction. Spatial appropriations are a testament to what it means to be a human inhabiting architecture - the purest form of creative self-expression within the built environment. Spatial appropriations, particularly in housing, reflect our innate needs to personalize and are a glimpse of our ideal living conditions.

The psychology-based theoretical framework underscores the significance of incorporating the psyche's spatial perception to perspectivize the future user. Recognizing that verbal expression alone may not adequately represent individual needs, the design process should prioritize observational methods. Reflecting on the architect and user disconnect insights how I can incorporate this research and methodology into my practice. This framework reveals that designers can only anticipate so much of people's needs and desires. Hence, it's not the architect's role to dictate these features, rather, it's up to the users to apply programmatic functions to the space. The architect's challenge is to balance designed and undesigned spaces that account for individual behavior and social customs that can be applied to specific and general contexts.

This research also reveals that behavioral observations in semi-private public spaces, like balconies and galleries, serve as experimental learning grounds that influence others to adopt similar solutions or refine implementations. People have demonstrated their ability to adjust their surroundings to create comfortable and self-expressive spaces, but does architecture facilitate this process? Exploring architecture as a lifestyle tool that enhances living quality emphasizes the building's role as a living, ever-changing tool for its users that evolves purpose through generational application. This appropriative domino effect establishes the foundation for future generations to develop and discover new needs and desires by maximizing their living spaces. Fostering spaces that optimize personalization can streamline the programmatic evolution process for future generations.

People will continue to appropriate so architecture should adapt and evolve alongside its residents. Given the substantial impact of memory and experience on an architect's design decisions, I stress the significance of incorporating a narrative-driven design approach to design at the human scale. Observing behavior, particularly informal actions like spatial appropriations, is an often overlooked tool for generating authentic, accessible, and effective solutions. Moreover, conversations with locals can reveal hidden stories behind certain interventions that may not have been apparent otherwise.

Therefore, as a future architect, I strive to gather as many stories, observe behavior as much as possible, and draw from sources beyond architecture to enrich my internal library of *perspectives*.

Bibliography

Cited Sources

Abaco Advisors. "Extensions: Closing in a Balcony or Terrace in Spain". *Spain Explained*, 2019.

Alkemade, Floris. *Rewriting Architecture: 10 1 Actions: Tabula Scripta / Floris Alkemade [and Three Others] (eds.); with Contributions by Floris Alkemade [and Twenty-seven Others]*. 2020. Print.

AIA, American Institute of Architects. "AIA 2030 Commitment by the Numbers: Post-Occupancy Evaluation." The American Institute of Architects, 2023, www.aia.org/showcases/6526947-aia-2030-commitment-by-the-numbers-post-oc.

Arte. TV. "Living Outside - the Balcony, Arte.TV Documentary." YouTube, 10 Feb. 2024, youtube.com/watch?v=riEYON1Lqhl&ab_channel=ARTE.tvDocumentary.

"Balcony." *The International Property Measurement Standards (IPMS) of Residential Buildings*, 18 Aug. 2021, www.designingbuildings.co.uk/wiki/Balcony.

Booth, Michael. *How Architecture Shapes Behavior*, Let's Talk Architecture, Danish Architecture Center (DAC), Aug. 2020.

Carleton Faribault School. *Participatory Action Research* Carleton Faribault School, 2023, participatoryactionresearch.sites.carleton.edu/about-par/.

Daybell, James, and Sam Willis. *Balconies!, Histories of the Unexpected*, Apr. 2020, <https://open.spotify.com/episode/7vnpD3aT2XqFU2OiQycDOD?si=0h7-5udxT7y1y2aA-55rig&nd=1>

Dewey, J. (1897). *School Journal* vol.54 (1897), p.77-80 dewey.pragmatism.org/creed.htm

Dewey, J. (1938). *Experience and education*. New York: Macmillan. & Dewey, J. (1897). *School Journal* vol. 54 (January 1897), pp. 77-80 dewey.pragmatism.org/creed.htm

De Witte, Melissa. Stanford University. (2019). *To Understand How People Think, Look To Their Actions, Not Their Words*. Stanford News. <https://news.stanford.edu/2019/08/02/thinking-faster-words/>

EVIA, "Indoor Air Quality." The European Ventilation Industry Association (EVIA), EVIA, 2023.

Franck, Karen A., and Howard, Teresa Von Sommaruga. *Design through Dialogue: A Guide for Clients and Architects*. Chichester, U.K.: Wiley, 2010. Print.

Franck, Karen, and Lepori, Bianca. *Architecture Inside Out*. Academy Edition ed., Wiley, 2000.

"Gallery Definition." *Designing Buildings, the Construction Wikipedia*, 5 Nov. 2020. www.designingbuildings.co.uk/wiki/Gallery_definition.

Gibson, J.J. *The Ecological Approach to Visual Perception* (1979). Boston: Houghton Mifflin.

Gîrbovan, Bogdan. "10/1 by Bogdan Gîrbovan", *Art Ctrl Del*, Mar 2018, www.a-c-d.net/10-1-bogdan-girbovan/.

Goldhagen, Sarah Williams. *Welcome to Your World: How the Built Environment Shapes Our Lives*. Audiobook, 2019.

Grauman, Carl F. "The Concept of Appropriation and Modes of Appropriation of Space," *Appropriation of Space* (1976), <https://iaps.architexturez.net/doc/oai-iaps-id-iaps-00-1976-009>.

Hall, Edward. *The Hidden Dimension*. Garden City, New York: Doubleday, 1966.

Herwig, Oliver. *Home Smart Home: How We Want to Live*. Birkhauser, 2022.

Hertzberger, Herman, et al. *Lessons for Students in Architecture*. Uitgeverij 010, 1991.

Hertzberger, Herman. "Herman Hertzberger: Polyvalence." University of Pretoria, University of Pretoria, 2016, repository.up.ac.za/bitstream/handle/2263/27690/03chapter3.pdf?sequence=4&isAllowed=y.p.154

IEA. "Spain Climate Resilience Policy Indicator – Analysis." *IEA*, 16 Aug. 2021, www.iea.org/articles/spain-climate-resilience-policy-indicator.

Jones, Jessica. "Why Flats Dominate Spain's Housing Market." *BBC Worklife*, BBC, 28 Feb. 2022, www.bbc.com/worklife/article/20200506-why-do-flats-dominatespains-housing-market.

Kennett, Earle. "Post Occupancy Evaluations." *Whole Building Design Guide*, www.wbdg.org/resources/post-occupancy-evaluations. 2021.

Kleon, Austin. *Steal like an Artist: 10 Things Nobody Told You about Being Creative*. Workman Publishing Company, 2022.

Lara-Hernandez, Antonio. "Institute of Mobility and Urban Territorial Development in Yucatan, Urban Resilience Research." *Instituto de Movilidad y Desarrollo Urbano Territorial*, Movilidad of Yucatan, Mexico, 2018, movilidad.yucatan.gob.mx/.

Letón, Sandra López. "Coronavirus Crisis Reveals Poor State of Spanish Apartments." EL PAÍS, 7 May 2020, elpais.com/economy_and_business/2020-05-07/coronaviruscrisis-reveals-poor-state-of-apartments-in-spain.html.

Lieberman, E. James. Nisbett, Richard E. The Geography of Thought: How Asians and Westerners Think Differently ... and Why. *Library Journal* 128.3 (2003): 156. Print.

Lamb, Robert. McCormick, Joe. "The Psychology of Architecture, Part 1", Stuff to Blow your Mind, iHeart Podcast, December 2019.

Lobell, Mimi. *Spatial Archetypes*. Revision, 1983, 6:2.

Lopez, Cano. "El Corralon: La Corrala de La Calle Carlos Arniches N.3y5". *Madrid Historico*, 2000.

Macbeth, Sarah. "Participatory Action Research." *Participatory Action Research and Methods*. [participatorymethods.org/glossary/participatory-action-research#:~:text=Participatory%20Action%20Research%20\(PAR\)%20is,change%20it%20for%20the%20better](https://participatorymethods.org/glossary/participatory-action-research#:~:text=Participatory%20Action%20Research%20(PAR)%20is,change%20it%20for%20the%20better)

Madrid No-Frills. "Explore Madrid's Charming Workers' Housing." MNF, 22 Sept. 2021, madridnofrills.com/corralas-madrids-charming-working-class-housing/.

Madrid No-Frills. "The Fight to Reclaim Madrid's Abandoned Plots, One Plant at a Time." MNF, 14 Feb. 2024, madridnofrills.com/madrids-abandoned-plots/.

Maslow, Abraham H. "A Theory of Human Motivation(1943)". *Psychological Review*, 50, 370-396.

Mcleod, Saul. "Maslow's Hierarchy of Needs." *Simply Psychology*, 21 May. 2018. <https://canadacollege.edu/dreamers/docs/Maslows-Hierarchy-of-Needs.pdf>

Merriam-Webster, Need *Definition & Meaning*. Merriam-Webster, www.merriam-webster.com/dictionary/need

Merriam-Webster, Jury *-Rig Definition & Meaning*. Merriam-Webster, www.merriam-webster.com/dictionary/jury-rig

Movimiento Contra la Intolerancia. "Lavapiés, Un Barrio Ejemplo de Convivencia En Madrid." *youtube*,
www.youtube.com/watch?v=Aqe92AzqOVE&ab_channel=MovimientoContraIntolerancia.

Origoni, Matteo, and Carlotta Origoni. "A Brief History of the Balcony: From Ancient Persia to the Covid-19 Pandemic." *Domus*, Italy, Apr. 2020, domusweb.it/en/architecture/2020/04/03/a-brief-history-of-the-balcony-from-ancient-persia-to-the-covid-19-pandemic.html

O'Sullivan, Feargus. "The Best Kind of Balcony for Outdoor Living Depends on the Climate." *Bloomberg*, Bloomberg, 29 Oct. 2023.

Pressman, Andy. *Curing The Fountain Headache: How Architects And Their Clients Communicate*. 2nd ed., Sterling Publishing Co., 2006.

Rapoport, Amos. *The Meaning of the Built Environment: A Nonverbal Communication Approach*. United Kingdom, University of Arizona Press, 1990.

Telemadrid. "Reporteros 360: El Nuevo Lavapiés." *YouTube*, Reporteros 360, 17 May 2017, www.youtube.com/watch?v=ieilCEyMmyY&ab_channel=Telemadrid.

Ribeiro, Catarina, et al. "A Review of Balcony Impacts on the Indoor Environmental Quality of Dwellings." *MDPI*, 11 Aug. 2020, www.mdpi.com/2071-1050/12/16/6453.

Schatz, Amy. "TTP by Hayahisa Tomiyasu." *Musée Magazine*, 3 Dec. 2018, museemagazine.com/culture/2018/11/7/reviewl-ttp-by-hayahisa-tomiyasu.

Tversky, Barbara (2019). *Mind in Motion: How Action Shapes Thought*. Hachette UK.

United Nations, "Article Viewer: United Nations Library." *UN iLibrary*, 29 Aug. 2019, www.un-ilibrary.org/content/books/9789210043137/read.

Uno Casa. "Why Do Spanish Properties Have Bars on the Windows Spain Guides." *1Casa*, 19 Jan. 2021, www.1casa.com/view-blog-post/11-spain-guides-why-do-spanish-properties-have-bars-on-the-windows.html

Vygotsky, L.S., et al. *Mind in Society: The Development of Higher Psychological Processes*. United Kingdom, Harvard University Press, 1978.

Wells, A.J. "Gibson's Affordances and Turing's Theory of Computation." *The London School of Economics and Political Science*, 2002.

Whyte, William Hollingsworth. *The Social Life of Small Urban Spaces*. Project for Public Spaces, 2018.

Supporting Sources

Banham, R., P. Barker, P. Hall, and C. Price. "Non-Plan: An Experiment in Freedom." *New Society* 13 (1969): 338. Web.

Berger, John. *Ways of Seeing*. British Broadcasting Corporation and Penguin Books, 2008. https://monoskop.org/images/9/9e/Berger_John_Ways_of_Seeing.pdf

Fallan K. (2008). *Architecture in Action-Traveling with Actor-Network Theory in the Land of Architectural Research*

Floet, Willemijn Wilms. *Urban Oases: Dutch Hofjes As Hidden Architectural Gems*. 2022.

Hill, Jonathan. *Occupying Architecture: Between the Architect and the User*. Routledge, 1998.

Latour B. (2005) *Reassembling the Social- An Introduction to Actor-Network-theory*

Miguel, Ciro. *Everyday Matters: Contemporary Approaches to Architecture*. RubyPress, 2022.

Moura, Carlos Machado E, and Bernal Miliàn, Dalia. *Repository: 49 Methods and Assignments for Writing Urban Places / Edited by Carlos Machado E Moura, Dalia Miliàn Bernal [and Three Others]*. 2023. Print. *Writing Urban Places*.

Producciones, Zampan, "Trailer Amparo 54." *Vimeo*, 31 Jan. 2024, vimeo.com/279641376.

Puigjaner, Anna. *Kitchenless City*. Harvard University Graduate School of Design, 2011.

Rubin, Arthur I., et al. *Post-Occupancy Evaluation: A Case Study of the Evaluation Process*. General Service Administration, Washington D.C., 1979. www.govinfo.gov/content/pkg/GOVPUB-C13-576ab08beb21ecf931f40070a27f83ef/pdf/GOVPUB-C13-576ab08beb21ecf931f40070a27f83ef.pdf

Rudofsky, Bernard, and Museum of Modern Art. *Architecture without Architects / by Bernard Rudofsky*. Tokyo: Kajima Institute, 1984. Print.

Terri Peters, and Sepideh Masoudinejad. "Balconies As Adaptable Spaces in Apartment Housing." Vol. 3, no. 1, 2022. INSERT-MISSING-DATABASE-NAME, INSERT-MISSING-SERVICE-NAME, <https://doi.org/10.5334/bc.191>.

Uher, Jana. "Introspection Put Back on Its Feet: New Research Reveals Conceptual Leap." *LSE Psychological & Behavioural Science*, 2019.

Appendix

Appendix A

Research Questions

1. How do an individual's spatial adjustments, interventions, and affordances on their balconies reveal more embedded issues within the apartment design or issues undress in the affected community?
2. What changes can architects implement into their design process to bridge the gap between users and clients?
3. How will the proposal of architecture that responds to user interactions improve the lives of individuals on a personal and communal level?
4. How would implementing a more integrated indoor /outdoor building encourage people to further appropriate their design process to bridge the gap between users and clients?
5. To what extent should designers allow the space to be designed?
6. What aspects of typical Madrid Apartment design and architecture are inhibiting users from fixing other things or arising needs?

Appendix B

Map of the Lavapies Neighborhood with Highlighted Interview Locations

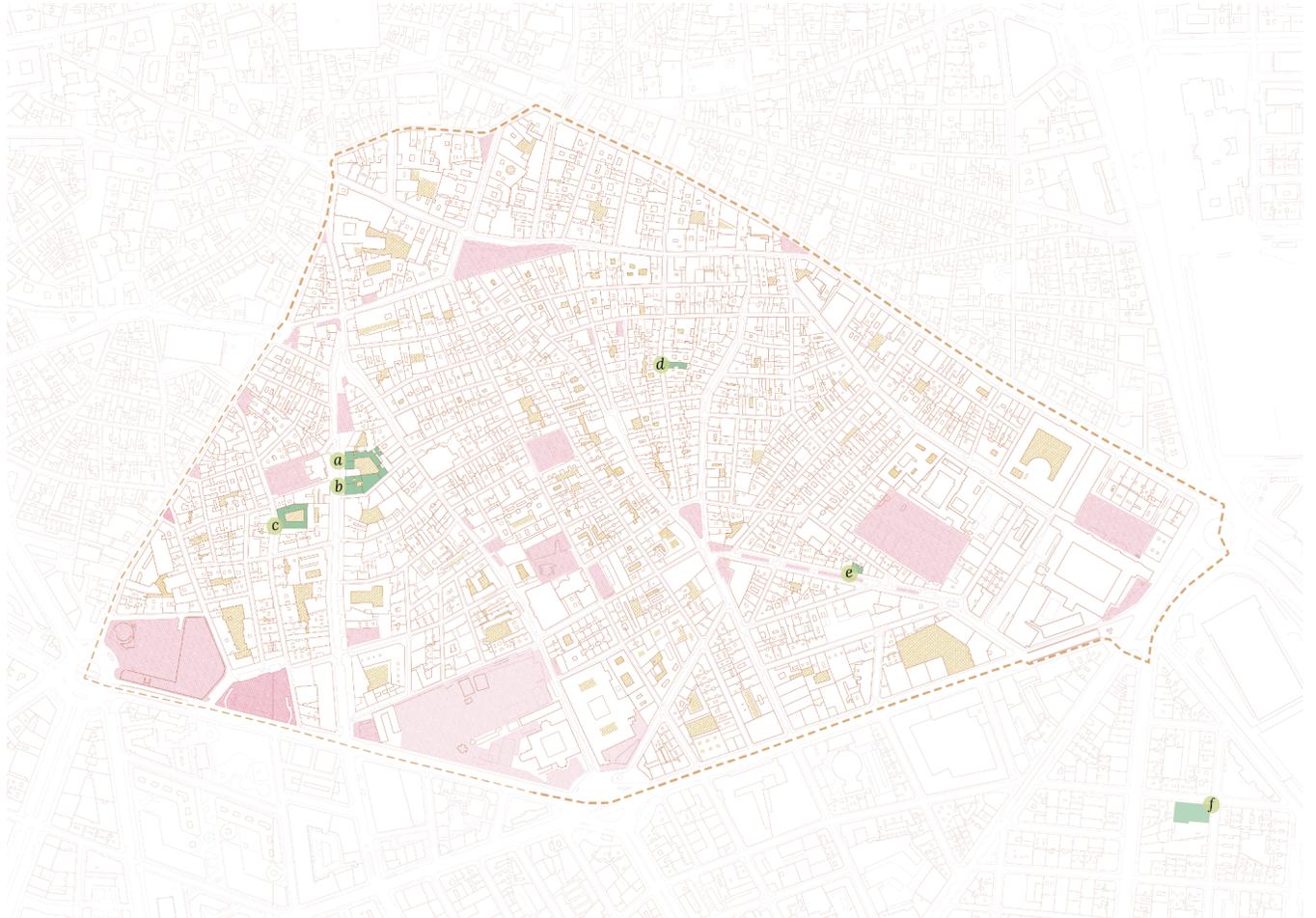


Figure 46 Perez, Mary. *Map of the Lavapies Neighborhood Interview Locations*. 2024.

- a - Maria Jose (Lavapies local who has lived in an apartment in the Ribera de Curtidores Corralas for the past 60 years)
- b - Paul (Lavapies local and has lived in the same Corrala as Maria for 4 years)
- c - Ana (Museum Curator at the Arts and Popular Traditions Corrala)
- d - Shira (American expat living in a Lavapies flat for the past 5 years)
- e - Dani (tattoo artist who tattoos from his flat's living room in Lavapies)
- f - Pablo (Lives in the Entrepatrios Cooperative, located south of Lavapies)

Appendix C

The Catalogue of Balcony Appropriations

Please refer to *The Catalogue of Balcony Appropriations* Booklet

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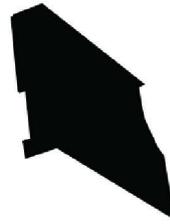
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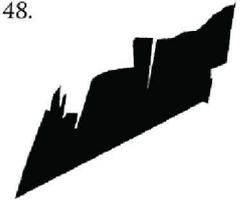
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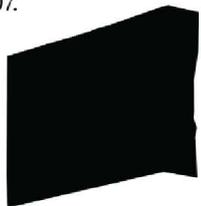
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