

École Polytechnique Fédérale de Lausanne

Spaces of Intergenerational Exchange

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Table of contents.

Introduction	3
Chapter 1. Switzerland	8
1.1. Two-dimensional paradise	8
1.2. Your one and only magnificent pension plan	11
1.3. Maternity as a natural process	12
1.4. Modern family	14
Chapter 2. Case-studies in Switzerland	16
2.1. Rehab, Basel. Architecture of care.	21
2.2. EMS Chocolatiere, Echandens. Modern norm and loneliness.	25
2.3. BG16, Bern. Portrait of new retirement community.	27
2.4. Karthago, Zurich. Providers of care	31
Conclusion.	34

Introduction

The selection of my research topic is deeply rooted in my personal experiences, as my formation as a person was greatly influenced by the connection I had with my grandparents. I believe that intergenerational exchange cannot be overemphasized, and the positive impact and importance of intergenerational ties has been confirmed by a multitude of social studies. Intergenerational interactions can lead to improved health outcomes for older adults, including better overall well-being, reduced isolation, and decreased social exclusion.¹ These interactions also contribute to a renewed sense of worth among the elderly. For young people, engaging with older adults can lead to the development of specific skills, including verbal, cognitive, and practical abilities, improved self-esteem, and greater empathy towards the older generation.² However, contemporary societal trends show that young and old people are more likely to spend time in age-segregated settings. Recognizing this gap, my research initially sought to answer a fundamental question: What kind of functional program could bridge this divide in intergenerational social interaction, and how could this be manifested architecturally?

In my analysis of relevant sources, I identified two primary trends. First, as a rule, social groups are always very clearly separated in the architectural design literature. There are either a variety of housing options where the mix of age groups is quite random³, or there are specialized facilities like care centers for the elderly, equipped with medical services, and separate housing for students or kindergartens.⁴ Despite the proximity of these centers in urban planning, the lack of overlapping programs results in minimal interaction among different age groups. The

¹ “The Future of Families to 2030,” Resolve a DOI Name, accessed November 1, 2024, <http://dx.doi.org/10.1787/9789264168367-en>, 189-228.

Robert M. Vanderbeck and Nancy Worth, *Intergenerational Space* (London: Routledge, 2015), 17-30.

² Fey Cole, essay, in *Intergenerational Practice in Schools and Settings: An Educator’s Handbook* (London: Routledge, 2023), 4-13.

³ “Generationenwohnen,” Direkt auf die Startseite springen, accessed January 14, 2024, <https://wohnforum.arch.ethz.ch/publikationen/forschungsberichte/2021/generationenwohnen.html>, 10-17.

⁴ Dominique Hauderowicz and Kristian Ly Serena, *Age-Inclusive Public Space* (Berlin: Hatje Cantz, 2020), 138-143.

popularity of retirement villages raises questions about the integration or separation of the elderly from the broader community. While these villages offer efficient formal service provision, they may reduce opportunities for elderly residents to form intergenerational connections and share social life with younger generations. This situation highlights potential social, economic, and political divisions between different age groups, underscoring the need for community designs that promote intergenerational interaction and avoid segregating elderly individuals from the rest of society. Concurrently, a significant portion of literature advocates for adapting existing residential and public spaces to accommodate older individuals or those with illnesses⁵, in line with the concept of age-friendly cities, but topic of intergenerational connections is never addressed. The bottom line is that although the topic seems to remain raised, the result always leads to prioritizing the creation of comfortable conditions for a specific isolated group, but does not directly address the contact between people of different ages. Secondly, when examining specialized literature on intergenerational relations within social studies⁶, the proposed solutions primarily address issues like the employment of the elderly, children education, and adapting educational programs to include diverse population groups. However, these solutions are seldom reflected in architectural design.

In my research, I have decided to focus specifically on Switzerland. This choice is driven by several factors: Switzerland's status as a developed country, its unique multilingual and multicultural character, and its relatively small size, which allows for a more concise and precise analysis. Additionally, Switzerland presents a peculiar demographic situation in a context of economic prosperity.⁷ A key feature is that the country has high longevity rates and yet low fertility rates. I delve into the specifics of this situation and its underlying causes in the first chapter of my research. These demographic trends have significant economic implications for the country, as the proportion of working and tax-paying individuals within the retired population

⁵ 1. Albert Bush-Brown and Dianne Davis, *Hospitable Design for Healthcare and Senior Communities* (New York: Van Nostrand Reinhold, 1992).

⁶ Fey Cole, essay, in *Intergenerational Practice in Schools and Settings: An Educator's Handbook* (London: Routledge, 2023). Robert M. Vanderbeck and Nancy Worth, *Intergenerational Space* (London: Routledge, 2015).

⁷ "Swiss Economy – Facts and Figures," Eidgenössisches Departement für auswärtige Angelegenheiten EDA, accessed January 8, 2024, <https://www.eda.admin.ch/aboutswitzerland/en/home/wirtschaft/uebersicht/wirtschaft---fakten-und-zahlen.html>.

decreases annually. At the same time, part of the reason for the low birth rates is the small number of benefits provided to young families and, on average, the very high expenditures on children.⁸ Given this context, my initial general research question about creating spaces for intergenerational exchange has been adapted to fit the Swiss context. The focus has shifted towards the elderly population, exploring ways they can be more actively integrated into society. The aim is to position the elderly not just as recipients but also as providers of care, reflecting a more reciprocal and inclusive approach to intergenerational engagement in Switzerland.

During the semester, my research led me to visit four distinct facilities, each contributing a unique perspective to my study. All these projects were located in Switzerland, with three situated in the German-speaking region and one in the French-speaking area.

Given my shifted focus towards the elderly, my first question centered on medicine and healthcare, particularly in the context of aging. I recognize that aging is not a disease to be cured, but a life stage that can be enhanced with strategies to maintain health and activity. Therefore, my first case study was the rehabilitation center in Basel, a project designed by Herzog & de Meuron. This facility is dedicated to the rehabilitation of individuals with physical and mental injuries. Its design is meticulously crafted to improve patient well-being, making it an ideal subject for analyzing architectural elements conducive to health improvement. This project is especially significant to me as it offers a range of solutions that could be incorporated into architectural designs catering to users with health concerns, potentially preventing further issues.

The second case study took me to Echandens in the French-speaking part of Switzerland. I chose the project of one of the big Swiss companies providing full 24 hour care for mostly people after 75 years old. It was selected to analyze the current reality of care-architecture in Switzerland. In my opinion, this project is a collective image of the care-facility typology, and in this chapter of

⁸ Alexandra Kohler, "In Switzerland, Having a Child Is Becoming a Luxury," SWI swissinfo.ch, January 22, 2020, https://www.swissinfo.ch/eng/society/parenting-series_in-switzerland--having-a-child-is-becoming-a-luxury/45510222.

my research, I will examine by example the architectural and urban planning solutions that, in my view, are not effective and could be improved.

In selecting my third and fourth case studies, I was guided by the materials collected by ETH Housing Forum 2021.⁹ In their paper they published a selection of housing projects in Switzerland that "explicitly aim to promote and maintain (inter)generational relationships among neighbors in their planning and operation".¹⁰ Both of the projects I selected are cooperatives, a decision I will elaborate on. "A cooperative is a special legal form that is suitable for groups of people or companies that want to pursue mutual economic or social interests, such as the construction or purchase of housing. Its primary aim is to promote the economic interests of its members by way of collective self-help."¹¹ This definition does not dictate a particular architectural form, but it does state that the goal of such a community is not to make a profit, but to maximize the reduction of costs and create mutually beneficial living conditions. At the same time, cooperatives are very popular in Switzerland,¹² and since they are an organizational structure that benefits from unique social programs, they are of particular interest when considering existing non-traditional solutions.

The third case study in my research is the BG-16 cooperative project, primarily inhabited by individuals in their later years, often referred to as the second stage of life. This cooperative, located in Bern, offers a unique opportunity to gain a deeper understanding of the elderly demographic in Switzerland. My analysis challenges the traditional views and norms associated with retirement-age individuals, suggesting that the current generation does not necessarily align with these established perceptions. This discrepancy provides a valuable chance to redefine our understanding of this target group and to reconsider the societal attitudes towards the elderly.

⁹ "Generationenwohnen," Direkt auf die Startseite springen, accessed January 14, 2024, <https://wohnforum.arch.ethz.ch/publikationen/forschungsberichte/2021/generationenwohnen.html>.

¹⁰ Ibid.

¹¹ SME Portal, Cooperative company: The characteristics, accessed January 8, 2024, <https://www.kmu.admin.ch/kmu/en/home/concrete-know-how/setting-up-sme/starting-business/choosing-legal-structure/cooperative-company.html>.

¹² Caroline Dove, *Radical housing designing multi-generational + co-living housing for all* (London: RIBA Publishing, 2020), p. 85-92.

Architecturally, the BG-16 cooperative is particularly intriguing. It occupies a repurposed office building in the heart of Bern's old town. This adaptation is noteworthy because the redesign was specifically tailored by and for its residents to enhance tenant interaction and actively involve them in the community's life.

The fourth case-study is the Kartago cooperative in Zurich, which is the most successful model in terms of interaction between people of different ages. It was chosen as an existing example of a project where people of retirement age fulfill the role of providers of care for younger generations and thereby facilitate the child-rearing process for young families and single parents. Unlike the smaller-scale Bern cooperative, Kartago is considerably larger, with each floor and shared apartment representing a distinct social group. Kartago's residents represent a wide array of life stages, origins, genders, sexualities, and marital statuses. Despite this diversity, there is a strong sense of community involvement and interaction across all ages and groups within the cooperative, and they collectively manage to organize their living spaces to accommodate the comfort and needs of everyone. The architecture of the project in this case is an interesting example of its thoughtful division into public and private spaces, exemplifying a design that meets the various living requirements within a single building.

Each case-study raises their own questions. Therefore, this research aims to find out:

Case-Study 1: Rehabilitation Center in Basel:

- How does the design of the rehabilitation center in Basel affect the well-being and recovery of patients with physical and mental injuries?
- What architectural elements and solutions are used to support the health and activity of older people?

Case-Study 2: EMS Care Center at Echandens:

- How does the architecture and design of the EMS care center in Echandens reflect typical approaches to elderly care in Switzerland?
- What alternative approaches could improve the interaction between different age groups in such facilities?

Case-Study 3: Cooperative BG-16 in Bern:

- What architectural and social strategies are employed to promote intergenerational relationships in this project?
- How does the BG-16 project help to understand the changing needs and preferences of older people in Switzerland?

Case-Study 4: Kartago Cooperative in Zurich:

- What is the success of the Kartago Cooperative model in Zurich in terms of interaction between people of different ages?
- How does the architecture and design of Kartago contribute to a comfortable and functional environment for diverse social groups?
- How does the Kartago project reflect the interplay between personal and public spaces to support intergenerational relationships?

Answering these research questions will provide an in-depth analysis of each study site and identify key aspects that influence intergenerational relationships in the context of architectural design.

Chapter 1. Switzerland

1.1. Two-dimensional paradise

Can a country be perfect? In the article “The Happy, Healthy Capitalists of Switzerland,”¹³ Ruchit Charma intoxicatingly describes a Swiss capitalist paradise without war, famine, or inequality, presenting the country as “less socialist than the Scandinavian countries but a more successful utopia”.¹⁴ He argues that Switzerland has lighter taxes, smaller government and a more open economy, providing extensive social benefits and an even distribution of wealth and

¹³ Ruchit Charma. “The Happy, Healthy Capitalists of Switzerland”. November 2, 2019
<https://www.nytimes.com/2019/11/02/opinion/sunday/switzerland-capitalism-wealth.html>

¹⁴ Sibilla Bondolfi. “Is Switzerland a utopia of wealth distribution?” December 13, 2019
https://www.swissinfo.ch/eng/society/social-inequality_is-switzerland-a-utopia-of-wealth-distribution-/45431050

income¹⁵, with the middle class owning about 70% of the nation's assets. An important difference is that the average Swiss family has a net worth of about \$540,000, twice that of their Scandinavian peers. Ruchit Charma suggests that Switzerland provides an alternative to the stereotypical choice between private enterprise and social welfare, and shows that a pragmatic country can succeed by managing this balance.

Of course, fact-check quickly crushes all the bold statements about the wonderful new world of capitalism. Wages are high internationally and the national minimum income does not fall to critical levels due to trade unions.¹⁶ However, statistics also show that 40 percent of property is owned by one percent of the population,¹⁷ and certainly with such results equal distribution and equality is hardly a discussion. The conclusion nevertheless remains optimistic, compared to other European countries Switzerland is doing pretty good and Swiss economic paradise, although 2D (if the wealth distribution equality still hurts one's feelings), exists. One evidence of a favorable economic climate in a country without famine, riots, or political conflicts is longevity rates. According to the World Health Statistics 2022 report ¹⁸, Switzerland has for several years been among the countries with the highest life expectancy (life expectancy at birth 83.3 as of 2019), second only to Japan with 84.3. Life expectancy after 65 is also changing; a hundred years ago you could statistically live in Switzerland for another 10-12 years, now you can expect 22.5 years if you are a woman and 20 years if you are a man ¹⁹. A beautifully inspiring prospect provided by Switzerland's commitment to a healthy lifestyle, favorable ecological situation, with pristine nature and clean air, and compulsory health insurance ensures that over 95% of the population can access necessary medical services.

¹⁵ Peter Grünenfelder, Natanael Rother, Samuel Rutz, Marco Salvi, "An International Think Tank Report on Inequality and Equality", July 18, 2019, https://cdn.avenir-suisse.ch/production/uploads/2019/07/International_Think_Tank_Report_on-Inequality_and_Equality_2019.pdf

¹⁶ Sibilla Bondolfi, "Is Switzerland a utopia of wealth distribution?" December 13, 2019, https://www.swissinfo.ch/eng/society/social-inequality_is-switzerland-a-utopia-of-wealth-distribution-/45431050

¹⁷ Ibid.

¹⁸ World health statistics 2022: monitoring health for the SDGs, sustainable development goals. Geneva: World Health Organization; 2022, <https://iris.who.int/bitstream/handle/10665/356584/9789240051140-eng.pdf?sequence=1>

¹⁹ Federal Statistical Office, "Age Dependency Ratios - 1900-2022: Diagram," Federal Statistical Office, September 26, 2023, <https://www.bfs.admin.ch/bfs/en/home/statistics/population.assetdetail.27225272.html>.

Interestingly, despite the favorable economic situation, there is a demographic crisis in the country. If we take Karl Marx's conclusions as a basis,²⁰ then along with economic development, population growth naturally follows. But the example of Switzerland shows the opposite, the birth rates here are declining every year. I will explore the causes for this a bit later. Therefore, in the Swiss context, together with falling fertility rates, longevity becomes a problem. A century ago in Switzerland, for every 100 people aged 20 to 64, there were 76 young people under 19 and 11 people after 65. In 2022, the ratios have changed, now there are 32 young people and 31 aging people per 100 working people.²¹ According to Federal Statistics Office²², in 2019 453,800 people were 80 years or older. They make up 28.3% of the population aged 65 and over. In some cantons, the proportion of older people is already higher than that of children and adolescents, especially in the cantons of Ticino, Graubünden, Basel-Landschaft, Nidwalden, Schaffhausen, Basel-Stadt, Bern, Glarus, Solothurn, Uri, Jura and Valais. And in this case, longevity calls into question the welfare of Switzerland ²³, as the an aging population poses economic challenges such as labor shortages and strains on healthcare and social services, necessitating adjustments in policies related to pensions, retirement age, and infrastructure to address the evolving demographic landscape.

All of the above indicators together help to construct a contemporary portrait of the population and indicate that it is likely that the composition of the average family is also changing. Since 1970, the number of households of couples with children has remained practically unchanged, but the number of lone parents with children under 25 has doubled, couples without children has

²⁰ 1. Maria Mies, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour* (London: Zed, 1986), 31-35.

²¹ Federal Statistical Office, "Age Dependency Ratios - 1900-2022: Diagram," Federal Statistical Office, September 26, 2023, <https://www.bfs.admin.ch/bfs/en/home/statistics/population.assetdetail.27225272.html>.

²² Federal Statistical Office. (2020, April 9). Die bevölkerung der Schweiz ist 2019 Erneut Gewachsen und Gealtert - Bevölkerungsentwicklung im jahr 2019: Provisorische Ergebnisse: Press release. <https://www.bfs.admin.ch/bfs/en/home/services/media-services.assetdetail.12247181.html>

²³ Swissinfo.ch, "Ageing Population Threatens Swiss Prosperity, Study Warns," SWI swissinfo.ch, November 15, 2019, https://www.swissinfo.ch/eng/worker-shortfall_ageing-population-threatens-swiss-prosperity--study-warns/45371408.

increased one and a half times, and one-person households have tripled.²⁴ Migration statistics are also particularly relevant. In 2022, 40% of the permanent resident population aged 15 and over has a migration background (2,951,000). More than a third of this population (1,115,000) has Swiss nationality. Almost four-fifths of the persons with a migration background belong to the first generation (2,342,000). The remaining fifth was born in Switzerland and is thus part of the second generation (609,000).²⁵ The data indicates that a significant number of people with a migration background, who are planning to have children, lack the proximity of extended family for support in the initial years of parenting. Consequently, their children might miss the opportunity for early interaction with grandparents. But this exchange is crucial as it enhances emotional support, cultural and familial ties, learning and mentorship, intergenerational bonding, and parental relief.

1.2. Your one and only magnificent pension plan

To better understand the situation now, it is important to look at the history of social insurance in Switzerland. In the 19th century, poverty in Protestant countries was mostly condemned as a sin and God's well-deserved punishment, and as one of results, social assistance as such was ignored. Until 1914, there was no official pension and the state had no responsibility for the elderly population. In fact, without pension provision, there were no elderly people as a separate social group. Therefore, before 1914, despite the existence of several public pension plans and innovative companies, most people had to work until late in life, relying on family help or rarely on charity. Poverty was mainly a threat to women, children, and the elderly. Beginning in 1900, social security for poor and distressed individuals became a tool for controlling the lower classes and an opportunity to bring in additional labor. A field of social work also emerged, which opened the possibility of professional development for bourgeois women. However, the first attempts to introduce compulsory insurance were rejected, with the sole exception of the

²⁴ Federal Statistical Office, "Private Households by Institutional Units and Household Size - 2012-2022: Table," Federal Statistical Office, October 5, 2023, <https://www.bfs.admin.ch/bfs/en/home/statistics/catalogues-databases/data.assetdetail.28265991.html>.

²⁵ Federal Statistical Office, "Immigration and Emigration - 2022: Diagram," Federal Statistical Office, August 24, 2023, <https://www.bfs.admin.ch/bfs/en/home/statistics/catalogues-databases/graphs.assetdetail.27465256.html>.

introduction of military insurance. Many initiatives were established during and after World War I, and more private insurance funds were initiated after Switzerland exempted them from tax on war income. In the period after World War II, labor unions called for the introduction of old-age, survivors, and disability insurance. Social security remained decentralized.²⁶

In 1947 a successful referendum approved the AHV system with initial modest pensions. The expansion of both the AHV and private pension plans alleviated societal fears of aging, transforming the perception of old age from one associated with poverty to that of a financially secure retirement and making retirement a distinct phase of life.²⁷ The 1972 vote solidified the three-pillar system, emphasizing the importance of private occupational provision. Switzerland stands out globally for the increasing prominence of the capitalization process, denoted as the 'second pillar,' and its multitude of pension funds. In 1980, Switzerland boasted nearly 10,000 operational pension funds, a stark contrast to the mere dozen or so in the Netherlands, even though these Dutch funds provided coverage for entire sectors.²⁸

1.3. Maternity as a natural process

While Switzerland is progressive and developed in terms of pensions, the social security of families is very limited compared to other European countries. In 1911, the Accident Insurance Law was introduced and it was precisely this law that was responsible for the care of mothers. According to its content, women in a period of pregnancy had the same benefits for 6 months as people in a period of serious illness. But only a small fraction of women had such benefits, and the majority were left without any protection. When the first application was made for the right to financial support for pregnant women and young mothers up to 12 weeks in 1919, the all-male council rejected the application, being discouraged by the additional costs and justifying their decision by the fact that birth is a natural process that does not require assistance. In the 20th

²⁶ Federal Social Insurance Office, History of social security-Old Age Provision, accessed November 7, 2023, <https://www.historyofsocialsecurity.ch/risk-history/old-age-provision>

²⁷ Ibid.

²⁸ Ibid.

century, Switzerland's initial attempts to introduce maternity insurance failed in 1984 and 1987, and in 1999, and the focus shifted to old age and survivors' insurance, AHV. The issue was that maternity was still equated with illness and no one wanted to revise the existing law.²⁹

In 1945, the groundwork was laid for maternity insurance and family allowances, but they were targeted at different groups in society. While maternity insurance was aimed at facilitating work and motherhood, family allowances were aimed at strengthening the breadwinner model and alleviating the burden on married women seeking employment. At the international level, various countries had already implemented solutions by the end of the twentieth century. Germany, for example, enacted maternity protection laws in 1927 to provide job security and leave for pregnant women. France in 1946 provided 14 weeks of maternity leave with compensation. Scandinavian countries introduced the possibility of parental leave relatively early: Sweden offered six months of maternity leave in 1963 and extended it to fathers in 1974. In contrast, the United States still offers only unpaid maternity leave.³⁰

A modest for European standards maternity leave was introduced in Switzerland only in 2004. Currently, in France, mothers are entitled to 16 weeks, in Germany paid parental leave - for both mothers and fathers - lasts up to a year, and in Sweden it can even reach 480 days, in Switzerland maternity leave is 14 weeks for mothers and 2 weeks for fathers. Formalized child and adult protection rights only established in 2013.³¹ At the same time, according to a study by the Zurich Youth Office, a child costs between CHF 1,200 and CHF1,800 a month, depending on its age. The median gross wage is CHF6,500 francs - so a child costs between 18 percent and 27 percent of the gross wage of one parent. Parents earning less than the national average face problems.³²

²⁹ Federal Social Insurance Office, Family and Maternity, accessed November 7, 2023, <https://www.historyofsocialsecurity.ch/risk-history/family-and-maternity>.

³⁰ Ibid.

³¹ Ibid.

³² Alexandra Kohler, "In Switzerland, Having a Child Is Becoming a Luxury," SWI swissinfo.ch, January 22, 2020, https://www.swissinfo.ch/eng/society/parenting-series_in-switzerland--having-a-child-is-becoming-a-luxury/45510222.

Thus, care processes for the more fragile social groups have been outsourced. In the case of the elderly, responsibility has shifted from the traditional family to the state and private pension companies, and in the case of parenting, due to the lack of state support and high childcare costs, which cannot be covered without a full-time job, to private and public childcare centers.³³

1.4. Modern family

The introduction of paid maternity leave was an indicator that even in traditional and slow to make political decisions Switzerland, reproductive tasks have been recognized as full-time labor. However, its compensation is still minimized compared to other European countries, and each company decides its own priorities. In other words, it is the prerogative of private companies and the employer what support (e.g. in terms of flexible working hours and job retention) is provided to young families. In the past, control over reproductive labor was mainly facilitated by religion and the marketing of the ideal of the nuclear family, in which the woman concentrated on non-wage work and was a housewife. Now in Switzerland, the nuclear family model, in which the woman has no career, is no longer functional as an ideal model. It follows that the state is putting the responsibility for the conditions of family formation in the hands of private companies. Here, in my opinion, the interests of the state and companies diverge, because the pension payments are made by state institutions and they will be the first to suffer from the lack of a tax-paying working population.

Let's take a closer look at the family organization over the past. Before industrialization, in the agri-culture, trade and commerce sectors, households most often combined the functions of production and housing. All the activities of daily life were concentrated in one place, family members were closely linked, and this form of dwelling provided insurance and assistance to the more vulnerable members of the family. In "History of collective living" by Susanne Schmid, the social organizational structures of living before industrialization are divided into: beguinage and monastery, whole house - collective working and living in a house group with multiple

³³ Susanne Schmid, *A history of collective living forms of shared housing* (Basel : Birkhäuser, 2019), 28-33.

generations, relatives, servants, and employees; bourgeois house - collective working and living in a family group with multiple generations; servants and employees are separated.³⁴ After industrial revolution, working and living were radically separated, leaving household a place for rest, education, reproduction, and housework only. Everything that was connected with domestic work, typically fell on the shoulders of women. At the same time, this work remained invisible to the public, as the home was now a private and intimate place.

The nuclear family emerged from the bourgeois ideal, making the unit of two parents and children the standard and ideal of modern society. However, the nuclear family holds on to a clear traditional division of functions between the sexes, with the woman always having the opportunity to look after the children and provide for the household, and the economic prosperity of the household enabling small variations in the traditional order of things. Global changes in women's values and status since the 1960s have exposed cracks in the system. Thirty years after the introduction of women's suffrage at the national level in Switzerland and twenty years after an equal rights amendment to the constitution, women's employment was no longer questioned, even by middle-class parties. Changing values have pushed the role of the family into the background, prioritizing education, career and financial independence, while an inflexible social assistance structure and the increasing difficulty of providing for the family have made the combination of two impossible.

Therefore, even assuming that Switzerland's demographic situation has stabilized, with the number of children under 19 surpassing the elderly population, the issue of intergenerational interaction remains pertinent. This is because over the past century, the very structure of the family has undergone significant changes. The challenge now lies not in reverting to the traditional nuclear family model, but rather in providing solutions tailored to modern family structures such as Single-Family, Multi-Family and Non-family.³⁵ In essence, while Switzerland represents a paradigm of economic success and social stability, it is not without its challenges

³⁴ Susanne Schmid, *A history of collective living forms of shared housing* (Basel : Birkhäuser, 2019), p. 30.

³⁵ Ibid.

and contradictions. The nation stands at a crossroads, where its economic triumphs are tempered by demographic shifts and evolving social dynamics, necessitating a thoughtful re-evaluation of policies and societal structures to ensure sustainable prosperity and social cohesion in the future. The main conclusion is that, in general, the average family can no longer provide a full range of intergenerational communication. Therefore, quality exchange has to be provided outside the family. The question is how to accomplish this? What is a space for such communication and what qualities should it have?

Chapter 2. Case-studies in Switzerland

During the semester, I visited four buildings. Initially, I made an extended list of places I wanted to visit where each had a quality architectural space for intergenerational exchange. However, within the scope of my work, it was crucial for me to visit the buildings myself, talk to the people who live or work there, and form my own opinion of the project, without blindly echoing other people's praise or criticism. It naturally narrowed down the list of case-studies. My first question after researching the present demographic situation in Switzerland was about the architecture of well-being. While the average longevity rates in Switzerland are very high, my question was about the quality of that longevity, whether a space can help a person to stay physically and mentally active for as long as possible. It was a reason I visited REHAB by Herzog & de Meuron, a project that emphasizes the architecture ³⁶ of the building as a key element in promoting healing. Interestingly, Rehab also organizes architectural tours, which is not a common practice in medical institutions.

Since Project Rehab is not a standard institution, my next question concerned what typical residential complexes for the elderly look like. Generally, if a person is of advanced age and has health issues, the housing is also equipped with medical services. However, unlike in the case of

³⁶ "Architecture," REHAB Basel, October 17, 2023, <https://www.rehab.ch/en/discover-rehab-basel/architecture>.

Rehab, this isn't a transitional zone, meaning it should provide a full-fledged life. My choice of this case study was influenced by personal experience. I temporarily lived in student housing near a medical-social establishment primarily intended for the elderly. My neighbor once shared that he had the opportunity to talk with an elderly woman living there. Late one evening, she knocked on the door of the student housing, claiming her medical nurse was hurting her. Further dialogue revealed this was untrue and she was having a panic attack and simply felt lonely. When I heard this story, it struck me that despite the two buildings being hundred meters apart (which in the context of Echandens it can be considered very close), there was no architectural pretext or shared space to get to know the neighbors. The only way to establish contact between these students and the elderly was to knock on the door in a panic at night. Therefore, I decided to visit the EMS facility ³⁷ to understand how this facility is arranged internally and to identify the hallmarks of standard senior housing, and what could be done differently to also provide a space for comfortable social interaction.

The third case study is a cooperative in Bern ³⁸, predominantly inhabited by people in the latter half of their lives. I visited the cooperative twice and was personally struck by how active the retirees were and how integrated they were in the life of the city and society at large. I had the pleasure of meeting 9 out of the 12 members of the cooperative, and each impressed me with their multitude of hobbies, activities, and initiatives they participate in. Although the stated values and goals of the cooperative greatly influenced the selection of its residents, the building's architecture, carefully crafted by residents in collaboration with an invited architect also significantly impacts the living atmosphere and interpersonal relationships. My aim was to understand which specific elements enable the creation of such a community.

The fourth project, Karthago, is a fairly well-known project in Zurich, even featured in a film titled “Karthago – eine real existierende Utopie”. ³⁹ It exemplifies diversity in a community, and

³⁷ “Ems La Chocolatière,” October 17, 2023, <https://altage.ch/etablissement-medico-sociaux/ems-la-chocolatiere/>.

³⁸ “Unsere Genossenschaft Stellt Sich Vor,” Genossenschaft BG16, accessed October 15, 2023, <https://www.bg16.ch/>.

³⁹ Genossenschaft Karthago, accessed December 15, 2023, <https://www.karthago.ch/>.

how people of different origins, ages, genders, beliefs, and social statuses can comfortably coexist and maintain close interactions. Particularly interesting in this project is how the boundaries between individual and communal spaces are organized, allowing people to feel included in the community while still preserving their privacy. Another key aspect of Karthago is that it accommodates families, often single parents with children. The structure of Karthago and its spatial solutions allow, to some extent, the recreation of extended family relationships, easing the challenges of childcare and upbringing.

For the analysis of all four case studies, I identified two main aspects to structure the analysis of completely different facilities. The first concerns the ability of a facility to provide everything necessary for people of any age. Here, I'm referring to the complete fulfillment of needs as per Maslow's hierarchy, meaning creating a comfortable environment not only for meeting basic needs but also aimed at fostering quality social connections among people and a sense of belonging to society. Usually such an ambition for comfortable and diverse environment is fulfilled within the city, I would like to introduce this ambition for a single building. Let me elaborate on this. In 1867, Ildefonso Cerdá introduced the concept of urbanization in his work "General Theory of Urbanization".⁴⁰ He conceptualized the city as a dynamic entity, designed to enhance the quality of life for its inhabitants through a harmonious blend of spacious, well-ventilated living areas, equitable social integration, efficient and accessible urban infrastructure, ample green spaces for public health, and a strong sense of community, all while being adaptable to the evolving needs of progress and innovation. Cerdá's theoretical work was embodied in the Eixample development in Barcelona.⁴¹ He speaks of a vibrant modern city, and although his book was written in the 19th century, I believe his definition of comfortable in all aspects, complete urban environment remains relevant. But what if I want to have it all but there is simply not enough space for a natural big city diversity? Such an approach, without adaptation, is not even applicable to modest swiss cities. For comparison, Zurich, the most populous city in

⁴⁰ Arturo Soria y Puig, "Ildefonso Cerdá's General Theory of 'Urbanización,'" *Town Planning Review* 66, no. 1 (1995): 15, <https://doi.org/10.3828/tpr.66.1.1330228470wv7m2u>.

⁴¹ Marta Baussels, "Story of Cities #13: Barcelona's Unloved Planner Invents Science of 'Urbanisation,'" *The Guardian*, April 1, 2016, <https://www.theguardian.com/cities/2016/apr/01/story-cities-13-eixample-barcelona-ildefons-cerda-planner-urbanisation>.

Switzerland, has over 428,700 residents ⁴², whereas in neighboring European countries like France, Germany, and Italy, the largest cities have populations calculated in millions. Simultaneously, as my work focuses on the elderly, whose mobility may be limited with age, it's important to consider even smaller scale, the diversity of spaces not within a large city, but within a neighborhood or building. Therefore, in my work, I would like to scale down the approach to the urban environment and consider how a quality like “urbanity” can be applicable to buildings with their internal functional program and approach to architectural space. That is, to what extent a single building can provide its users with the experience of urban interaction within the scope of a single building project. “Urbanity” for me does not necessarily suggests dense built environment. My perception of the term was greatly influenced by the work “Urbanity of Things” by Simon Kretz and Christian Salewski. ⁴³ “Essentially, the forest can be said to be urban if its relationships with its social and spatial networks also intertwine with one another”. ⁴⁴ “If the forest were divided up and each group of users and each use were to accommodate one part each, it would lose its urban character”. ⁴⁵ Therefore, in the context of this work, “urbanity” for me is a combination of a space rich in forms and textures, ⁴⁶ which also leads to the creation of encounters between different people and the establishment of relationships.

The second aspect of my analysis involves examining the boundaries between public and private spaces and their impact on creating quality interactions. That is, through the examples of selected buildings, I aim to determine the specific ratio of individual to communal spaces that leads to the creation of the most productive and comfortable social environment, or space for exchange. However, these boundaries are far more complex than a simple black-and-white division of

⁴² Population,” Facts & Figures - City of Zurich, October 25, 2019, <https://www.stadt-zuerich.ch/>

⁴³ Christian Salewski and Simon Kretz , “Urbanity of Things. Relationship Potential and Wealth of Relations as Urban Resource,” essay, in *The City as Resource: Texts and Projects 2005-2014: Chair of Prof. Kees Christiaanse, ETH Zurich*(Berlin: Jovis Verlag GmbH, 2014), 167–80.

⁴⁴ Ibid, 167-168.

⁴⁵ Ibid, 168.

⁴⁶ Charles Spence, “Senses of Place: Architectural Design for the Multisensory Mind - Cognitive Research: Principles and Implications,” SpringerOpen, September 18, 2020, <https://cognitiveresearchjournal.springeropen.com/articles/10.1186/s41235-020-00243-4#rightslink>.

public and private. Serge Chermayeff in his book “Community and Privacy: Toward a New Architecture of Humanism” describes six different spheres: urban-public, urban-semi-public, group-public, group-private, family-private, individual-private.⁴⁷ Moreover, the nature of any private space can change depending on the time and the number of people using it. “We can carry out private activities in a cafe or on the tram while, conversely, we can be in contact with the whole world from our desk or bedroom, and then take to the streets to find time alone.”⁴⁸ In the context of this work, I would like to examine group-public spaces, that is, spaces that may have restrictions for public use but offer a safe and comfortable environment for acquaintance and communication.

Thus, in this chapter, I will analyze spaces based on two characteristics - the urbanity of the space and transitions between public and private. These characteristics will help answer questions for each case study and introduce a unified metric amidst the diversity of projects.

Case-Study 1: Rehabilitation Center in Basel:

- How does the design of the rehabilitation center in Basel affect the well-being and recovery of patients with physical and mental injuries?
- What architectural elements and solutions are used to support the health and activity of older people?

Case-Study 2: EMS Care Center at Echandens:

- How does the architecture and design of the EMS care center in Echandens reflect typical approaches to elderly care in Switzerland?
- What alternative approaches could improve the interaction between different age groups in such facilities?

Case-Study 3: Cooperative BG-16 in Bern:

- What architectural and social strategies are employed to promote intergenerational relationships in this project?

⁴⁷ Serge Chermayeff and Christopher Alexander, *Gemeinschaft Und Privatbereich Im Neuen Bauen*, 1972, 109.

⁴⁸ Susanne Schmid, *A history of collective living forms of shared housing* (Basel : Birkhäuser, 2019), 17.

- How does the BG-16 project help to understand the changing needs and preferences of older people in Switzerland?

Case-Study 4: Kartago Cooperative in Zurich:

- What is the success of the Kartago Cooperative model in Zurich in terms of interaction between people of different ages?
- How does the architecture and design of Kartago contribute to a comfortable and functional environment for diverse social groups?
- How does the Kartago project reflect the interplay between personal and public spaces to support intergenerational relationships?

2.1. Rehab, Basel. Architecture of care.

Rehab Basel, designed by Herzog & de Meuron, serves as a rehabilitation center in Basel, Switzerland. The building is specifically tailored for patients requiring physical and neurological rehabilitation. In the building, there are on average 100 patients, and it is also the center with the largest number of coma patients in Switzerland. In general, residents stay here between 3 and 8 months. The primary purpose of the facility is to provide a space for comprehensive rehabilitation services. It offers various therapies and treatments for patients recovering from injuries, surgeries, or neurological conditions. The design of the building plays a crucial role in facilitating these services, with features that are specifically tailored to the needs of the patients undergoing rehabilitation. This project won the competition for its ability to create a therapeutic environment that aids in the rehabilitation process while also being aesthetically pleasing and architecturally significant. A key influence in the design of Rehab Basel was the involvement of the chief therapist, this individual's insights into the needs of patients and the nuances of rehabilitation therapy were instrumental in shaping the design of the facility for natural healing.

The defining feature of the spatial organization of the project is its design centered around gardens. Owing to the large glass walls and the constant integration of green wells into the building's structure, it becomes unclear where the building ends and the exterior begins. The

gardens and the wooden facade, adorned with intricate bead details, momentarily distract from the fact that it's a hospital. The absence of a typical hospital atmosphere is noted in every architectural review of Rehab, but, unfortunately, delving deeper into the building reveals its true function. This sense of medical inevitability is mostly manifested in the omnipresence of medical equipment, yet there's hardly any architectural element evoking associations with a standard medical institution - no stark white walls interspersed with overly bright colors or posters, no endless straight corridors, nor pervasive artificial overhead lighting.

Many architectural elements are designed to aid patients in both physical and mental rehabilitation. For example, the gardens not only provide natural light to most rooms but also serve as navigational aids. While hospitals typically use numbers, signs, or brightly colored blocks for direction, these are primarily visual cues. The gardens, on the other hand, offer a multisensory ⁴⁹ navigation tool with sound, scent, and periodically changing visuals due to the seasonal nature of many plants. They are universally accessible to all patients, including those with various impairments or illnesses whose spatial perception may differ from those without disabilities, for whom visual navigation might not be sufficient.

All the restroom facilities in the building feature neon-bright walls and floors. While this may not seem comfortable, the idea behind such bathrooms is rather ingenious. Specifically in Rehab, some individuals may forget basic human functions, such as using the bathroom. These functions need to be relearned, and the bright colors serve this purpose; they stimulate brain activity and 'activate' the person back into reality. Such stimulation can enhance cognitive functions, memory, and emotional responses, making multi-sensory environments particularly effective for educational, therapeutic, and recreational purposes. ⁵⁰ The 'uncomfortable' space concept extends to the corridors as well. All corridors in Rehab are curved; there are no straight walls—they

⁴⁹ Charles Spence, "Senses of Place: Architectural Design for the Multisensory Mind - Cognitive Research: Principles and Implications," SpringerOpen, September 18, 2020, <https://cognitiveresearchjournal.springeropen.com/articles/10.1186/s41235-020-00243-4#rightslink>.

⁵⁰ Charles Spence, "Senses of Place: Architectural Design for the Multisensory Mind - Cognitive Research: Principles and Implications," SpringerOpen, September 18, 2020, <https://cognitiveresearchjournal.springeropen.com/articles/10.1186/s41235-020-00243-4#rightslink>.

constantly either narrow or widen, and some even have a slight incline. Architects claim that this helps to forget that one is in a hospital and creates a natural-like pathway. On the other hand, this can be seen as intentionally created discomfort, or a trigger. Walking through these slightly altered corridors creates a feeling that something is off with the space. In my view, this serves the same purpose as the neon restrooms: creating a space that is not entirely comfortable, which slightly disrupts our routine and makes us more conscious of our surroundings. Some “uncomfortable” architecture elements have clearly stated training purpose. One such element is the large staircase in the building's northern wing. It can be used for regular circulation, but its steps vary in size, also serving as a training tool for people with limited mobility.

The gardens, bright toilets, curved corridors, and building elements specifically designed for mobility training - all these aspects of Rehab resonate largely with the theory "architecture against death" by Arakawa + Gins.⁵¹ Arakawa and Madeline Gins, a creative duo consisting of an architect and an artist/poet, developed the avant-garde architectural philosophy known as "architecture against death," also referred to as "reversible destiny architecture." This theory is unique in its approach to architecture and design, focusing on the interaction between the physical space and human longevity. The essence of their theory is that architecture should challenge the body and mind, thereby keeping them active and engaged. Arakawa and Gins believed that through specific architectural elements and designs, one could stimulate the senses and the brain, leading to improved health and potentially extending life. Their concept was based on the idea that overly comfortable and predictable environments lead to mental and physical stagnation, which could hasten aging and death. To implement this idea, their designs often featured uneven floors, rooms with varying heights, colors and textures that create sensory experiences, and spaces that require unusual movements to navigate. The goal was to make the inhabitants constantly aware of their environment and to engage their bodies and minds in a continual process of adaptation and learning. Arakawa and Gins envisioned that by constantly

⁵¹ Ciampaglia A. Dante, “These Architects Sought to Solve the Ultimate Human Design Flaw-Death,” Metropolis, September 14, 2021, <https://metropolismag.com/viewpoints/arakawa-madeline-gins-architecture-death-exhibition/>.

challenging the residents, their architecture could encourage a state of perpetual growth and vitality, potentially impacting the aging process.

Despite its name, both authors of the project "Architecture against death" passed away at the ages of 72 and 73. Therefore, it's not about architecture preventing death, but rather about creating architecture that allows a person to stay 'switched on' to life, both physically and mentally.⁵² One project focuses on preventive and extreme measures in the home environment, while the other, in a typically Swiss aesthetic manner, gently facilitates the restoration of strength and health. Both projects are highly specific, yet their elements and principles can be integrated into residential and public buildings to create a diverse environment. The key takeaway is that it's precisely the finely tuned discomfort and variety of spaces that helps people remain active.

In describing the Rehab project, Herzog & de Meuron speak of Rehab having a structure akin to a small town.⁵³ This is because patients there lead essentially normal lives with the sole difference being that all their activities are concentrated in one place. Consequently, the architectural office's task was to create an irregular, interesting space that would mimic a neighborhood with houses, gardens, and streets. In this context, Rehab is a vivid example of how urbanity can be expressed within the confines of a small-scale project. The spaces in the project partly act as triggers, evoking various multisensory sensations and mimicking an urban environment with a diversity of forms and opportunities for encounters with different people. This emphasis in design is intentional, as patients temporarily lack the ability to access the outside world. Some Rehab patients are not only unable to leave the facility but sometimes even their rooms. Therefore, each chamber is equipped with a unique glass "eye" in the ceiling, designed to bring nature and the outside world directly into the patient's room. While this skylight cannot replace the diversity of the environment, it also represents an effort to connect a patient to the outside world on the smallest architectural scale.

⁵² "Reversible Destiny Lofts-Mitaka (in Memory of Helen Keller)," Reversible Destiny Foundation, accessed August 15, 2023, <https://www.reversibledestiny.org/reversible-destiny-lofts-mitaka-in-memory-of-helen-keller/#>.

⁵³ "165 Rehab, Clinic for Neurorehabilitation and Paraplegiology," Herzog & de Meuron, accessed January 10, 2024, <https://www.herzogdemeuron.com/projects/165-rehab-clinic-for-neurorehabilitation-and-paraplegiology/>.

Regarding the division between private and public spaces, in Rehab it is distinctly clear. All patient rooms are located on the first floor, while therapeutic offices and other services are on the ground floor. The first floor offers spaces solely for individual use. However, the ground floor offers several different zones. There are also areas reserved for patients where interaction is facilitated by medical staff, and there's a fully open area with a café and seating available to all users. Of particular interest to us is open public zone. Here, patients meet with relatives, medical workers dine, visitors can wait, and anyone passing by can grab a meal or coffee. The territory belongs to the hospital; it is private but temporarily open for public use, essentially semi-private-semi-public. Here, patients or temporary residents of Rehab can observe different people and interact with them. However, every 5-10 meters, there are also small, secluded nooks with tables, chairs, and couches, pockets of comfort and privacy. These allow for the creation of safe, comfortable zones when patients venture into the external public world, and enable users to adjust the privacy of the space according to their needs.

2.2. EMS Chocolatiere, Echandens. Modern norm and loneliness.

EMS La Chocolatière, situated in Echandens, Switzerland, is an establishment focusing on geriatric and psychogeriatric care. It is situated amongst fields, next to forest and located within a 20 minute walk of the nearest stores and services. The center is equipped with 44 beds, including 8 in double rooms, and most of its rooms have private bathrooms. The ground floor houses 31 geriatric beds, mainly in single rooms, while the first floor features 13 individual rooms dedicated to advanced-age psychiatry. It caters to elderly individuals, around 80 years on average, offering tailored care for their specific physical and cognitive needs. As for the term "EMS" in this context, it stands for "Établissement Médico-Social," which is a French term referring to medical-social establishments. These facilities provide long-term care, including medical, social, and personal care services, primarily for elderly individuals who need assistance with daily living activities and health management. They often focus on creating a homely, supportive environment while providing professional care tailored to individual needs.

The project is situated in a former production building of the Nestle chocolate company. Since the building was repurposed to meet new needs, it presents a series of unordinary spaces, sometimes converging in entirely unexpected places. However, even within the confines of an old factory structure, the architecture and interior have been normalized to the extreme. Everything is functional, sterile, and precise. All offices and rooms are aligned along a straight, pristine white corridor that traverses the entire building. To alleviate the stark white emptiness, small pockets of color have been added, such as room number plaques that also contain little pictures of sunsets or forests. Intriguingly, despite its incredible proximity to nature, there is almost no natural element inside the building and near it. Even the landscape design in front of the building is meticulously and painstakingly precise. As a result, although residents are fully provided with all necessities for living - a roof, walls, food, and medicine - the lack of diversity necessary to prevent feelings of isolation is absent.

The facility is a 15-minute walk down a gentle, uneven slope from public transport, shops, cafes and restaurants, pharmacies, and other services. For an able-bodied person, this is not a significant distance, but for those with physical impairments, for whom movement over long distances is complicated, it becomes almost insurmountable. At the same time, all spaces accessible to people with limited mobility are regular and predictable, making the entire spatial experience they receive in the center characterless and monotonous.

In the same building as the EMS, there are two-story lofts primarily intended for families with children. Across the road, 20 meters from the EMS, is the FMEL student housing. Upon zoning analysis, one might expect this to be a diverse, vibrant environment. However, in real life, the social groups of elderly people, families, and students never intersect because there is no program around to provoke interaction. Providing even a small sport ground, capable of introducing a bit of diversity into the measured environment of the facility, could significantly change the atmosphere of the project and possibly positively impact the lives of all neighborhood residents. It's not about creating friendships between students and the elderly, but at least turning

complete strangers into familiar faces, thereby creating a sense of community and a more friendly atmosphere, where initiating contact is much easier. In comparison with Rehab, there are no semi-public spaces in the building that could diversify the environment and provide opportunities to communicate with the outside world.

2.3. BG16, Bern. Portrait of new retirement community.

Cooperative house BG16 is located in the center of the old town in Bern Switzerland. The house was originally built in the early 20th century and was used as accommodation for low-income groups. Then in 1930 it was purchased by the city of Bern, and in the 1960s it went through an urban renovation of the old town center, during which no attention was paid to the preservation of the original interior, as the overall architectural ensemble was important. As a result, the building was demolished and converted into an office building in 1960-1961. In 2005, a group of seven people purchased the building and founded a cooperative. The conversion project into a modern residential building with an atrium was completed in 2006-2007.⁵⁴ After that, the cooperative was called Haus Sein, but since June 2023, after a radical change of direction and values, the community is known as Cooperative BG16.

The BG16 concept focused on creating a project that is accessible to people with limited financial resources. The cooperative, originally formed to purchase the house, went through a detailed and time-consuming process of planning and executing renovation works within a strict budget. The building includes 15 apartments distributed over nine floors, with a total living area of 665 square meters. The composition of the apartments is diverse: 3 apartments with one room, 10 apartments with two rooms and 2 apartments with three rooms. In addition, the building provides common areas totaling 73 square meters, including an atrium, common room and guest rooms. Most of the apartments are rented to co-op members, with three units available to

⁵⁴ “Unser Haus,” Genossenschaft BG16, accessed October 15, 2023, <https://www.bg16.ch/leben-in-der-brunnngasse-16/das-haus/>.

independent tenants (there are currently 12 co-op members - 8 women and 4 men - and 3 independent tenants living in the building).⁵⁵

All members of the cooperative live alone by choice or due to divorce or death of a partner, 9 out of 12 members are of retirement age, and 7 of them are working full-time or part-time. The occupations (current or past) of the cooperative members belong to different fields: geography, graphics, commerce, career guidance, business administration, medicine, pedagogy, social work, nursing.⁵⁶ At the same time, everyone maintains an active lifestyle, participates in charitable activities, and each has his or her own responsibilities for the household. Unlike cooperatives with larger budgets, BG16 residents provide service to the entire building on their own.

To more accurately define a group of people living in a cooperative, I would like to use the description given in the book "Planning for an Ageing Society" by Rose Gilroy. In the book instead of differentiating people by age, later life is categorized into different phases that can be entered without reference to a specific number. The journey begins with the Honeymoon Phase, a period that can be a time of heightened wellbeing for those with higher education and income. This phase is often characterized by travel, leisure pursuits, and perhaps some part-time work or volunteering. However, the experience contrasts for those retiring from manual labor or unemployment, who might face this phase with less financial security and poorer health, diminishing the essence of a honeymoon. Following this is the Big Decision Phase. With work potentially out of the equation, this stage becomes crucial for making significant life choices, like relocating or planning for future mobility challenges. As one progresses, they enter the Navigating Longevity Phase. Here, managing health becomes a central aspect of daily life. The need for regular assistance or the comfort of having someone close becomes paramount. This phase often influences decisions regarding housing location and type, with a greater reliance on nearby facilities accessible on foot or via robust public transport. Finally, there's the Solo Journey Phase, often encountered alone following the loss of a life partner. Daily support with personal

⁵⁵ "Unsere Genossenschaft Stellt Sich Vor," Genossenschaft BG16, accessed October 15, 2023, <https://www.bg16.ch/>.

⁵⁶ "Unsere Genossenschaft Stellt Sich Vor," Genossenschaft BG16, accessed October 15, 2023, <https://www.bg16.ch/>.

care becomes vital, and mobility limitations may confine one's life to local and easily accessible environments. This phase highlights the importance of community and accessible support networks in shaping the landscape of our later years.⁵⁷ The majority of the residents in the cooperative are in the phase of Navigating Longevity. At this stage, the essence of community becomes profoundly significant, and the selection of both the people in their surroundings and their living arrangements takes on a strategic character. Hence, every element of the building and the approach to the program in BG16 are meticulously designed to manifest the most comfortable conditions for older individuals.

BG16 is self-governed by its residents, who meet regularly at house meetings and are members of the cooperative. A five-member board oversees operations, and residents actively participate in thematic working groups focusing on community relations, house and building management. The downtown area is very dense and a greater number of apartments remain mostly dark. However, the location has simply outstanding transportation, proximity to services and stores, and is right on the waterfront of the Aara River. One of the key features of the cooperative's program is its focus on external connections. The whole neighborhood was carefully informed about the project, and after the opening, weekly open lunches were organized for the public, allowing the residents of the cooperative to stay connected to the world around them and expand their network of contacts.

Currently, following the COVID-19 pandemic, the cooperative organizes lunches open to public only once a month, which anyone interested can attend, provided they email the cooperative at least a day in advance. I visited the cooperative twice, both times during lunch. The first time, I was the sole guest; the second time, there were six guests present, four of whom, including myself, were under 35 years old. This indicates that although the cooperative primarily houses elderly people, it has created a space that facilitates intergenerational exchange. This is also

⁵⁷ Rose Gilroy, *Planning for an Ageing Society* (London: Lund Humphries Publishers, 2021), 14.

influenced by the democratic pricing of the lunches (5 francs), which is almost five times cheaper than the average lunch in Bern (23 francs).⁵⁸

The residents of the cooperative are at the heart of city life, with constant activity around them. To be integrated into society, they don't need to travel miles; the vibrant city is right at their doorstep. Therefore, the concept of urbanity described at the beginning of the chapter, in this case, is resolved by location. However, communicating with people outside their immediate circle can still be challenging, as active socializing, especially with new acquaintances, requires considerable effort. Hence, they invited the city into their home. On the ground floor, there's a large hall for all cooperative members, equipped with a kitchen. One of the invited guests mentioned that she got acquainted with the cooperative members when she asked to rent the communal space to organize a charity cultural evening in support of the people affected by an earthquake in Morocco. Thus, the communal room becomes a versatile tool for communication with people of all ages and backgrounds. Being part of the cooperative inherently suggests a preference for active socializing over solitude, but with the functional diversity of the common room, this openness is particularly noteworthy because it is geared towards new acquaintances.

Also, during the adaptation of the building for the cooperative, a decision was made to carve out a huge atrium in the center of the building. In the walls, small windows were cut out, allowing one to see what's happening in each person's apartment. These windows represent semi-group spaces, creating a bridge between the exclusively individual apartments and the cooperative's communal spaces. Each resident has decorated their window in their style, with many turning it into a display window, and some hanging sheer curtains to control the level of privacy. However, thanks to this opportunity to have a glimpse into individual spaces, and even just to know whether someone is home or not, or to use items displayed in the window to start a conversation, these windows help create a sense of belonging to the community and make the interaction between members easier.

⁵⁸ "Cost of Living in Bern," . Jan 2024. Prices in Bern, accessed January 10, 2024, <https://www.numbeo.com/cost-of-living/in/Bern>.

2.4. Karthago, Zurich. Providers of care

The Karthago cooperative housing in Zurich is an exemplary model of social-utopian living that has evolved significantly since its inception. Born out of a movement in the 1970s that countered the scarcity of affordable housing in Zurich, Karthago's history is deeply entwined with political activism and a desire for alternative living arrangements. During this era, activists sought to create new forms of living that were communal and affordable, a strong contrast to the traditional family and individual households prevalent at the time. Their efforts culminated in 1984 with the establishment of Karthago in a block at Stauffacher, Zurich, marking a significant step in their journey towards creating a living space that was detached from conventional housing norms and real estate speculation. Initially, Karthago was not just a housing project; it was a symbol of resistance against the prevailing urban housing issues. The activists occupied vacant buildings as a political statement, living together briefly, albeit in a self-determined manner. This form of living, however, faced challenges, notably when the original building they occupied was demolished in 1990. Undeterred, the group persisted, and in 1991, they found new hope when the city of Zurich offered them a site in Altstetten. This led to the founding of the Genossenschaft Karthago, a cooperative that would redefine communal living.⁵⁹

The cooperative's approach to housing is fundamentally different from traditional models. It is organized as a non-profit entity, with members joining by paying a share certificate and an entry fee of 10.000 Swiss francs. The residents also contribute a significant capital share upon moving in. This model ensures that housing is kept away from speculative real estate practices and remains affordable for its members. At the same time, if the fee is too much for a new resident, cooperative can divide payment into several parts. In Karthago, the decision-making process is communal, with residents having a say in the utilization and design of common spaces like

⁵⁹ "Generationenwohnen," Direkt auf die Startseite springen, accessed January 14, 2024, <https://wohnforum.arch.ethz.ch/publikationen/forschungsberichte/2021/generationenwohnen.html>.

kitchens, community rooms, courtyards, and terraces through general assemblies. This participatory approach fosters a sense of belonging and collective responsibility among the residents. Interestingly, when asked how new members are accepted into the cooperative, no one was able to give a precise answer. The question was to find out how such a diversity of ages is ensured and whether there are certain rules, but it turned out that decisions are made spontaneously by each cooperative unit and there is no targeted age group. The only ratio that the residents try to maintain is an equal proportion of men and women in the cooperative.

Karthago's diverse community is one of its most remarkable features. It is home to a wide range of individuals and families, including singles, small families, parts of polyamorous networks, and couples.⁶⁰ This diversity necessitates a high level of tolerance and a shared commitment to communal living. Each resident or family unit lives in one of the nine housing units structured as communal living spaces, yet each has the autonomy to participate in the community to the extent they desire. However, despite all the openness, the building has its own unspoken rules. For example, couples are sort of forbidden to live together and even on the same floor, on the one hand apparently to ensure peace of mind in the shared apartment in case of relationship breakup, and on the other hand to keep separate financial contributions from both members of the relationship. Financially, Karthago operates on a model that ensures sustainability and support for its members. The rent covers the costs of shared infrastructure and contributes to an internal subsidy fund, which aids residents during financial difficulties. This system not only facilitates affordable living but also builds a support network within the community.

The cooperative's building houses an incredible array of additional features, including office space, a workshop, a laundry room, a large restaurant with a professional kitchen that offers the opportunity to dine in the cooperative every day, and even a small kiosk in the basement where you can buy essential groceries at any time of day, any day of the week. In other words, the entire building functions like a model of a small village, where each floor has its own community

⁶⁰ "Generationenwohnen," Direkt auf die Startseite springen, accessed January 14, 2024, <https://wohnforum.arch.ethz.ch/publikationen/forschungsberichte/2021/generationenwohnen.html>.

with its own rules, but everyone is in plain sight and in principle should not leave the space to sustain life, as all necessary services can be found within the cooperative. In the cooperative, there is also a space available for external rent,⁶¹ but unlike BG16, this does not involve interaction with the cooperative members. Thus, the diversity of spaces within the cooperative, the authentic design and furnishing of each, as well as the large number of residents and their periodic rotation, ensure a sense of urbanity within the project.

This means that no matter what kind of relationships the members of the community have, everyone must have their own space to live in (there is only one exception to this rule in the cooperative). So even if for instance a young couple lives in the cooperative, they should have different rooms, the same applies to parents and children, each child has its own private space. That is, everyone is addressed as an individual regardless of age and marital status. Meanwhile, all other spaces are shared among the members of the cooperative, and once you are out of your small individual unit, you are constantly in the public eye. For that matter, there isn't much room for mischiefs or dangerous adventures for the kids, as they are almost always under the supervision provided by the co-op members. The same goes for the older residents, and in this arrangement, all residents become providers of care regardless of their choice. This leads to the identification of three levels of privacy. First, the small individual room space, which everyone possesses. Second, the apartment group private space is the area within an apartment for a small group of people, governed by rules applicable exclusively within this cell. Third, cooperative group private encompasses all the communal amenities of the cooperative. Within this latter sphere, everyone has the opportunity to meet and interact with new people while remaining within a safe and comfortable zone.

⁶¹ "Gruppenraum Karthago," Genossenschaft Karthago, accessed January 14, 2024, <https://www.karthago.ch/gruppenraum-karthago/>.

Conclusion.

The analysis I undertook this semester evolved into a deeply personal journey. In the early pages of the second chapter, I emphasized the importance of developing a personal perspective. The process of communicating and interviewing people while visiting various projects significantly influenced my conclusions. Therefore, my judgments about the architecture of spaces are deeply intertwined with my observations of people interacting within these environments, mirroring the atmosphere I witnessed. Living in Switzerland for four years, the prevalence of the elderly in various public spaces – streets, cafes, mountains, and cinemas – seemed to me a natural aspect of life. However, my exploration of causes and effects in the first chapter led to an understanding that what I perceived as ordinary is, in fact, the culmination of countless political decisions spanning at least a century. Architecture, in this context, emerges as the crystallized manifestation of these decisions. It lags behind societal changes, yet does not orchestrate them. The analytical approach of the first chapter resembles a saline solution, whereas the architectural projects in the second chapter are akin to the resulting salt crystals. The solution's composition is ever-evolving, and so too will be the nature of its crystallization. An architect's role, then, is to meticulously trace this evolution and respond with alacrity. While examining merely four projects offers but a glimpse into a nation's architectural narrative, such a microcosmic analysis can still bring insights into the contemporary condition of spaces designed for exchange.

What have we managed to uncover? The analysis in the first chapter reveals that the elderly emerged as a distinct social group with the introduction of pension fund regulations. However, this does not imply that an individual, upon reaching a certain age, instantaneously becomes dependent and frail. Retirees should no longer be seen as a special group with unique needs. Aging is a deeply individual process, and the role of architectural spaces is to highlight diversity and facilitate playful interactions, not based on age, but on varying levels of engagement.

In this light, "architecture for the elderly" is not about wheelchair-accessible paths and ramps, which should be available for all ages anyway, but about providing an rich multisensory

experience with diverse textures, spaces, and forms within the building's scale. It's important to note that this isn't about creating an endless kaleidoscope of entertainment and glitz, similar to senior village depicted in the film "Some Kind of Heaven".⁶² It's about crafting a comprehensive architectural experience, a design thoughtfully detailed to stimulate all senses and promote physical and mental activity, rather than minimising exertion. The environment profoundly influences individuals and their behaviors. Therefore, if an architectural space continuously perceives its occupants as weak, infirm, helpless, and mentally declining, it risks eventually shaping its inhabitants to fit these very molds.

Another emerging trend, borne from the same premise of creating comfort for the frail and weak, is the active segmentation of social groups and the design of spaces tailored exclusively for specific age groups. The issue is not that an architect meticulously tailors a space for a specific function, but rather the risk of overlooking communication in such designs, leading to the isolation of a group. The case studies underscore the critical importance of maintaining transitional spaces that facilitate comfortable social interactions. Similar to the way multisensory spaces leverage forms and textures to offer a diverse spatial experience, the careful modulation between private and public zones can craft areas contribute to social engagement. Achieving a nuanced balance and experimentation with varying degrees of privacy within a structure is crucial to foster a rich tapestry of social connections and encounters, enhancing the human experience within these environments.

As highlighted in the first chapter, the concept of community holds increased significance in Switzerland due to the gradual diminishing of familial bonds. To avoid segregation and the division of people into isolated mini-clusters, inevitably leading to isolation and conflict, architects should aim to foster as diverse interactions as possible. Well-designed spaces can intrigue and be comfortable for a wide range of people, without excluding specific groups. Therefore, the ability to include or exclude someone from a space, to enable or prevent encounters, lies in the hands of the architect.

⁶² *Some Kind of Heaven* (United States: Magnolia Pictures, 2020).

The next question to consider is what examples of social programs could be implemented in Switzerland to improve the demographic situation, and how the findings on architectural spaces for intergenerational connections, as presented in this work, can be implemented into new typologies.

Bibliography:

“165 Rehab, Clinic for Neurorehabilitation and Paraplegiology.” Herzog & de Meuron. Accessed January 10, 2024. <https://www.herzogdemeuron.com/projects/165-rehab-clinic-for-neurorehabilitation-and-paraplegiology/>.

Althaus, Eveline; Glaser, Marie; Pock, Leonie; Otto, Ulrich; Kaspar, Heidi; Greusing, Marie-Hélène. “*ETH Wohnforum – ETH CASE_Dokumentation Generationenwohnen*”. <https://wohnforum.arch.ethz.ch/publikationen/forschungsberichte/2021/generationenwohnen.html>

“Architecture.” REHAB Basel. Accessed January 15, 2024. <https://www.rehab.ch/en/discover-rehab-basel/architecture>.

Ball, Scott. *Livable communities for aging population: urban design for longevity*. Hoboken, N.J.: Wiley, 2012.

Baussels, Marta. “Story of Cities #13: Barcelona’s Unloved Planner Invents Science of ‘Urbanisation.’” The Guardian, April 1, 2016. <https://www.theguardian.com/cities/2016/apr/01/story-cities-13-example-barcelona-ildefons-cerda-planner-urbanisation>.

Bösch, Ivo. *Grundrissfibel Alterszentren 44 Architekturwettbewerbe in der Schweiz 2002-2014*. Zürich : Edition Hochparterre, 2014

Bush-Brown, Albert, and Dianne Davis. *Hospitable design for healthcare and senior communities*. New York: Van Nostrand Reinhold, 1992.

Chermayeff, Serge, and Christopher Alexander. *Gemeinschaft und Privatbereich im Neuen Bauen*, 1972.

Cole, Fey. Essay. In *Intergenerational Practice in Schools and Settings: An Educator's Handbook*, 4–13. London: Routledge, 2023.

“Cost of Living in Bern.” . Jan 2024. Prices in Bern. Accessed January 15, 2024. <https://www.numbeo.com/cost-of-living/in/Bern>.

Dante, Ciampaglia A. “These Architects Sought to Solve the Ultimate Human Design Flaw-Death.” *Metropolis*, September 14, 2021. <https://metropolismag.com/viewpoints/arakawa-madeline-gins-achitecture-death-exhibition/>.

“Ems La Chocolatière.” *altage*, October 17, 2023. <https://altage.ch/etablissement-medico-social/ems-la-chocolatiere/>

“The Future of Families to 2030.” Resolve a DOI Name. Accessed November 1, 2024. <http://dx.doi.org/10.1787/9789264168367-en>.

Genossenschaft Karthago. Accessed January 15, 2024. <https://www.karthago.ch/>.

Goldenberg, Leon. *Housing for the elderly : new trends in Europe*. New York: London : Garland STPM Press, 1981.

Gilroy, Rose. *Planning for an ageing society*. London: Lund Humphries Publishers, 2021.

Grant, Myron A. *Design that cares. Planning health facilities for patients and visitors*. Chicago, Illinois : American Hospital Publ., AHA, 1996.

Hauderowicz, Dominique, and Kristian Ly Serena. *Age-Inclusive public space*. Berlin: Hatje Cantz, 2020.

“Hauptnavigation.” History of social security-Old Age Provision. Accessed January 14, 2024. <https://www.historyofsocialsecurity.ch/risk-history/old-age-provision>.

Heintz, Katherine McMillan. *Retirement communities for adults only*. New Brunswick, N.J. : Center for urban policy research, 1976.

Kotnik, Jure. *Designing spaces for early childhood development sparking learning & creativity*. Mulgrave, Victoria, Australia : Images Publishing, 2017.

Lenzen, Steffi. *Bauen für Kinder = Building for Children Redaktion*. München : Edition Detail, 2016.

Mies, Maria. *Patriarchy and accumulation on a world scale: Women in the International Division of Labour*. London: Zed, 1986.

Nord, Catharina. *Caring architecture institutions and relational practices*. Newcastle upon Tyne, UK : Cambridge Scholars Publishing, 2017.

“Population.” Facts & Figures - City of Zurich, October 25, 2019. https://www.stadt-zuerich.ch/portal/en/index/portraet_der_stadt_zuerich/zahlen_u_fakten.html#:~:text=Zürich%20is%20the%20largest%20city,people%20live%20in%20Zürich%20agglomeration.

Portal, SME. Cooperative company: The characteristics. Accessed January 8, 2024. <https://www.kmu.admin.ch/kmu/en/home/concrete-know-how/setting-up-sme/starting-business/choosing-legal-structure/cooperative-company.html>.

“Reversible Destiny Lofts-Mitaka (in Memory of Helen Keller).” Reversible Destiny Foundation. Accessed August 15, 2023. <https://www.reversibledestiny.org/reversible-destiny-lofts-mitaka-in-memory-of-helen-keller/#>.

Salewski, Christian, and Simon Kretz . “Urbanity of Things. Relationship Potential and Wealth of Relations as Urban Resource.” Essay. In *The City as Resource: Texts and Projects 2005-2014: Chair of Prof. Kees Christiaanse, ETH Zurich*, 167–80. Berlin: Jovis Verlag GmbH, 2014.

Some Kind of Heaven. United States: Magnolia Pictures, 2020.

Soria y Puig, Arturo. “Ildefonso Cerdá’s General Theory of ‘Urbanización.’” *Town Planning Review* 66, no. 1 (1995): 15. <https://doi.org/10.3828/tpr.66.1.1330228470wv7m2u>.

“Unsere Genossenschaft Stellt Sich Vor.” Genossenschaft BG16. Accessed January 15, 2024. <https://www.bg16.ch/>.

Vanderbeck, Robert M., and Nancy Worth. *Intergenerational space*. London: Routledge, 2015.

Swissinfo.ch. “Ageing Population Threatens Swiss Prosperity, Study Warns.” SWI swissinfo.ch, November 15, 2019. https://www.swissinfo.ch/eng/worker-shortfall_ageing-population-threatens-swiss-prosperity--study-warns/45371408.

“Swiss Economy – Facts and Figures.” Eidgenössisches Departement für auswärtige Angelegenheiten EDA. Accessed January 8, 2024. <https://www.eda.admin.ch/aboutswitzerland/en/home/wirtschaft/uebersicht/wirtschaft---fakten-und-zahlen.html>.

Spence, Charles. “Senses of Place: Architectural Design for the Multisensory Mind - Cognitive Research: Principles and Implications.” SpringerOpen, September 18, 2020. <https://cognitiveresearchjournal.springeropen.com/articles/10.1186/s41235-020-00243-4#rightslink>.