

# Masterthese zur Erlangung des Master of Advanced Studies in Real Estate

# Developing a framework to assess urban quality An approach validated through three development areas in the city of Zurich

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# List of abbreviations and acronyms

AfS Amt für Städtebau

ARE Bundesamt für Raumentwicklung

(english - Federal Office for Spatial Development)

BFS Schweizer Bundesamt für Statistik

GIS-ZH Geographisches Informationssystem des Kantons Zürich

(english- Geographical Information System of Canton Zurich)

NFP65 Nationales Forschungsprogramm "Neue urbane Qualität"

RES Rräumliche Entwicklungsstrategie

SBB Schweizerische Bundesbahnen

(english- Swiss Federal Railways)

ZZN Zentrum Zurich Nord

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# **Executive Summary**

Under city development strategies it is to be understood an urban design tool used by a city administration in order to support the controlled growth/ transformation of an area in the respective city.

These strategies are being developed to respond to the actual and future needs of the city on a social, economical, cultural level. One of the main goals it is to provide urban qualities in the newly developed areas.

The aim of this research is to develop a framework through which urban quality can be assessed. In order to achieve this, it is necessary to define what urban quality is in the actual context of society and what indicators define it.

By applying the urban quality evaluation framework to three development areas from Zurich, I attempt to indicate if urban quality is achieved through the formulated goals of development strategies.

Identifying the success factors and understanding the way in which city development strategies work serves to analyse the general quality and effectiveness of the strategies as city planning instruments. Additionally, by doing this, recommendations can be formulated in order to support their future development and application.

The current debate of quality of life vs. standard of living and sustainable urbanism provides a strong base to encourage research in the field of urban quality and supports the actuality of my theme.

# 1 Introduction

This research paper is structured into five chapters. After the introduction, the second chapter defines the main terms used in the paper. The third chapter is an introduction to the development context of Zurich and the three case studies that will be used. The following, fourth chapter presents the research itself. The interpretation of research results together with their future applicability and recommendations are developed in the fifth chapter.

# 1.1 Research question

Urban quality is a complex concept that includes material aspects of space (infrastructure, buildings) as well as its less tangible social and economic aspects (functions). A third dimension taken into consideration are the immaterial aspects generated by the people living in the space (perception, memory, identification).

Current, popular socio-economic concepts make reference to urban quality, often associated with quality of life and understood as a requirement of sustainability. Additionally, it is a component of indexes used to rate the attractiveness of a city. As a consequence, policy makers address it in their strategic goals when planning developments for their cities.

Due to the broad use and importance of urban quality, it is necessary to understand the concept and the issues related to its measurement. Providing a standard set of instruments to assess and monitor it can help measure the impact of interventions and programs related to urban quality and consequently help to better understand its impact in various aspects.

However, defining a method for the evaluation of urban quality proves to be challenging due to the subjectivity of the concept, the complexity of the fields that it relates to, and the many different actors involved. A classic, quantitative method cannot cover this level of complexity, as most of the aspects require a qualitative approach. Consequently, the need to address urban quality with an appropriate method arises. In order to fulfil this methodological need, in this paper I propose a framework based on current theoretical contributions.

The development of former industrial areas represents a perfect case to test a framework that assesses urban quality. In Zurich, a reconversion process began in the 1990's. With

the decay of industry, large areas became available in good locations inside the city. Furthermore, economic and demographic growth had produced an increased demand for space. The opportunity to plan such vast areas, areas that already benefited from a good position within the city, was the perfect context in which to introduce new concepts like urban quality, sustainability and quality of life. These areas had to be integrated into the urban fabric of the city and assigned a function that supports urbanity.

In order to support this re-urbanisation process, an entire planning system was developed using strategic (Leitbild/Entwicklungskonzept) and operational instruments (Regionaler Richtplan,Gestaltungsplan) which had partly been in practise before, and partly newly developed.

While urban quality has been an implicit and explicit goal of city development strategies, adequate definition and measurement have been elusive. The framework method I develop in this paper aims to fill this research gap. Defining a method to assess urban quality has various levels of usability. First of all, having a definition for urban quality helps at theoretical level, in order to answer questions like, *Can urban quality be planned?* or *How can we evaluate buildings and spaces in terms of urban quality?* Thereafter, based on the proposed framework, sensitive fields can be identified through the results of the evaluation. A confrontation between the factors defined within the framework and the ones defined by the policymakers will highlight different perceptions of the concept. Consequently, this can contribute to a better understanding of the sensitive aspects of urban quality and to the improvement of the instruments used to put it into practice.

Furthermore, the continuous growth of the city and its densification represent sensitive problems to which urban planning instruments must respond in an increasingly detailed manner. Because it is expected that the city of Zurich will continue to work with these instruments in the future, proves to be even more important to understand the concept of urban quality, have a definition for it and the method to assess it. These are necessary prerequisites in order to evaluate development strategies before, during and after implementation.

# 1.2 Goals

The aim of my research is to develop a framework method through which urban quality can be assessed.

In order to achieve this it is necessary to define what urban quality is in the actual context of society, for the cities of the 21st century, what indicators define it and to understand the challenges in measuring it.

The applicability of the method developed in the first phase is verified through case study analysis. This assessment attempts to indicate if urban quality is achieved through the formulated goals of development strategies for city of Zurich.

Based on this I finally aim to structure recommendations for the success in reaching urban quality in the field of area development.

# 1.3 Theme delimitation

In existing literature, urban quality is often related to sustainability and quality of life.

The aspects researched in my paper deal with the spatial dimension of urban quality (public spaces, buildings), including the qualities that a space should posses in order to promote urban quality. Urban space and buildings provide more than a mere background for city life. Their relation to social, economic, and cultural factors make it impossible to consider them in isolation. Furthermore, all these factors mutually influence each other and for this reason also these interactions are accounted for by the indicators developed in the framework.

A series of remarks should be made referring to the evaluation of the case studies. For the urban analysis of the three case studies, only completed projects will be taken into consideration. However, these cannot be isolated from their context, in which some projects may yet not have been realised or converted, which could later have an influence over general quality. All evaluations thus represent a provisional assessment, as urban development is a long and iterative process. For the confrontation of the developed framework with the development goals, the goals expressed in the development concept will be taken into consideration (Entwicklungskonzept). As these are the instruments which will also be practically used in the future development of Zurich, my research focuses on these strategic instruments in order to prove – and possibly improve – their value in planning urban quality.

# 1.4 Approach

With regards to research content, the method bases itself firstly on a theoretical study concluded in a framework and secondly on the evaluation of concrete case studies. The methodology follows five steps.

In the first phase, literature research will be used to define what urban quality means in the current context.

In the second phase, an urban quality evaluation framework (matrix) will be defined by assigning indicators to the urban quality factors identified in the previous theoretical study.

In the third phase, the framework will be used to evaluate three case studies in order to validate its applicability.

After the evaluation, the results will be compared with the goals determined for the urban quality of these areas. This part represents a point of view from the practice, relevant for identifying the challenges encountered in defining and evaluating urban quality.

Recommendations and potential applicability of the method are given in the final step.

# 2 Terminology

This chapter defines the key concepts used in the research. After the definition of urbanity, the first chapter provides a short overview of the main urbanity theories, with a focus on the ways in which the definition of urban has changed in the last centuries. The second chapter narrows down the concept, concentrating on the notion of urban quality in the contemporary context.

# 2.1 Urbanity

The word urbanity has its origins in the 16th century French word *urbanité*, from the latin word *urbanitas* derived from *urbanus* and meaning 'belonging to the city''. Urbanity is being often used as a synonym for *urban life*.

The term relates not only to the difference between rural and urban, but also includes attributes that where associated with the urban life of that period, those of *courteousness* and *refinement of manner*<sup>2</sup>. "Urbanity has meant a polished courtesy, politeness, or sophistication and elegance of manners."<sup>3</sup>

This definition offers a hint at the complexity of the concept. Urbanity is a classical term that has been addressed by all the great thinkers on cities in the 20<sup>th</sup> century. Whether from the fields of urban sociology, geography, economy or ethnography, the questions such as *What exactly does urbanity means?* and *What are the characteristics of urban life that differentiate it from the rural one?* were of central interest.<sup>4</sup>

The concept of urbanity has changed over time and what we define as typically urban today is different from what it used to be for the societies of the last century. It has been argued that the urban principle itself is about forming centres and being central,<sup>5</sup> " what does the city create? Nothing. It centralizes creation. And yet it creates everything. . . The city creates a situation, the urban situation, where different things occur one after another and do not exist separately but according to their differences."

In this context, one can conclude that any definition of *urban* will be essentially related to the existence of a *centrality*.

<sup>2</sup> cf. Oxford Dictionary

<sup>&</sup>lt;sup>1</sup> cf. Oxford Dictionary

<sup>&</sup>lt;sup>3</sup> Bosselmann 2008, p. 213

<sup>&</sup>lt;sup>4</sup> cf. Helbrecht 2012, p. 1

<sup>&</sup>lt;sup>5</sup> cf. Helbrecht 2012, p. 6

<sup>&</sup>lt;sup>6</sup> Lefebvre 2003 in Helbrecht 2012, p. 16

Throughout history, the city centre represented a political, religious and economic centre of power. The existence of a significant centrality, in this case the city centre, defined what the designation *urban* relates to. A clear difference was made between city centre and periphery, supported by existing social and economic regulations.<sup>8</sup>

However, the industrial revolution brought a shift in this order. The nineteenth century represented a period of great change in much of Europe and the United States. The new ways of production transformed how and where people worked, leading to a mass migration of people from the countryside to the city. The old city centre did not dispose of the infrastructure necessary to receive this migration, which led to the formation of new centres of living and working at its periphery. 10 Urbanity ceased to be related only to the old city centre. This change of order represented a fertile ground for theoreticians like Karl Marx, Friedrich Engels and George Simmel to start investigating the influences that cities have on the life of their inhabitants. 11 If Karl Marx was more concerned about modernization and change with regards to the character of work, Engels focused more on urban life in the industrial city, <sup>12</sup> each recognizing a great potential in urban density.<sup>13</sup>

The social aspects of urbanity were addressed at the beginning of the 20th century by the Chicago School of Sociology. Its theoreticians Robert Park, Ernest Burgess and Louis Wirth introduced the concept of social space by investigating the ways in which the spatial patterns and areas of cities are shaped and influenced by their residents.<sup>14</sup>

Furthermore, urbanity seen as a "consequence of the city's variety and diversity in a concentrated *heterogeneous* space"<sup>15</sup> has been the research field for city theoreticians like Jane Jacobs and Louis Wirth. In his article Urbanism as a Way of life, Louis Wirth reflects upon the relation between *density* and what we call being *urban*. According to Wirth, what makes a place urban cannot be measured only in terms of the number of people living there. He concluded that the diversity and heterogeneity of the place play

<sup>&</sup>lt;sup>7</sup> cf. Helbrecht 2012, p. 10

<sup>&</sup>lt;sup>8</sup> cf. Helbrecht 2012, p. 10

<sup>&</sup>lt;sup>9</sup> cf. Chen 2013, p. 30

<sup>&</sup>lt;sup>10</sup> cf. Benevolo 2000, p. 801 <sup>11</sup> cf. Chen 2013, p. 31

<sup>&</sup>lt;sup>12</sup> Engels in his book "The condition of the working class in England in 1844" described the living conditions in the new cities as "ruinous and miserable" and considered that the density that characterized them was diminishing the ability of its residents to have an adequate quality of life.

<sup>&</sup>lt;sup>13</sup> cf. Chen 2013, p. 32 <sup>14</sup> cf.. Chen 2013, p. 39

<sup>&</sup>lt;sup>15</sup> Helbrecht 2012, p. 9

a more important role.<sup>16</sup> The image of the modern city, characterized by the segregation of urban life into mono functional districts connected by large transport infrastructures, lead Jane Jacobs to revisit classical urbanity forms. She sees urbanity "not in the design of the major highways nor in large skyscrapers, but rather in the people and their neighbourhoods"<sup>17</sup> The *classical neighbourhood* is seen as a model for urbanity both in terms of built environment (pedestrian alleys, diversity in buildings) and social life (the everyday *community life*).<sup>18</sup>

City centres abandoned in favour of the suburbs regained their function of *centrality* in the second half of the 20<sup>th</sup> century.<sup>19</sup> The transformation of modern capitalism from an economy of production to an economy of consumption,<sup>20</sup> the changes in production technology, and the globalisation of the market lead to the decline of industry in European and American cities. With factories leaving the city, new urban spaces were made available in proximity to the old city centres. The elite and middle classes rediscovered the desirability of this proximity and supported the *urban renewal of* the old city centres. The sociologist Sharon Zukin analyses this phenomena and advances the concept of *gentrification*.<sup>21</sup>

Ilse Helbrecht brings an important contribution to the identification of forms of urbanity in the 21st century with her concept of *new downtowns*.<sup>22</sup> These could be described as representing an urbanity that "can be planned to some degree and thus owes its development to deliberate planning [...] it is defined by design [...] intends to distinguish itself as a representative of a new *performative urbanity*."<sup>23</sup> The decisive force in generating this phenomenon is recognized as the new form of centralisation emerging from the global conditions of contemporary society.

This new world society "evolved from the service society, but relinquishes the demand for a relational social unity and no longer has recourse to an –unrealistic- precondition of homogeneity and internal connectivity as essential constituents for a society."<sup>24</sup>

<sup>&</sup>lt;sup>16</sup> cf. Wirth 1938, p. 2

<sup>&</sup>lt;sup>17</sup> Chen 2013, p. 60

<sup>&</sup>lt;sup>18</sup> cf. Jacobs 1961

<sup>&</sup>lt;sup>19</sup> However, this centrality is not unique anymore - how it has been before the industrial revolution- but a shared one between the various centres of the city

<sup>&</sup>lt;sup>20</sup> cf. Chen 2013, p.61

<sup>&</sup>lt;sup>21</sup> In the context of a consume society, as this old industry areas become available and changed into residences, they become increasingly desirable for healthy people. This has influences on the life of their previous inhabitants and the character of the area.

<sup>&</sup>lt;sup>22</sup> cf.. Helbrecht 2012, p. 1

<sup>&</sup>lt;sup>23</sup> Helbrecht 2012, p. 1

<sup>&</sup>lt;sup>24</sup> Helbrecht 2012, p. 3

This should be seen in the context of the *global city*, a concept introduced by Saskia Sassen<sup>25</sup> to assert that the cities of today are now serving a function that is central for the global economy and that this should also be taken into consideration when planning locally.

As a consequence, in the current society the formation of a centre, considered the ultimate form, has become a question of political process and social, cultural and economic power. Centrality is no longer a product of social order, but more the result of an artificial production of spatial advantages arising from the creation of valuable locations within world society. Due to a high degree of mobility and social diversity, these centralities can now be found all over metropolitan areas in the developed world. New Centralities such as Shopping Malls or Airports, but also reconverted industrial sites, complement older centralities such as the traditional city centre and the railway station. Each of them plays a specific role and catering towards a specific form of urbanity.

# 2.2 Urban quality

The term *urban quality* is constructed by combining the words *urban*, belonging to the city, <sup>28</sup> and *quality*, "a distinctive attribute or characteristic"<sup>29</sup> and "general excellence of standard or level, "<sup>30</sup> together understood as the characteristics that define the quality of the urban environment. But, as Henri Lefebvre states, the urban environment is *l'espace conçu*, *l'espace vecu* and *l'espace perçu*, <sup>31</sup> that involves a multitude of aspects: physical (buildings), economic (functions, services), and socio-cultural (people).

The complexity of the concept is best seen in the variety of definitions provided by experts using it in their daily practice.

"I would define urban quality with three terms: diversity [...] intensity of exchange between people and change." 32

"Urban quality has to do with *quality of life*, quality of *urban space*, *public space*; it has to do with the place you like to be, *identity*", 33

<sup>26</sup> cf . Helbrecht 2012, p. 12

<sup>&</sup>lt;sup>25</sup> cf . Sassen 2005, p. 1

<sup>&</sup>lt;sup>27</sup> Helbrecht 2012, p. 12

<sup>&</sup>lt;sup>28</sup> cf. Chapter 2.1

<sup>&</sup>lt;sup>29</sup> cf . Oxford Dictionary

<sup>&</sup>lt;sup>30</sup> cf . Oxford Dictionary

<sup>&</sup>lt;sup>31</sup> cf. Lefebvre 1974

<sup>&</sup>lt;sup>32</sup> Appendix, Interview Guenther Arber

"Urban qualities are [...] viewpoints of the concept of *urbanity*. [...] urbanity is also a form of abandonment between no relationships at all and so many things that nobody understands. [...] urban qualities are aspects from the bigger idea."<sup>34</sup>

"Urban quality has a lot to do with *emotions*, not only with rooms- or with functionsbut also with feelings going through these rooms".<sup>35</sup>

Despite its complexity, in recent years the concept of urban quality has received increased attention. It has begun to be used in the definition of other current terms (sustainability, quality of life) and is also frequently employed by policy makers and planners when addressing strategic goals for the development of their cities.

In order to better understand the concept, it is necessary to explore the particularities of the context and the reasons behind this increased interest. To this end, two perspectives on urban quality will be explored: the first one is focused on aspects related to economy and sustainability, while the second one focuses on urbanism.

First, the reasons to address urban quality could be to some extent explained through trends in the global economy. <sup>36</sup> In *Consumer city*, it is argued that "the future of the city depends on the ability of particular areas to provide attractive places." Furthermore, as people continue to get richer, "quality of life will become increasingly critical in determining the attractiveness of particular areas". The importance of the urban environment in providing urban quality of life derives from the fact that quality of life is achieved on two levels: "First, at a personal level where each person assesses their own level of satisfaction with life within their life sphere and, second, an evaluation of the components of the city environment which help to create the sense of satisfaction. <sup>40</sup> In this context, an attractive city should dispose of the following four urban amenities: the presence of a rich variety of services and consumer goods, aesthetics and a physical setting (architecture and urban space design), <sup>41</sup> good public services and speed (the ease with which individuals can move around). <sup>42</sup> Consequently, these urban qualities become necessary in order to stay competitive on the world city market and to attract capital and

<sup>&</sup>lt;sup>33</sup> Appendix, Interview Beatrice Aebi

<sup>&</sup>lt;sup>34</sup> Appendix, Interview Simon Kretz

<sup>&</sup>lt;sup>35</sup> Appendix, Interview Regula Iseli

<sup>&</sup>lt;sup>36</sup> cf. Sassen 2005

<sup>&</sup>lt;sup>37</sup> Glaeser et al. 2001, p. 1

<sup>&</sup>lt;sup>38</sup> Glaeser et al. 2001, p. 2

<sup>&</sup>lt;sup>40</sup> Leitman 1999 in Yuan 1999, p. 49

<sup>&</sup>lt;sup>41</sup> The research of Glaeser also reveals that architecturally attractive cities grow faster that unattractive cities

<sup>&</sup>lt;sup>42</sup> cf. Glaser et al. 2001, p. 2

working force for a guarantee of future survival.<sup>43</sup> Urban qualities later become indicators in the formation of global city indexes.<sup>44</sup>

In the environmental context, urban quality is addressed as a premise of sustainable urbanism. Sustainable development should aim for quality of public and private space and the promotion of urban and architectural quality.<sup>45</sup> Theories like New Urbanism and Smart Growth make reference to traditional urbanism, where urban quality is described as walkability, connectivity, mixed use and diversity, quality in architecture and urban design, increased density, minimal environmental impact.

Finally, the second perspective on urban quality is the one that focuses more on the built environment, addressing themes of urbanism and architecture.

Conclusive research into a definition of the meaning of urban quality in the contemporary context- with a focus on the metropolitan regions of Switzerland- was conducted by the interdisciplinary group NFP 65. With a deep understanding of what urbanity means in the current context and the factors that shape it, they define seven urban quality factors: centrality, accessibility, usability, adaptability, appropriation, diversity and interaction. <sup>46</sup> Especially, aspects such as architecture and urbanism design, aesthetics and perception of the public space, as well as sustainability and economic feasibility are taken into account in the development of these new concepts.<sup>47</sup>

<sup>&</sup>lt;sup>43</sup> cf. Florida 2002

<sup>&</sup>lt;sup>44</sup> To name a few: City Attractiveness Index from Marc M&A, Cities of opportunity from PwC

<sup>&</sup>lt;sup>45</sup> cf. Thierstein et al. 2005, p. 22

<sup>&</sup>lt;sup>46</sup> cf. Angelil et al. 2014

<sup>&</sup>lt;sup>47</sup> cf. Angelil et al. 2014

#### 3 Case Study: Area development in the city of Zurich

This chapter introduces three case studies from Zurich's development areas. Since the validation of the method developed in this paper is based on them, a better understanding of their relevance and of the context in which they were developed proves to be necessary. The first part of the chapter provides a general introduction to the development of former industrial sites in Zurich, with a focus on the processes and instruments developed in order to support it. The second part focuses on each of the three development areas, offering information about their particularities and processes of development.

#### Context of the area's development initiatives 3.1

In the beginning of the nineties, the industry decay which affected most industrial cities in Europe and North America was also present in Zurich. At this point, 80% of the industrial sites in Zurich were no longer necessary for production. Ten million square meters of industrial surface were free in Switzerland and the prognosis was that another 20-40 million square meters of industrial surface would be put to other uses within the next ten years. 49, Die aktuellen Ruinenfelder nicht mehr genutzter Industrie- und Verkehrsanalgen sind grösser als alle kunsthistorisch anerkannten Ruinenstätten der Antike."50 These areas, crossed by a dense network of regional traffic, were distinguishable by their fenced-off sites, difficult pedestrian accessibility, lack of green areas, noisy traffic and pollution. Additionally, they were marked by the presence of office and service buildings built in the preceding decades as a result of land availability in these industrial areas. Unfortunately, they did not contribute to the appeal of the area, best described in their following description, "nicht übermässig hoch, dafür sehr tief, so dass sie künstlich belichtet und belüftet werden müssen, mit Zäunen gegen die Umgebung abgegrenzt, mit Videokameras überwacht, aber trotzdem an den Eingängen städtische Repräsentation vorspiegelnd, mit Triumphportiken, durch welche niemand eintritt, weil ihre eigentliche Verbindung zur Welt die Ausfahrt aus der Tiefgarage ist.",51

The 1980's had been an euphoric time for developing office buildings, but the economic crash in 1989 effected the real estate market, especially in the office space segment,

 <sup>&</sup>lt;sup>49</sup> cf. Schweizer et al. 1994 in Scholz 1995, p. 17
 <sup>50</sup> Bärtschi 1993, S.16 in Scholz 1995, p. 17
 <sup>51</sup> Blum et al.1993 in Scholz 1995, p. 90

leading to more than 409'242 square meters of vacant office space in Kanton Zurich.<sup>52</sup> This additional sensitive issue had also to be considered when planning the future of the industrial sites.

Despite all this, their central position in the city and their good accessibility made the newly available buildings and sites very attractive for investments.

#### 3.2 Processes and instruments in area development

As the newly available sites offered the opportunity to plan new parts of the city, questions arose regarding how to best deal with their history, what could be possible future uses, who should be involved in their development, how to deal with the contamination of the land and how to make them sustainable for the future. Addressing these problems highlighted the need to create specific planning instruments.

The existing planning and building laws, at both cantonal and national levels, did not include any special specifications or instruments for dealing with the conversion of industrial areas<sup>53</sup>. Furthermore, a strong hierarchical organisation in terms of planning did not include a culture of partnership between the different actors involved.

The only special planning instruments available that allowed specific solutions were the local plan<sup>54</sup> and special building regulations.<sup>55</sup>

In 1992, the City of Zurich revised the *Building code*, <sup>56</sup> paying particular attention during their discussion to the future of industrial areas. In this context, Ursula Koch, Principal at the Building Authority, pled against a liberalisation of the local plan and the special building regulations, which would have had as a consequence the landowners defining only profitable uses for their properties, without addressing uses that could improve the urban quality locally and at the city level.<sup>57</sup> She called for the involvement

 <sup>&</sup>lt;sup>52</sup> cf. Neue Zürcher Zeitung 1995 in Scholz 1995, p. 90
 <sup>53</sup> cf. Scholz 1995, p. 91

<sup>&</sup>lt;sup>54</sup> in german Gestaltungsplan is a local building law, developed at the initiative of the landowner or the authorities, further approved by the authorities, superposing locally a zoning plan and building code. It allows deviation from cantonal and communal rules for special cases. It defines the number, position, exterior dimensions and use of future projects as well as its connection with the exterior surroundingsdesign of urban space, infrastructure. It was actually an instrument developed in the 1970s as a reaction to the fact that traditional planning instruments could not cope with the rapid urban development of that time.

<sup>&</sup>lt;sup>55</sup> In german Sonderbauvorschriften- represents also a possibility to deviate from the prescriptions of the zoning plan, but it is necessary to occur in the entire concerned area. The main difference between Gestaltungsplan and Sonderbauvorschriften is that the last is not binding- either one builts in the entire area according to this new prescriptions or the existing building laws and zoning plan are respected.

<sup>&</sup>lt;sup>56</sup> in german *Bauordnung* 

<sup>&</sup>lt;sup>57</sup> cf. Scholz 1995, p. 91

and influence of the authorities on the planning process, with the perspective that such a collaboration would contribute to a successful development for all parties.<sup>58</sup>

The will of the public authorities to be involved in the planning of these industrial areas should be understood as an incursion into a landscape of private initiatives and developments that was started in the nineties by mostly private owners. Studies like Winti Nova, developed for the industrial site from Winterthur, where most of the industrial heritage was proposed for demolition in order to make place for new buildings, garnered a lot of public criticism. By their presence in the city (size and history) the industrial areas were considered a public good. This conflict represented the turning point at which these developments stopped being planning processes and instead became political processes.<sup>59</sup> It was the beginning of *cooperative planning*<sup>60</sup> in area development in Zurich, with industrial areas to be developed in cooperation with a variety of different actors (landowners, investors, municipality). City of Zurich intended to provide for these areas development strategies. Providing technical instruments and initiating cooperation between the involved actors proved to be insufficient, however, to guarantee the success of these developments, as their context and particularities differed vastly from one another.

In order to better assure these needs, the *area management*<sup>61</sup> department was created. Ten development areas were defined and each was attributed an individual management office. (cf. Figure 1)

Among other functions like operative project management for the public space and infrastructure and communication mediation between the different partners, one main function of area management was the strategic one. Following the philosophy that actions taken in order to successfully transform an area have to be contextual and related to the special needs of that area, individually customized development concepts<sup>62</sup> were created for each of these areas. These formulated goals were to be achieved using the development strategy in which urban quality was presented as a general goal.

<sup>&</sup>lt;sup>58</sup> cf. Scholz 1995, p. 91 <sup>59</sup> cf. Lodater 2005, p. 10

<sup>&</sup>lt;sup>60</sup> Kooperative Entwicklungsplanung

https://www.stadt-zuerich.ch/hbd/de/index/entwicklungsgebiete/kooperative\_planung.html[last\_accessed at 15.08.2014]

<sup>&</sup>lt;sup>61</sup> Gebietsmanagement

https://www.stadt-zuerich.ch/hbd/de/index/entwicklungsgebiete/gebietsmanagement.html[last accessed at 15.08.2014]

<sup>62</sup> in german Entwicklungskonzept

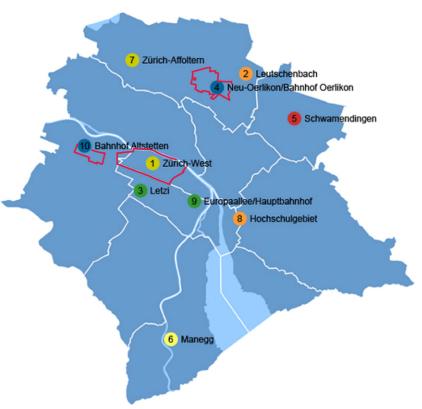


Figure 1: Development areas of the city of Zurich, http://www.stadt-zuerich.ch (2014)

# 3.3 Development areas

## 3.3.1 Neu Oerlikon

Neu Oerlikon<sup>63</sup> is a development area situated north of the Oerlikon Railway Station.

This area, previously the Maschinenfabrik Oerlikon (MFO), was the site of the biggest Swiss industrial reconversion project of the 1990's. The 63-hectare territory was situated in a strategic traffic position between the city centre and the airport and benefited from a proximity to the Oerlikon Train Station (cf. Figure 2). The affordable land made available by the industrial decay stimulated many investment opportunities in the area.

Prior to development, the area could be characterized by its homogeneity in terms of buildings and use-industry and related services. This homogeneity also extended to the ownership structure: only 4 landowners were involved.

With regards to development processes, in 1989 the private owners presented the city with a first development concept for the area: "Chance Oerlikon 2011." In it a large

<sup>&</sup>lt;sup>63</sup> during the development process in the nineties, reffered as Zentrum Zurich Nord (ZZN)

part of the site was still allocated to industry and services, alongside a greater vision of providing 12000 working places and housing for 5000 people. An idea competition was organized in 1992 to address the question of the industry patrimony. The first project proposal suggested a tabula rasa of the industrial site and of the role of the municipality in the development process. Thereafter, a long process followed until finally, in 1994, the landowners, the city of Zurich and SBB joined together in a proposed a development concept that ended up being included in the special building regulations for the area in 1998.

The vision developed by the landowners and planners understands ZZN as ein "neuer, lebendiger, der Öffentlichkeit allgemein zugänglicher, weitgehend vom Privatverkehr befreiter, gemischt genutzter Innenstadtteil mit intensiver Park- und Alleendurchgrünung" with the goal of creating a town quarter with urban life quality that would allow it to be a second centre of Zurich.



Figure 2: Aerial view of Neu Oerlikon, Desair AG (2004), http://www.stadt-zuerich.ch (2014)

<sup>&</sup>lt;sup>64</sup> cf. Scholz 1996, p. 94

<sup>65</sup> cf. Scholz 1996, p. 95

<sup>&</sup>lt;sup>66</sup> cf. Lodater 2005, p. 10

<sup>&</sup>lt;sup>67</sup> cf. Roth, 1996, p.24 in Scholz 1996, p. 18

#### 3.3.2 Zurich West

Zurich West, mostly referred to during the development process as the Sulzer Escher Wyss Area, the name of the main industrial site present there, is a development area situated between the Bahnhof Hardbrücke at the south, the Limmat in the north, the Viadukt in the east, and the Hardturm stadium to the west. (cf. Figure 3)

In the nineties the area represented a spatial mix of large, publically inaccessible industrial sites like Sulzer Escher Wyss, services (the distribution centers from Coop and Migros), a football stadium, office buildings<sup>68</sup> and infrastructure networks.<sup>69</sup> One of the first projects to be developed in Zurich West was the Technopark. Designed in the 1980's, the building complex offered a surface of over 60000 square meters for high tech private enterprises to undertake research, development and production. 70 As in Oerlikon, companies like Sulzer Escher Wyss found themselves in the nineties with the biggest reserve of land in the city, and huge opportunities for investment.

With regards to a development process, a local plan was developed and approved in 1995 for the Sulzer Escher Wyss area after many years of discussions and negotiation between the landowners and the City of Zurich authorities. The landowners were especially concerned about permissible future uses, since these would constitute a decisive factor for the land price. Furthermore, the perimeter of the developed area was strictly limited to the perimeter of the industrial site, without taking into consideration its adjacent areas or its integration into the city urban structure. The plan garnered critique and a cooperative development process was initiated with the Stadtforum in 1997. The discussions started with a series of workshops between the different actors involved in order to gain a better understanding of the needs and the steps to be taken. A planning culture<sup>71</sup> was developing that later would be integrated into the future development processes in Zurich.

This step was extremely important considering that, with more than 90 landowners, the ownership structure in Zurich West was more complex than in Neu Oerlikon.<sup>72</sup>

The development concept was published in 2000. Alongside a wish to transform Zurich West into a quality urban district from Zurich, concepts like sustainability were mentioned as key development goals.

<sup>68</sup> cf. Chapter 3.1. <sup>69</sup> cf. Eberhard 2013, p. 9

<sup>&</sup>lt;sup>70</sup> cf. Scholz 1995, p. 88

<sup>&</sup>lt;sup>71</sup> cf. Eberhard 2013, p. 9

<sup>&</sup>lt;sup>72</sup> cf. Hofer 2013, p. 13

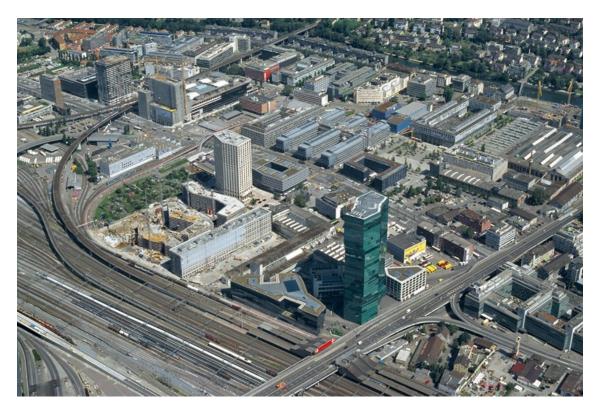


Figure 3: Aerial view of Zurich West, Desair AG (2012), http://www.stadt-zuerich.ch (2014)

# 3.3.3 Bahnhof Altstetten - Juch

The development area Banhof Altstetten - Juch is situated north of the Altstetten railway station (cf. Figure 4). Taking advantage of its strategic position in terms of connectivity between the train rails and the highway A1, the area developed during the twentieth century mainly as an industry and services area. The image of the area in the beginning of the nineties was marked by the presence of service buildings from the 1960's<sup>73</sup> and the absence of a coherent urban space. A revision of the zoning plan allowed the change in area profile from an industry-business district to a business-services one. In recent years, important firms (IBM, Bank Julius Bär) or education institutions (EB) chose Altstetten as their location. In order to further stimulate these investments by using the area's good transport connection potential, a development process was initiated in 2001. The main goals were to increase the attractiveness of the area and to activate the pedestrian accessibility from the surroundings, with a focus on the urban space. The ownership structure is characterized by a large number of landowners, notably SBB.

<sup>&</sup>lt;sup>73</sup> cf. Chapter 3.1.



Figure 4: Aerial view of Altstetten - Juch, Desair AG (2012), http://www.stadt-zuerich.ch (2014)

# 4 Research

The present paper aims to identify a framework to assess urban quality and then to validate it with the three case studies. The first part of the chapter introduces the research strategy- research methods used, existing approaches and identification of the research challenges. The second part represents the developed method – the framework, with a description of its indicators. The validity of the method will be tested in a third part with the help of the three case studies mentioned in the previous chapter.

# 4.1 Research strategy

# 4.1.1 *Research methods*

The following research methods were employed in order to develop an evaluation method for urban quality.

With the help of Literature review, information was gathered in order to understand what urban quality means, what the different perspectives on the concept are and what the challenges of trying to measure it could be. Due to its complexity- deriving from its subjective and objective character- the method for its evaluation has specific characteristics. These aspects were researched by reviewing literature from fields of similar complexity, for example that of the quality of life. After the literature review, a clear image of the particularities of the evaluation method and of the attributes it has to fulfil was formed. Additionally, a list of urban quality factors was defined and indicators were attributed to each of them.

In order to verify the applicability of my method, I decided to apply it to concrete case studies from Zurich. Three development areas from the city of Zurich were chosen based on a set of criteria that fulfils the *case study research method* requirements, namely "the study is detailed and intensive [...] the phenomenon is studied in context [...] the use of multiple data collection"<sup>74</sup> They are relevant for the evaluation of urban quality for the following reasons. First, for all three urban quality was expressed as a goal at the beginning of the development. As they were all a part of former industrial areas, the aim was to integrate them into the urban context of the city and to have them become centralities for the city. Furthermore, authorities coordinated their development with the advantages of good urban planning and management. Secondly, they were

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<sup>&</sup>lt;sup>74</sup> Ritchie et al. 2003, p. 52

developed in the last years, that is to say in the context in which new urban qualities were defined.<sup>75</sup> They can also be put in the context of the global city, as Zurich occupies an important place on the global scene.<sup>76</sup> Finally, the scale of their development, which implied a large number of actors involved and a detailed planned process, offers a large source of data collection.

The third research method used is a partially structured *Experts Interview*. According to theories of qualitative research, interviews "are particularly well suited to research that requires an understanding of deeply rooted or delicate phenomena or response to complex systems, processes or experiences because of the depth of focus and the opportunity they offer for clarification and detailed understanding." Experts are chosen for use of concepts like urban quality in their practice: from experts responsible to building development strategies at the city level, to experts in charge of area development strategy and management. The theoretical component of urban quality was covered by interviews with experts involved in the latest research into this theme and active in the academic field. They contributed to the consolidation of the findings from the first method by confirming the urban quality factors list and enriching it with additional factors. By providing professional insights from the context of the development areas chosen as case studies, they helped me make a stronger relation between the case studies and urban quality.

# 4.1.2 *Relevant existing approaches*

Urban quality is addressed in the research mainly in the context of quality of life. The field of sociology offers a broad range of studies on the relation between individuals and space.<sup>78</sup>

The National Research Program (NFP 65) provides a large contribution to the research of urban quality with its focus on the physical component and the new context. In 2005, the Federal Assembly commissioned the Federal Office for Spatial Development the works for *Raumkonzept Schweiz*- a project aimed at defining strategic key aspects for

<sup>&</sup>lt;sup>75</sup> cf. Chapter 2.1.

<sup>&</sup>lt;sup>76</sup> cf. Chapter 2.2. consumer city

<sup>&</sup>lt;sup>77</sup> Legard et al. 2003, p. 139

<sup>&</sup>lt;sup>78</sup> an interesting study to be mention is the work of William H. Whyte - *The Social Life of Small Urban*. He analysis the reasons behind some succeful urban places- measure in thei capacity to bring people together, concretize with recommendation about how to make the city more liveable.

the future spatial development of Switzerland.<sup>79</sup> In this context, the NFP gathered an interdisciplinary team that researched urbanisation processes during over years in order to develop concepts and strategies for a new understanding of urban quality. A revision of this research contributed to my definition of the factors and indicators of urban quality.

In terms of methodology – building a framework to evaluate the performance of complex concepts as sustainability on concrete case studies – a contribution is brought by the study commissioned by Zürcher Kantonalbank to an interdisciplinary group (ETH Zurich and the planning and engineering office Ernst Basler + Partner). The study represents an in- between evaluation of Zurich West in terms of sustainability and is presented in the form of *Is-Should be* analysis- comparing the expressed goals in terms of sustainability with the reached results.<sup>81</sup>

# 4.1.3 *Challenges in evaluating urban quality*

"Today, the urban phenomenon astonishes us by its scale; its complexity surpasses the tools of our understanding and the instruments of practical activity. It serves as a constant reminder of the theory of complexification, according to which social phenomena acquire increasingly greater complexity".<sup>82</sup>

"Quality like beauty lies in the eyes of the beholder."83

Urban quality is a complex concept that encompasses the material aspects of space (infrastructure, places, buildings) as well as economic and social factors (uses, demography, density). Furthermore, these aspects are accompanied by an immaterial aspect (perception, memory, identification) which make urban quality an extremely complex concept. Consequently, the set of indicators developed to address it must be broad enough to include all these relevant aspects.

In this context, one possible solution could be a mixed method that uses both qualitative and quantitative indicators: "Many of the questions that need to be addressed require measurement of some kind but also greater understanding of the nature or origins of an issue."

<sup>&</sup>lt;sup>79</sup> cf. Angelil et al. 2014

<sup>81</sup> cf. Thierstein et al. 2005, p. 5

<sup>&</sup>lt;sup>82</sup> Lefebvre 2003, p. 45

<sup>83</sup> Yuan et al. 1999 p. 3

<sup>84</sup> Ritchie et al. 2003, p. 38

Urban quality is something specific, it relates to culture and to the context of a space. In this context, one can argue that a method using qualitative indicators could help in this direction because they capture the experience of the individuals. However, for some aspects of urban quality, density for example, quantitative indicators exist that can accurately and precisely be expressed with numbers. The interpretation of this quantitative data faces the challenge of finding the absolute value (for example, what is the optimal density?). In order to overcome this challenge, it becomes important to be able to evaluate within the context. The method should allow an interpretation according to the context that provides a consistent guideline and helps to develop specific decisions for specific situations.

As mentioned in the previous chapter, <sup>85</sup> besides the complexity of the term due to the different aspects that comprise it, one notices the lack of an "official definition" when the concept is interpreted differently depending on the context in which it is used. It has been proven that when using a complex concept, in order to make it more understandable and practical to use, it is important to break it into more specific parts, which are best related to current understandings. In this case, for example, breaking urban quality down into buildings, alleys, and interactions between people will render the whole concept more accessible.

Finally, to conclude the last two observations, a method to measure urban quality should set the background for a clear definition of the indicators used (in order to be clear what are we looking at, what conditions should be fulfilled, what qualities they should pose), offer the possibility of combining quantitative and qualitative analysis and at the same time offer a flexibility of interpretation according to the according context.

<sup>85</sup> cf. Chapter 2.2.

#### 4.2 A framework to assess urban quality

On the basis of the research findings from the previous chapters, I have defined a framework to assess urban quality.

In the qualitative research, the analysis method framework is defined as a "matrix based analytic method which facilitates rigorous and transparent data management [...] used to classify and organise data according to key themes, concepts"86

The choice of a framework method could be justified by those characteristics that overcome the challenges<sup>87</sup> related to the particularities of the concept *urban quality*: it allows me to reduce the complexity of the concept by breaking it into more understandable concepts that can be qualitatively or quantitatively evaluated while maintaining an overview of the general concept.

The first step in developing the framework, created with the help of the input gained from the literature review and expert interviews, was to break the concept of urban quality into eight different factors. The eight identified urban quality factors are, mainly based on the findings of the NFP research group: centrality, accessibility, usability, adaptability, diversity, appropriation, interaction and design.

In the next step, I sought to further reduce the concept's abstraction by allocating quantitative or qualitative indicators to the factors according to their nature. Also, a short description is provided for each indicator. An additional descriptive list, which provides in depth explanations of the eight urban quality factors, is an added document for the framework.

Finally, for the evaluation of these indicators a rating system from 1 to 8 is attached, where 1 signifies Very Low and 8 Very High.

The next section represents the descriptive list. The urban quality assessment framework is found at the end of the chapter. (cf. Table 1)

Ritchie et al. 2003, p. 220cf. Chapter 4.1.3.

A descriptive list of the urban quality factors

# 4.2.1 *Centrality*

Centrality means that a situation is significant for many users. The more users need this place in their life, the more central is the place.<sup>88</sup>

# **Indicators**

Logistic centrality- density of the transport system, connectivity with the rest of the city Functional centrality- density of functions around the infrastructure knots

A high centrality is defined by its combination of high logistic centrality and high functional centrality.

Everyday life/temporary centrality- existence of places that represent a centrality in the everyday life of different users (parks, meeting points, old city centre)

Symbolic centrality- degree of meaning possessed by the space for individual or collective identification

In the course of history, the function of centrality was mainly associated with the city centre. The city centre contained all functions necessary for its inhabitants of all social classes and it was defined as a result of operating distances.<sup>89</sup>

At the beginning of the nineteenth century, mobility significantly impacted centrality. Functions were dispersed and within the territory new centralities emerged. The city centre lost significance and functionality in relation to the city as a whole. As a response to this new dynamic, growth had to be planned and the concept of centrality reconsidered. Researchers from fields like economics, geography and city planning started to investigate the territorial relationships among communication flows, population wealth and land use.<sup>91</sup>

As centralities emerge from the overlapping of spatial (logistic) and relational (functional) networks, a central place is understood as one that is accessible and supports a high density of uses. The premises for centrality, therefore, are good

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<sup>88</sup> cf. Angelil et al. 2014

<sup>89</sup> cf. Helbrecht 2012

<sup>&</sup>lt;sup>91</sup> An important theory from this time is the one of central place developed by the German geographer Walter Christaller in 1933. Christaller reaches to model the patterns of settlement locations by examining their functions.

transport connection, interconnectivity at different levels and scales, and a pooling of functions in proximity to transport knots.

Centrality presents itself on different scales. A larger scale centrality, however, does not necessarily guarantee the quality of a lower scale centrality. For instance, an airport could be extremely central on a global scale but have no centrality for the neighbour city. When spaces are addressed to specific users they can limit the access of others, this indicates why good connectivity itself does not guarantee centrality.

The quality of connectivity alone does not represent a sufficient condition for the emergence of a central place. If a place is very good connected, by not happening nothing there it doesn't create a quality urban space. Consequently, activating the potential for synergy between available infrastructure and existing programs in a specific place is what leads to a successful urban factor. An attractive place in terms of infrastructure that fails to relate to the context or to fulfil the needs of the area's users will not generate a centrality. A pertinent example is found in Bucheggplatz which, despite being the most central place in Zurich in terms of logistic centrality, lacks the functional centrality it would need to be perceived by the majority of people as a quality urban place.

# 4.2.2 *Accessibility*

Accessibility means that a situation stays open in terms of time and space for different users. 92

## **Indicators**

General accessibility – accessibility of the area from the surroundings, existence of connecting bridges or passages if highways or railways are present at the border of the area

Porosity – accessibility within the area

A high porosity is reached when the following conditions are fulfilled:

- large number of physically accessible public spaces
- identifiable, perceptible, visible accesses to the public spaces
- large number of public ground floor functions
- a dense, non hierarchical network of local public infrastructure

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<sup>92</sup> cf. Angelil et al. 2014

- generous infrastructure of pedestrian and cycling paths and passages

existence of passages through large building blocks
 minimal selectivity- reduced number of gates, surveillance cameras, social controls, conditioned entrances to public buildings

The different functions of a space (city) are connected and made accessible to its inhabitants and users through public urban space. Urban public space is to be understood as local public infrastructure (streets, pedestrian paths, cycling paths), parks, and public buildings.

The urban spaces together with the buildings that define them exert a powerful influence on human behaviour. The way that people move and interact in space is directly related to the connections that the space enables. Space has the power to connect but at the same time also to segregate. <sup>93</sup>

The connecting function is supported by the infrastructure network, which constitutes the physical component of accessibility. In addition to infrastructure, accessibility is also defined by the relation between adjacent volumes (buildings). Buildings can be accessible or not, they can allow or deny the flow of public space.

In order to achieve a good level of accessibility, the accessibility to and through the public spaces should be non-restrictive and free. Regulations in terms of selectivity, formal or informal, influence the accessibility of a place. The admission or exclusion of a certain category of people from a space influences the freedom of movement through it can have larger scale effects. The selectivity can be temporary (a park that stays closed between certain periods of the day), or it can be conditioned (in order to cross/enter a building one needs to buy something or work in that building).

Streets, parks, public places and public buildings should have the least selective access for the public and their configuration should encourage people to use them.

Professional Companies like *The Space Syntax* offer a professional evaluation of accessibility. Their approach is built on a set of evidence-based methods that forecast proposed policies and strategies. Space Syntax spatial analysis software transforms a street pattern into a network graph by disaggregating the network at the intersections. The "spatial accessibility value" assigned to each segment reflects the

Syntax spatial analysis software transforms a street pattern into a network graph by disaggregating the network at the intersections. The "spatial accessibility value" assigned to each segment reflects the complexity of routes from that segment to all the others within the system. In this way, plans and designs will work to create the social, economic and environmental benefits that they are expected to.

# 4.2.3 *Usability*

Usability means that a situation is suitable for the demands of different users. 95

## **Indicators**

Multiple usability- capability of a space or building structure to be used for multiple purposes

Usability as a necessary attribute of urban space and buildings was first discussed in the work of the Roman architect Vitruvius, De Architectura. He defines usability together with beauty and stability as the three main requirements a building should fulfil.<sup>96</sup>

Elaborating on this idea, usability can be described as the coordination between use and urban form. When describing an urban/ architectural structure or space as usable, we refer to its formal capacity to allow for a large variety of activities and uses. It fulfils its constructed purpose and is adaptable to new ones. By meeting this requirement, it is ensured that no specific group of users or uses are granted absolute priority, and diversity<sup>97</sup> in the urban context is supported.

Two levels of usability can be distinguished: the elemental level where it is usable itself, and the contextual level where it is also usable in the context in which it has been built. Furthermore, to serve its purpose, a constructed element must fulfil its constructive function and at the same time support the usability of surrounding structures. For example, a park is usable when its recreational function is fulfilled (people can frequent the park in order to relax or play) but also when it supports the usability of the surrounding structures (on their way to the park people can continue the liveability of the adjacent streets, for example they can stop at the nearby cafe). In this sense, while planning buildings and urban spaces they should always be seen as components of a greater structure (their surroundings) and be developed taking their context into consideration.

In addition to the pure usage of a space, Usability also plays an important role in sustainability. If buildings are designed to receive different uses, at a future point in

<sup>95</sup> cf. Angelil et al. 2014

<sup>&</sup>lt;sup>96</sup> De Architectura is a latin tracty about architecture written in the first century before Christ. It is mainly referred to for the trilogy utilitas, firmitas and venustas (usability, solidity and beauty) defined by Vitruvius to describe a architecture.

<sup>&</sup>lt;sup>97</sup> cf. Chapter 4.2.6

time they can be adapted to fulfil other requirements. In this way, value is added through usability.

The Josefswiese park in Zurich represents a good example of multiple usability in an urban space. The park is clearly configurated as a space and its various spatial elements( trees, ground surface) allow zonning, meaning that different activities can take place in the same time.

# 4.2.4 *Adaptability*

Adaptability means that a situation is flexible and adaptable to the changing demands and needs of different users.<sup>98</sup>

## Indicators

General flexibility of buildings- capability of the entire building to receive a new use, generally determined by its structure, floor height, disposition of installations, facade concept

Flexibility of ground floor – the capability of publicly accessible ground floors to be adapted in order to be used as shops, ateliers or cafes. The following conditions should be fulfilled: direct connection to the street or a public space, appropriate room height, flexible facade conception, appropriate ground floor layout and size.

An adaptable building or space has the capacity to adapt to changing requirements and still remain intact in terms of general form and structure; it can handle transformations and changes without the need to be demolished or replaced by another structure. Furthermore, it can receive functions that at the moment of the construction are not yet known or defined and which can later be easily integrated.

Adaptability allows changes with regards to the use, to the built condition or to the meaning of the building or urban space. High adaptability in terms of urban space is facilitated by a free spatial configuration of streets and parks. In this sense, not all spaces should be planned in detail but should rather allow for possible future uses that might emerge from the potential future needs of their users.

<sup>98</sup> cf. Angelil et al. 2014

Apart from its standalone benefits, *adaptability* plays an important role in fulfilling *accessibility*<sup>99</sup> as a quality factor. It addresses aspects related to the connection between buildings and public space. In this context, the adaptability of ground floor spaces plays an important role as it is simultaneously the boundary and the passage to public space. From the flexibility of ground floors comes the possibility to activate and stimulate exterior adjacent spaces, (for example during public functions) and in this way reach an even higher level of accessibility.

Adaptability as an urban quality factor can stimulate other urban quality factors. Diversity, <sup>100</sup> the possibility of adapting a place in order to receive different uses which then allows for more diversity, and *appropriation*, the possibility of adapting a place over the time to meet user's changing needs, are two such concepts.

# 4.2.5 *Appropriation*

Appropriation designates the ability of different users to actively claim a situation through their practice.<sup>101</sup>

# **Indicators**

*Use appropriation* – signs of modification to the space or its constructed elements generated by inhabitant use

*Identification*- existence of historical buildings, places with identity

A space is appropriated when users adapt it to respond their needs and identify themselves within it.<sup>102</sup> Having the possibility to actively co-determine and co-design the space facilitates the identification and appropriation processes.

In order to achieve a high degree of appropriation there are a series of aspects that need to be considered.

First, in terms of physical space, appropriation develops organically in a space that already benefits from other urban qualities. Spaces are more liable to be appropriated when they are *accessible*, that is, when users have freedom in use and action (*adaptability*).

<sup>&</sup>lt;sup>99</sup> cf. Chapter 4.2.2

<sup>&</sup>lt;sup>100</sup> cf. Chapter 4.2.6

of. Chapter 101 cf. Angelil et al. 2014

<sup>&</sup>lt;sup>102</sup> cf. Thierstein et al. 2005, p.51

This process can be stimulated through design and planning, as it has been described in the case of accessibility 103 and adaptability. 104

Identity and identification is the second premise for appropriation. In order for people to identify themselves with a place, the place should already possess an identity and have its own specific character. The presence of historical elements stimulates the identification processes and facilitates an understanding of the place by making the user aware of the potentials and forces that shaped it. However, the way these elements are integrated in a new development can play a decisive role. When developing new areas, one cannot assume that simply preserving historical elements or artificially reconstructing similar ones will be a recipe for identity. The way these elements are integrated in the context and the dialogue they establish with the new buildings play a more important role. All in all, identification remains an extremely subjective process. Although it can be stimulated by building and designing measures, these alone cannot completely determine it.

The third aspect to be considered when speaking about appropriation is time. The acceptance of public buildings and places by their users takes time and one must be aware that appropriation can be a long process. However, this does not exclude interventions that may facilitate it. The element of time is not only a factor in reaching appropriation, it should be also considered in the process of observation. The process of appropriation should be observed and monitored starting with the completion of the building and then, when the need for stimulation is observed it should be encouraged through specific measures.

#### Diversity<sup>105</sup> 4.2.6

Diversity means that different uses and users are present in a situation.

#### Indicators

Social diversity- diversity of people (age, income, profession, culture) Functional diversity- diversity of uses, functions, social and event infrastructures *Spatial/buildings diversity-* diversity of housing typologies Property/Investment diversity – diversity in investment (public, private)

<sup>&</sup>lt;sup>103</sup> cf. Chapter 4.2.2 <sup>104</sup> cf. Chapter 4.2.4

<sup>105</sup> cf. Angelil et al. 2014

Urbanity can described as the co-existence of the diverse and the different. The presence of different cultures, functions, uses and spatial typologies constitutes urban diversity. In order for diversity to take place, it needs to be stimulated by a fertile framework: a physical space must be available for different needs, have the quality of *flexibility* <sup>106</sup> and be receptive towards appropriation. 107

A first premise for diversity is the existence of a mix of functions. Mixed-use should consider the private and the public supply of services and take into account commercial as well as non-commercial activities. Mixed-use itself, however, is not a recipe for urbanity, for example concentrating a large number of different uses in a mall will not immediately generate urbanity. Consequently, the space where these uses are spread, the distances in between, and the scale of the space they occupy are of great importance because they allow for synergies to develop through interaction. This aspect is especially evident in the modern urban planning of the first part of the twentieth century, when the different functions in a city were segregated and resulted in a reduction of interaction potential that later led to social problems. The mono functional neighbourhoods of our times show the same characteristics and consequently face the same problems.

Secondly, social diversity plays an important role in achieving diversity in a space. Social diversity is insured in a place in terms of the social mix of different cultures, professions, and ages. In order for it to function people must be willing to interact and exchange with other people and their life values. Tolerance towards social, economic and cultural differences plays an important role for the generation of urban situations. Finally, the space provided should be a space where these differences meet physically and become productive, such as spaces for events and festivities, market places, or community centres.

A high density of persons, a social mix, and different uses provide the basis for diversity. But these premises may also contribute to increasing the attractiveness of a place. When more people want to use the advantages of a place, some are willing to pay more, the offers adapting to this willingness to pay 108. This leads to a homogeneity of offers that over time diminishes the diversity of users and causes an implicit selection to

<sup>106</sup> cf. Chapter 4.2.4.

<sup>&</sup>lt;sup>107</sup> cf. Chapter 4.2.5

The tendency to commercialize district and the growth of the rich clientele slowly leads to gentrification.

occur, ultimately limiting accessibility 109 and urban potential. The solution for this phenomenon is to encourage diversity in economically productive/non-productive activities, permanent/temporary uses. In this sense, spaces in transformation offer an ideal background for temporary uses, as they do not always require a big investment or a future strategy. They may not always immediately provide good returns, but by the effect of externalities they add value to the area. In order to assure the existence of these spaces good planning and surface management prove to be very important.

A good example of diversity from a structural, typological, programatic and social point of view is the Langsstrasse neighborhood. The neighbourhood's high buildings density offers the background also for high social density. The existence of different degrees of public space stimulates a diversity of activities and functions.

#### 4.2.7 Interaction

Interaction means that different users productively influence each other as result of their relation to a spatial situation. 110

#### **Indicators**

Social density- describes the quantitative mass of people present in a place (inhabitants and workers)

Interaction spaces- presence of spaces that encourage interaction: buildings that offer temporary uses, experimental places, innovative space concepts, infrastructure for festivities

Urbanity can be understood as the productive interaction between people.

The heterogeneity of a place together with a specific social and density use creates synergies and potentials that have the power to transform a society in terms of economy, culture and social life. Interaction, seen in the density of contact between individuals and the networking of different functions, ways of life and exchange contexts, has a positive influence on innovation processes from different fields.<sup>111</sup>

<sup>109</sup> cf. Chapter 4.2.2
110 cf. Angelil et al. 2014
111 cf. Urban economics- the cluster concept

In order for interaction to happen, a critical mass of people is needed. Population density, which translates into a large number of people living in close proximity to each other is a characteristic of urban areas.

However, social density itself it is not enough, the intensity of exchange is actually decisive for interaction. Intensity of exchange defines itself as a rapport between the density of people and the space they have at their disposal to interact. An urban way of life implies the willingness of the urban actors to deal with what is unknown, new and different. This willingness must given a staging ground in order to become productive.

From the urban planning point of view, interactions and communication processes can be encouraged when public or publically accessible spaces and infrastructures are offered that correspond to the social density and allow for a multitude of activities that users can relate to.<sup>112</sup>

These spaces should be well positioned and connected (*centrality*), <sup>113</sup> have a certain dimension and configuration (*usability*), <sup>114</sup> have adaptation potential (*adaptability*), <sup>115</sup> yet also be physically built and legally sustained to guarantee access to as many users as possible (*accessibility*). <sup>116</sup>

Public spaces stimulate interaction especially were they are positioned in a border situation: this could be either the space between two areas with different functions or in points where networks of mobility and everyday life meet.

#### 4.2.8 Design

#### Indicators

Architecture quality – scale, context, relation to the exterior

*Architecture competitions* – number of architecture/ planning competitions organized in order to commission the projects

Quality in architecture and design is a very subjective concept. However, a consensus can be reached by taking into consideration aspects of aesthetics, context, human comfort and human scale.

of Chapter 4.2.1.

<sup>&</sup>lt;sup>112</sup> cf Chapter 4.2.5

<sup>114</sup> cf. Chapter 4.2.3.

of. Chapter 4.2.4.

<sup>&</sup>lt;sup>116</sup> cf. Chapter 4.2.2.

Many of the qualities of good design can be identified through the presence of other urban qualities, like *accessibility, adaptability, identification or usability*. It can also be interpreted the other way around: good architecture will generate these qualities in a space.

An important aspect of quality in architecture or urban design is the consideration of the context. In this sense, the scale of the building should be related to the urban layout and the surrounding buildings so as to encourage granularity. This quality further sustains *accessibility* through the porosity of the space. Furthermore, any new buildings should consider the existing identity of the place and make reference to it in order to stimulate synergies. Nevertheless, such a guideline does not exclude the possibility for new buildings to have their own identity (different materials, forms). The quality of the dialogue between them is more relevant.

Another important aspect is the interaction of the building with the public space. It is important in order to support porosity that the building be open to its surroundings. This can be achieved through the design of the ground floor, in the configuration of entrances and passages, the selection of functions that occupy it, and the materialisation of the facade.

Still, the subjectivity of aesthetics makes it difficult to completely describe what good architecture means. Quality in design and architecture can be better invoked through process. Organizing architecture/planning competitions can add value to a development by the addition of participants' diversity of perspectives over a single subject and the contribution of a jury's expertise.

Urban quality factors	Indicators	Indicators description	Evaluatio	n			
			Very Low	Low	Medium	High	Very high
Centrality	Logistic centrality	frequency and density of the transport system, connectivity with the rest of the city	12	3	45	6	78
	Functional centrality	density of functions around the infrastructure knots	12	3	45	6	78
	Everydaylife centrality	existence of places that represent a centrality in the everyday life of different users (parks, meeting points, old city centre)	12	3	45	6	78
	Symbolic centrality	degree of meaning possessed by the space for the individual or collective identification	12	3	45	6	78
Accessibility	General accessibility	accessibility to the area from the surroundings, existence of connecting streets, bridges, passages	12	3	45	6	78
	Porosity	accessibility within the area large numbers of physically accessible public spaces; ample local public infrastructure; density of public ground floor functions	12	3	45	6	78
	Rights of use	selectivity of access number of gates; closed sites; surveillance cameras; social controls: conditional entrances to public buildings	12	3	45	6	78
Usability	Multiple usability	capability of a space or built structure to be used for multiple purposes or to receive new uses	12	3	45	6	78
Adaptability	General Flexibility of buildings	capability of the entire building to receive a new use	12	3	45	6	78
	Flexibility of ground floor	the capability of publicly accessible ground floors to be adapted for public uses	12	3	45	6	78
Diversity	Functional diversity	diversity of uses, functions, social-cultural events	12	3	45	6	78
	Social diversity	diversity of people (age, income, profession, culture)	12	3	45	6	78
	Property diversity	diversity in investment (public, private)	12	3	45	6	78
	Spatial diversity	diversity of housing typologies	12	3	45	6	78
Appropriation	Use appropriation	signs of space modification through use	12	3	45	6	78
	Identification	existence of spaces with identity and character, historic buildings	12	3	45	6	78
Interaction	Social density	population density	12	3	45	6	78
	Interaction spaces	presence of spaces that encourage interaction - buildings that offer temporary uses, experimental places, innovative space concepts, infrastructure for festivities	12	3	45	6	78
Design	Architecture competitions	architecture / planning competitions organized in order to commission the projects	12	3	45	6	78
	Achitectural quality	context, scale of building, building - exterior space relation	12	3	45	6	78

Table 1: Urban quality evaluation framework

#### 4.3 Method validation

In order to validate the framework developed in the previous subchapter, three case studies from Zurich were selected and evaluated using the framework. The first part of the subchapter gives information about the evaluation procedures and data used in the analysis, while the second subchapter represents the evaluation itself. A comparison of the framework and the urban quality concepts defined in the development strategies is undertaken in the last part.

#### Data sampling and procedures in case study evaluation 4.3.1

In order to validate the developed urban quality framework, an evaluation of three case studies is done using the framework. The case studies have been chosen, as mentioned in a previous chapter, <sup>117</sup> in order to fulfil the case study conditions: they are relevant in the context, urban quality has been expressed as a goal for their development, and they were developed in the last years. Thus, they relate to the new understanding of urban quality and, as their development process is well supervised, there is a large availability of data about them. Apart from the common characteristics mentioned above, the particularities of the three case studies in terms of size, phase of development process, main functions and type of property allow the developed method to be tested in different contexts, contributing in this way to a broader understanding of the concept. In the evaluation of the three case studies, the following steps are taken.

First, the indicators described in the framework are analysed. Their analysis is based on urban analysis, 118 evaluation of statistical data, evaluation of architecture and urban projects, on-site observations and literature review.

The urban analysis primarily concentrated on the following indicators: logistic centrality, functional centrality, general accessibility, porosity, functional diversity, property diversity and spatial diversity. These indicators were evaluated through the analysis of urban plans. The plans were either existing thematic plans, developed by the Area Management<sup>119</sup> on a GIS<sup>120</sup> support, or plans developed personally using the GIS support and taking into consideration the characteristics of indicators from the

zentrum.html

<sup>&</sup>lt;sup>117</sup> cf. Chapter 3.3 <sup>118</sup> cf. de Geyter 2002

<sup>119</sup> cf. Area Management internet site

https://www.stadt-zuerich.ch/hbd/de/index/entwicklungsgebiete/gebietsmanagement.html# 120 cf. GIS internet site http://www.are.zh.ch/internet/baudirektion/are/de/geoinformationen/gis-zh\_gis-

descriptive list. 121 It should be noted that only completed projects were taken into consideration for the urban analysis. However, a complete delimitation cannot be drawn between new, old and not-yet-reconverted as they all influence the quality of the urban space.

The urban analysis is supported by the statistical data offered by the Area Management. In the evaluation, the data referring to the City of Zurich is taken as a relative value. The analysis of social diversity and social density is based on the evaluation of statistical data, taking into consideration the same relative value expressed previously.

Indicators like multiple usability, general flexibility of buildings, flexibility of ground floor, architecture quality and architecture competitions are analysed through the evaluation of the architecture projects, the literature review and the on-site observations. Finally, on-site observations were the basis for the evaluation of everyday life centrality, symbolic centrality, right of use, use appropriation, identification and interaction spaces.

The analysis of indicators was concluded with a grade on the rating system. 122

Further on, the urban quality factor is given a rating based on a weighing of its different indicators. On the base of personal understanding of the indicator importance, I propose the following weighing for the evaluation:

Centrality =  $(3 \times logistic \ centrality + 3 \times functional \ centrality + 2 \times everyday \ life$ centrality + 1 x symbolic centrality) / 9

Accessibility = (1x general accessibility + 2 x porosity + 1 x right of use) / 4

Adaptability=  $(1 \times general flexibility of buildings + 2 \times flexibility of ground floor)/3$ 

Diversity = (functional diversity + social diversity+ property diversity+ spatial diversity)/4

Appropriation = (use appropriation + identification)/2

Interaction =  $(social\ density + 2x\ interaction\ spaces)/3$ 

Design= (architecture competition + architecture quality)/ 2

Finally, the results are graphically represented in a radar chart, <sup>123</sup> allowing an overview on the urban quality for the specific area.

 <sup>121</sup> cf. Chapter 4.2, List of urban factors and indicators
 122 cf. Chapter 4.2
 123 cf. Tague 1995

#### 4.3.2 *Case study evaluation*

#### 4.3.2.1 Neu Oerlikon

Neu Oerlikon benefits from a high logistic centrality due to the presence of the Railway Station and a good public transport network (Appendix I), this is reinforced by a high functional centrality that results mainly from the functions concentrated around the railway station. In terms of everyday life centrality, the homogeneity of functionsmainly housing- keeps the district from being a very active place during the day.

In terms of accessibility (Appendix I), projects like the passage under the railways have increased the general accessibility of the area. However, it is observed that they are still missing connections with the surroundings on the north side and west side. Accessibility through the area is rated as medium. Although a dense pedestrian network has been developed, mainly with the help of the parks, the scale of the buildings and the lack of ground floor public functions greatly reduce porosity. The accessibility within the area is non restrictive, with the exception of the industrial and factory sites, which remain closed to the public.

The area disposes over a limited number of buildings (Appendix III) that allow for multiple usability, identified mainly in the industrial remaining. However, the new parks developed allow functional zooning and can be the background for different uses. The general flexibility of buildings is reduced, mainly due to the homogenous program of the area housing. With regards to the flexibility of the ground floor, a small number of projects (Appendix IV) provided a ground floor design that allows other uses (publically accessible, adequate floor height and facade).

Neu Oerlikon is mainly being characterized as a housing area, however housing only represents half of the programs present in the area. The other half is a mix of industry spaces, offices and public services that together have a medium functional diversity in comparison with the whole City of Zurich (Appendix V). Social diversity is rated medium to low as the population of Oerlikon is less diverse than that of the whole City of Zurich (Appendix V). In terms of property diversity, one can notice homogenity (Appendix V). Spatial diversity is quite low: the space is mostly occupied by buildings and streets and there is a low percentage of green spaces in the whole area (Appendix V).

Sign of appropriations are quite limited, although the housing program should contribute in this regard. Little from the industrial heritage has been preserved and the

new buildings do not offer enough identity, which consequently leads to a reduced potential of identification (Appendix VI).

In terms of social density, Neu Orlikon scores medium to low (Appendix VII). The number of spaces to support interaction is quite low, with the exception of the new parks.

In terms of design, most of the architecture and master plan projects were directly commissioned. There is a noticeable homogeneity in architecture design, mainly in the scale of the buildings, which were intended to refer to the industrial context. An evaluation overview of the rating is represented in Table 2, while Figure 5 represents the final evaluation results.

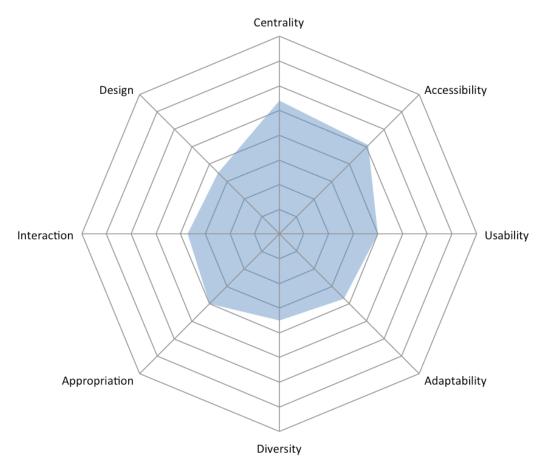


Figure 5: Evaluation Neu Oerlikon

Urban quality factors	Indicators	Indicators description	Neu Oerlikon Evaluation
			Very Low Low Medium High Very high
Centrality	Logistic centrality	frequency and density of the transport system, connectivity with the rest of the city	12345 <b>6</b> 78
	Functional centrality	density of functions around the infrastructure knots	12345 <b>6</b> 78
	Everydaylife centrality	existence of places that represent a centrality in the everyday life of different users (parks, meeting points, old city centre)	12345678
	Symbolic centrality	degree of meaning possessed by the space for the individual or collective identification	123678
Accessibility	General accessibility	accessibility to the area from the surroundings, existence of connecting streets, bridges, passages	12345678
	Porosity	accessibility within the area large numbers of physically accessible public spaces; ample local public infrastructure; density of public ground floor functions	12345678
	Rights of use	selectivity of access number of gates; closed sites; surveillance cameras; social controls: conditional entrances to public buildings	12345 <b>6</b> 78
Usability	Multiple usability	capability of a space or built structure to be used for multiple purposes or to receive new uses	123 <b>4</b> 5678
Adaptability	General Flexibility of buildings	capability of the entire building to receive a new use	1235678
	Flexibility of ground floor	the capability of publicly accessible ground floors to be adapted for public uses	123 <b>4</b> 5678
Diversity	Functional diversity	diversity of uses, functions, social-cultural events	12345678
	Social diversity	diversity of people (age, income, profession, culture)	12345678
	Property diversity	diversity in investment (public, private)	128
	Spatial diversity	diversity of housing typologies	128
Appropriation	Use appropriation	signs of space modification through use	128
	Identification	existence of spaces with identity and character, historic buildings	1234 <b>5</b> 678
Interaction	Social density	population density	1235678
	Interaction spaces	presence of spaces that encourage interaction - buildings that offer temporary uses, experimental places, innovative space concepts, infrastructure for festivities	123 <b>4</b> 5678
Design	Architecture competitions	architecture / planning competitions organized in order to commission the projects	1 <b>2</b> 345678
	Achitectural quality	context, scale of building, building - exterior space relation	12345678

Table 2: Urban quality evaluation framework Neu Oerlikon

#### 4.3.2.2 Zurich West

Together Bahnhof Hardbrucke and the new tramline provide a very high logistic centrality to Zurich West (Appendix I). Additionally, there is a high density of functions around these main infrastructure networks and within the area as a whole. The mixed uses present in the area contribute to an active atmosphere throughout the day. This, combined with the multitude of evening events, renders the everyday life centrality of the area quite high. However, because these aspects only target a special category of people, the symbolic centrality of Zurich West being in this way diminished.

The general accessibility is considered medium. Even if good connections are provided to the surroundings in the east (Viadukt) and north (presence of bridges over the river), the south accessibility of the area proves to be difficult due to the presence of the railways. In terms of porosity, the area benefits from new pedestrian infrastructure projects (near Toni Areal) and parks aimed to improve accessibility. Furthermore, the building design (Puls 5) promotes porosity with publicly accessible ground floors (Appendix II). With regards to right of use, access through the area is generally non-restrictive.

A limited number of buildings could be considered to allow for multiple uses (Puls 5, Schiffbau), as could multifunctional urban spaces like Turbinenplatz or the niches on Geroldstrasse. (Appendix III)

Although the general building flexibility in the area is quite low, the new projects offer a high number of publicly accessible ground floors. (Appendix IV)

Zurich West shows a high functional diversity (Appendix V). Social diversity is quite low in comparison to the whole City of Zurich. In terms of spatial diversity, as a consequence of the space's industrial background, it is mostly occupied by buildings or infrastructure. A low percentage of green space is available. However, new park projects are contributing in this sense. The property structure is very diverse. In some areas, despite the new developments, Zurich West retains an industrial character that stimulates appropriation.

The population density of people living in the area is quite low. However, the area has at its disposition a high density of people who work or use the area for special events (Appendix VII),. A series of spaces left unplanned, like Geroldstrasse, offer the background for alternative events, spaces for the creative class, encouraging in this way appropriation.

Many of the architecture competitions in the development of the area were direct commissions. However, the master plans where developed through competitions, which contributed to the diversity in planning. The new buildings take into consideration the context of the area and develop quite a good relation with the public space.

An evaluation overview of the rating is represented in Table 3, while Figure 6 represents the final evaluation results.

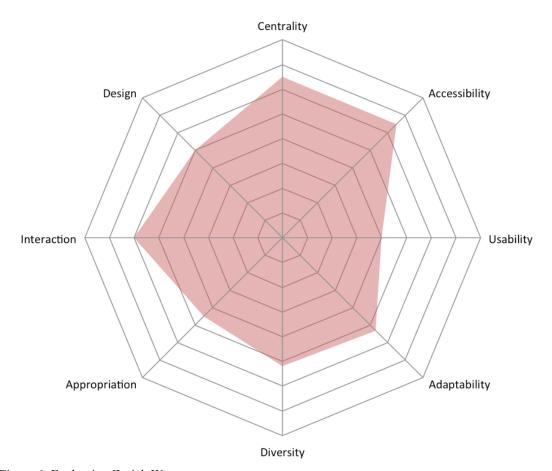


Figure 6: Evaluation Zurich West

Urban quality factors	Indicators	Indicators description	<b>Evaluation Zurich West</b>				
			Very Low	Low	Medium	High	Very high
Centrality	Logistic centrality	frequency and density of the transport system, connectivity with the rest of the city	12	3	45-	6	<b>7</b> 8
	Functional centrality	density of functions around the infrastructure knots	12	3	45	6	78
	Everydaylife centrality	existence of places that represent a centrality in the everyday life of different users (parks, meeting points, old city centre)	12	3	45-	6	78
	Symbolic centrality	degree of meaning possessed by the space for the individual or collective identification	12	3	45	6	8
Accessibility	General accessibility	accessibility to the area from the surroundings, existence of connecting streets, bridges, passages	12	3	45	6	<b>7</b> 8
	Porosity	accessibility within the area large numbers of physically accessible public spaces; ample local public infrastructure; density of public ground floor functions	12	3	45	6	8
	Rights of use	selectivity of access number of gates; closed sites; surveillance cameras; social controls; conditional entrances to public buildings	12	3	45	6	<b>7</b> 8
Usability	Multiple usability	capability of a space or built structure to be used for multiple purposes or to receive new uses	12	3	<b>-4</b> 5	6	78
Adaptability	General Flexibility of buildings	capability of the entire building to receive a new use	12	3	<b>4</b> 5	6	78
	Flexibility of ground floor	the capability of publicly accessible ground floors to be adapted for public uses	12	3	45	6	8
Diversity	Functional diversity	diversity of uses, functions, social-cultural events	12	3	45	6	78
	Social diversity	diversity of people (age, income, profession, culture)	12	3	<b>4</b> 5	6	8
	Property diversity	diversity in investment (public, private)	12	3	45-	6	78
	Spatial diversity	diversity of housing typologies	12	3	<b>4</b> 5	6	78
Appropriation	Use appropriation	signs of space modification through use	12	3	<b>4</b> 5	6	8
	Identification	existence of spaces with identity and character, historic buildings	12	3	45	6	78
Interaction	Social density	population density	12	3	45	6	78
	Interaction spaces	presence of spaces that encourage interaction - buildings that offer temporary uses, experimental places, innovative space concepts, infrastructure for festivities	12	3	45	6	8
Design	Architecture competitions	architecture / planning competitions organized in order to commission the projects	12	3	<b>4</b> 5	6	8
	Achitectural quality	context, scale of building, building - exterior space relation	12	3	45	6	78

Table 3: Urban quality evaluation framework Zurich West

#### 4.3.2.3 Bahnhof Altstetten - Juch

The development area Bahnhof Alstetten - Juch disposes of a high logistic centrality (Appendix I), due to its proximity to the railway station Altstetten, the highway A1 and the newly introduced tram line. However, this logistic centrality is not supported by a functional centrality: the area only disposes of a very limited number of services. Office and service buildings mainly occupy the area. Due to the lack of public space offered, no everyday life centrality has been developed. The same could be said about the symbolic centrality.

In terms of general accessibility, though the new passage facilitates access from the railways, the area still lacks connections with the other surroundings (Appendix II). Accessibility within the site is extremely low, many areas being closed to the public or designed in such a way that they do not encourage access.

In terms of adaptability, the number of buildings that allow other uses is quite low (Appendix III), largely because of the main program present in the area- offices and service.

There is almost no place that allows for multiple usability (Appendix III).

The main factor in the area's diversity is functional diversity –since it has a mix of office buildings, services and educational spaces- and property structure diversity. (Appendix IV).

There are no signs of appropriation, mainly as a consequence of the area's characteristic lack of identity (Appendix VI). There are no interaction spaces provided, besides the new park developed in Vulkanplatz. Being mostly a working district, its low housing influences the social density and diversity (Appendix VII).

The architecture projects were mostly directly commissioned. An evaluation overview of the rating is represented in Table 4, while Figure 7 represents the final evaluation results.

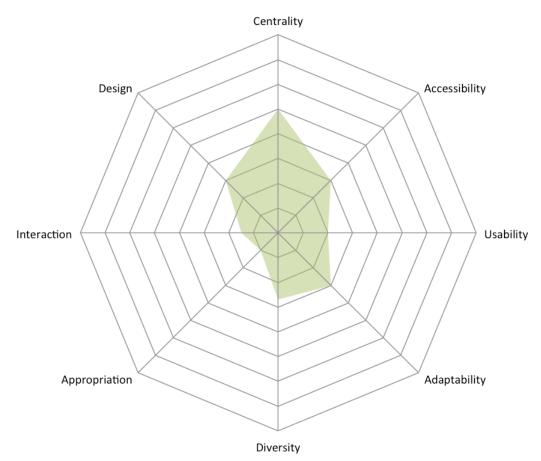


Figure 7: Evaluation Altstetten - Juch

Urban quality factors	Indicators	Indicators description	Evaluation Altstetten - Juch
			Very Low Low Medium High Very high
Centrality	Logistic centrality	frequency and density of the transport system, connectivity with the rest of the city	1234567 <b>8</b>
	Functional centrality	density of functions around the infrastructure knots	1235678
	Everydaylife centrality	existence of places that represent a centrality in the everyday life of different users (parks, meeting points, old city centre)	12345678
	Symbolic centrality	degree of meaning possessed by the space for the individual or collective identification	1 <b>2</b> 345678
Accessibility	General accessibility	accessibility to the area from the surroundings, existence of connecting streets, bridges, passages	123 <b>4</b> 5678
	Porosity	accessibility within the area large numbers of physically accessible public spaces; ample local public infrastructure; density of public ground floor functions	12 <b>3</b> 45678
	Rights of use	selectivity of access number of gates; closed sites; surveillance cameras; social controls: conditional entrances to public buildings	12345678
Usability	Multiple usability	capability of a space or built structure to be used for multiple purposes or to receive new uses	1 <b>2</b>
Adaptability	General Flexibility of buildings	capability of the entire building to receive a new use	12345678
	Flexibility of ground floor	the capability of publicly accessible ground floors to be adapted for public uses	12 <b>3</b> 45678
Diversity	Functional diversity	diversity of uses, functions, social-cultural events	1235678
	Social diversity	diversity of people (age, income, profession, culture)	12345678
	Property diversity	diversity in investment (public, private)	123678
	Spatial diversity	diversity of housing typologies	128
Appropriation	Use appropriation	signs of space modification through use	12345678
	Identification	existence of spaces with identity and character, historic buildings	12345678
Interaction	Social density	population density	12345678
	Interaction spaces	presence of spaces that encourage interaction - buildings that offer temporary uses, experimental places, innovative space concepts, infrastructure for festivities	12345678
Design	Architecture competitions	architecture / planning competitions organized in order to commission the projects	12345678
	Achitectural quality	context, scale of building, building - exterior space relation	128

Table 4: Urban quality evaluation framework Altstetten - Juch

## 4.3.3 Confrontation urban quality framework - area development goals

In this chapter, the urban quality factors defined in the framework are compared with the goals regarding urban quality expressed in the development concept for each of the three areas. The common indicators are highlighted.

## 4.3.3.1 Neu Oerlikon

The development concept for Neu Oerlikon was published 4. February 1998. 124 (Table 5)

Urban quality factors	Indicators	Goals expressed in the development concept	Neu Oerlikon Evaluation
			Very Low Low Medium High Very high
Centrality	Logistic centrality	gute Erschliessung des Gebietes	12345 <b>6</b> 78
	Functional centrality		128
	Everydaylife centrality		12345678
	Symbolic centrality		128
Accessibility	General accessibility		12345678
	Porosity	ein Gebiet mit einem dichten Netz von Fusswegen und Radwegen	12345678.
	Rights of use		12345 <b>6</b> 78
Usability	Multiple usability		12345678
Adaptability	General Flexibility of buildings	städtebaulich und architektonisch gut gestaltete und umweltgerechte dichte Überbauung	12345678
	Flexibility of ground floor		128
Diversity	Functional diversity	vielfältige Nutzungsstruktur	12345678
	Social diversity		128
	Property diversity		128
	Spatial diversity	grosszügige Freiräume gute Durchgrünung des Gebietes	12 <b>3</b> 45678
Appropriation	Use appropriation		128
	Identification		12345678
Interaction	Social density		128
	Interaction spaces		128
Design	Architecture competitions		128
	Achitectural quality	städtebaulich und architektonisch gut gestaltete und umweltgerechte dichte Überbauung	1234 <b>5</b> 678

Table 5: Confrontation urban quality evaluation - strategy goals for Neu Oerlikon

<sup>&</sup>lt;sup>124</sup>cf. Sonderbauvorschriften für das Gebiet Neu- Oerlikon https://www.stadt-zuerich.ch/internet/as/home/inhaltsverzeichnis/7/700/220/1306479052092.html

#### 4.3.3.2 Zurich West

The development concept for Zurich West was published in 2000. 125.

Table 6 presents the urban quality factors mentioned in the development concept enabling a comparison with the urban quality factors defined in the framework.

Urban quality factors	Indicators	Goals expressed in the development concept	<b>Evaluation Zurich West</b>
			Very Low Low Medium High Very high
Centrality	Logistic centrality	notwendige Infrastruktur	123456 <b>7</b> 8
	Functional centrality		123456 <b>7</b> 8
	Everydaylife centrality		12345 <b>6</b> 78
	Symbolic centrality	städtische Identität	1234 <b>5</b> 678
Accessibility	General accessibility		123456 <b>7</b> 8
	Porosity	Plätze, Strassen, Pärke und Freiraumverbindungen Quartierdurchlässigkeit	12345 <b>6</b> 78
	Rights of use		12345678
Usability	Multiple usability		123 <b>4</b> 5678
Adaptability	General Flexibility of buildings	Zukunftsbewusste Flexibilität	123 <b>-4</b> 5678
	Flexibility of ground floor		12345 <b>6</b> 78
Diversity	Functional diversity	Nutzungsmix Quartierinfrastruktur	123 <b>6</b> 78
	Social diversity		12345678
	Property diversity		123456 <b>7</b> 8
	Spatial diversity		123 <b>4</b> 5678
Appropriation	Use appropriation		123 <b>4</b> 5678
	Identification	städtische Identität	12345678
Interaction	Social density		12345678
	Interaction spaces	Plätze, Strassen, Pärke	12345 <b>6</b> 78
Design	Architecture competitions	kooperative Verfahren	123 <b>-4</b> 5678
	Achitectural quality	hohe städtebauliche und architektonische Qualität	12345 <b>6</b> 78

Table 6: Confrontation urban quality evaluation - strategy goals for Zurich West

https://www.stadt-

zuerich.ch/hbd/de/index/entwicklungsgebiete/zuerich\_west/veranstaltungen\_publikationen/entwicklungsk onzept zuerich west.html[last accessed at 15.08.2014]

<sup>&</sup>lt;sup>125</sup>cf. Entwicklungskonzept Zurich West

## 4.3.3.3 Bahnhof Altstetten - Juch

The concepts expressed for the development of Bahnhof Altstetten - Juch - published in the development concept in 2001<sup>126</sup>- are compared in table 7 with the urban quality factors.

Urban quality factors	Indicators	Goals expressed in the development concept	Evaluation Altstetten - Juch  Very Low Low Medium High Very high
Centrality	Logistic centrality	Erschliessung und Mobilitätsmanagement	12345678
	Functional centrality		123 <b>4</b> 5678
	Everydaylife centrality		128
	Symbolic centrality		125678
Accessibility	General accessibility	Vernetzung in die angrenzenden Quartiere	123 <b>4</b> 5678
	Porosity	Querräume Freiräume und innere Freiraumachse Fuss und Velo Verkehr Orientierunes- und Beleuchtuneskonzent	12 <b>3</b> 45678
	Rights of use		1 <b>2</b> 3678
Usability	Multiple usability		125678
Adaptability	General Flexibility of buildings	Nachhaltige Entwicklung	1 <b>2</b> 5678
	Flexibility of ground floor		125678
Diversity	Functional diversity		1235678
	Social diversity		125678
	Property diversity		128
	Spatial diversity	Städtebauliche Verdichtung	125678
Appropriation	Use appropriation		123678
	Identification	Image und Nutzung	12345678
Interaction	Social density		12345678
	Interaction spaces		1235678
Design	Architecture competitions	Zusammenarbeit Stadt und Grundeigentümer	12345678
	Achitectural quality	Fassaden als Visitenkarten des Gebiets	123 <b>4</b> 5678

Table 7: Confrontation urban quality evaluation - strategy goals for Altstetten - Juch

https://www.stadt-

zuerich.ch/hbd/de/index/entwicklungsgebiete/bahnhof\_altstetten/publikationen\_veranstaltungen/entwicklungskonzept\_2001.html[last accessed at 15.08.2014]

<sup>&</sup>lt;sup>126</sup> cf. Entwicklungskonzept Banhof Altstetten

#### 4.4 Research findings

The urban quality evaluation framework, as presented in the chapter 4.2, represents the main findings of my research. In addition to these findings, further knowledge has been gained. The next two chapters organize this information into two categories: the first category refers to the findings about urban quality resulting from the research process, while the second category, with the help of the three case studies, focuses on the findings resulting from the validation of the framework.

### 4.4.1 *General findings*

Through the process of developing an urban quality evaluation framework a series of findings about the concept of urban quality were made. The first aspect relates to the complexity of the concept. Not only does the concept embody aspects from the fields of architecture, urbanism, society and economics, these aspects are also culturally and locally specific in a way that leads to greater subjectivity and complexity. Consequently, the concept is not easily understandable by everyone, and different definitions have been advanced. A possible option to overcome these difficulties was to reduce the complexity of the concept by dividing it into smaller parts composed of simpler concepts. Defining the eight urban quality factors represented the main step in this direction. These factors were further described with the help of indicators.

#### 4.4.2 Findings from the the case study evaluation

Once the framework was defined, the next step was to confirm its validity. The validation was done with the help of three case studies from Zurich. Evaluating these three development areas from Zurich proved to be a good opportunity to gain more practical knowledge about urban quality – since urban quality was a goal for these developments, evaluating if it has been reached would bring more information about how the concept is understood.

The first phase in the evaluation was the indicators analysis. The difficulties encountered – what are the suitable methods, what are the absolute values- revealed the complexity of an urban development. It has been proven necessary to use a mix of methods. The analysis was mainly qualitative. Some indicators allowed a quantitative analysis, but no absolute value was available for the interpretation of the values. Some indicators were extremely subjective, particularly those ones related to *symbolic* 

centrality, 127 identification, 128 and architectural quality. A large quantity and diversity of data is available for these development areas, most of them developed by the planning authorities - Amt für Städtebau through their Area Management departmentsand supported by tools developed by the City of Zurich, such as the GIS. 129

The superposed evaluation results of the three areas is presented in Figure 8. This representation alone can provide findings about urban quality in all three developments areas. A comparison of the urban quality framework and the goals expressed in the development concept shows the ways in which urban quality is understood and addressed by the policy makers. In order to benefit from this information, I propose two possible further correlations that I intend two verify through the interpretation of the research findings.

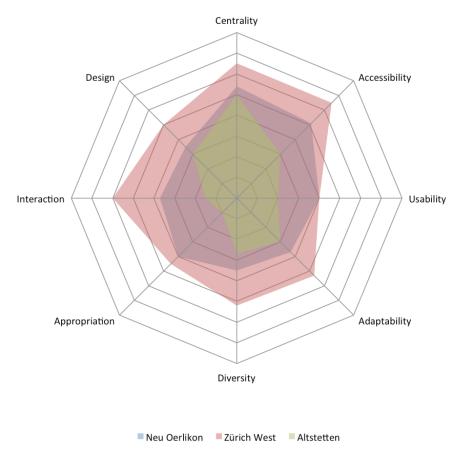


Figure 8: Case studies evaluation overview

<sup>127</sup> cf. Chapter 4.2.1. 128 cf. Chapter 4.2.5. 129 cf. List of abreviations

# 4.4.3 Correlation between the success in reaching urban quality and the strategy description

The starting point for this correlation represents the question if describing better the goals in term of urban quality correlates with achieving a higher level of urban quality.

The first thing noticed by confronting the urban quality framework with the goals about urban quality expressed in the development concept is that only a small amount from the urban quality indicators were addressed.

For all three development areas, an already high centrality was reinforced with the desire to provide a good transport network. Consequently, all three areas possess high logistic centrality and this contributes to a good general accessibility for each one.

All three cases had as a goal the creation of good accessibility within the area. Zurich West and Neu Oerlikon achieved this quite well, while in the case of Altstetten, no measures have yet been taken in this direction.

Despite the fact that sustainability- perceived in this context as the general flexibility of the buildings and usability- was also a common goal, all three areas score quite low in this regard.

Although, architecture quality was a goal for all three areas, the evaluation results are different from one case to another. All three areas intended for collaboration in the development process. In this sense, one could expect a process in which the projects were publicly debated- mainly through design competitions. However, only a limited number of competitions could be observed for all three areas.

Diversity was a goal for both Zurich West and Neu Oerlikon, and was achieved to a higher degree in Zurich West.

An important observation is that most of the social factors -diversity, interaction and appropriation -are not at all addressed. This failure correlates with low scores in these sections.

All in all, the goals expressed in the development concept for Zurich West cover the most urban quality factors, and Zurich West scores highest of all three development areas.

#### 4.4.4 Correlation between the success in reaching urban quality and the development process

The starting question for this correlation was whether the development process plays a role in achieving urban quality. In addition, as in some cases the development process is influenced by the investment structure used, this aspect will also be taken into consideration.

When looking at Altstetten-Juch, the lowest rated area, a possible explanation for the low scores in the evaluation could be the fact that the development process is still in its incipient phases. One can notice that the construction of some buildings had priority over the urban space which led to very low scores for most of the aspects.

In the case of Neu Oerlikon, the process was rather fast, with most of the development being completed in less than ten years. This was mainly possible due to the property structure - having only four landowners 130 involved. These aspects could offer an explanation for its homogeneity and consequently the relatively low scores for Diversity and Design. The fast development tempo could have also had an influence on the appropriation process – people did not have the necessary time to identify themselves with the space – which provides a potential explanation for the low Appropriation score. In the case of Zurich, the process was (is) longer than in the cases of the other two areas. As in the previous case, a possible explanation could be the property structure – with more than 90 landowners<sup>131</sup> involved. As a result, the development tempo was slower, offering people the time to get used to the space – hence the identification with the space is rated higher than for the other two. Large areas of the site are not yet developed, offering the background for the creation of non-conventional spaces, like Geroldstrasse, that encourage Appropriation and Interaction. The score for Diversity is also higher than in the other areas, which could potentially correlate with the property structure – more design competitions organized, different views over the development. All in all, Zurich West, the area with the longest development process and a diverse

investment structure, scored highest in the urban quality evaluation.

<sup>&</sup>lt;sup>130</sup> cf. Chapter 3.3.1. <sup>131</sup> cf. Chapter 3.3.2.

#### 5 Synthesis and recommendations

The fifth chapter presents a synthesis of the knowledge gained through the present research, which is then formulated into conclusions and recommendations. Furthermore, the potential applicability of the developed framework is discussed. Lastly, taking into account the main limitations of the present research, the final section of this chapter provides an indication of further research possibilities.

#### 5.1 Synthesis

The present research has revealed that, despite its complexity, urban quality is an extremely important concept. Whether addressed when speaking about quality of life or as a goal in development strategies that shape entire city areas, the concept of urban quality includes aspects that relate to the environment in which we live and work, to our interactions with other people and to our perception of the space that surrounds us. In essence, urban quality relates to almost all aspects in our everyday life. Moreover, in an era when cities are competing against each other to attract and retain workforce and capital, urban quality is an important differentiator that all cities should strive to provide. Consequently, it is of utmost importance to understand what urban quality involves in order to better address it.

Through my research, I built a framework that supports the evaluation of urban quality. The validation of the framework through three case studies from the City of Zurich was developed as a test run to identify the challenges in addressing urban quality in practice. Furthermore, the confrontation between the urban quality framework and the goals expressed in the development concepts<sup>132</sup>, uncovered insights on how the concept is being addressed and understood by the different actors involved in the area's development.

The additional information generated through the development of the framework, provided me with the foundations on which to build recommendations.

## 5.1.1 Recommendations for planers and authorities

An important aspect observed from the confrontation between the development concept goals and the urban quality factors defined in the framework was that only a few of them were addressed when aiming to achieve urban quality in the development of an

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<sup>&</sup>lt;sup>132</sup> cf. Chapter 4.3.3.

area. In this sense, a possible explanation could be the complexity of the urban quality concept – it relates to so many things that it could be almost everything<sup>133</sup>. Starting from these observations, the following recommendations refer mainly to the factors not addressed in the development concepts.

Firstly, an important aspect in reaching urban quality is *diversity*. Diversity is to be supported by the planers through mix uses, different programs and building typologies. Authorities could contribute in this sense by offering the platform for developments – supporting the organization of more design competitions and promoting different types of investment.

Secondly, social aspects – such as *identification*, *use appropriation*, *social diversity*, *social density* and *interaction* – are part of various urban quality indicators, as they relate to the people living in that space. These aspects have not been addressed in the goals of the development concepts researched, correlating also with the low scores that all three areas obtained in the evaluation.

Social visions should be in fact considered in parallel with the urban visions. Furthermore, the social aspect should not be seen as a residual dimension – one that is considered once the buildings are completed – but instead it should be considered as an important factor when planning the development. The expected groups of population and their current and future needs should be take into account at the incipient phases of the development. This perspective ultimately has an influence on the space offer: on typologies of apartments, public services, schools, infrastructure for community events and so on.

The extent of the social and cultural dimension of a neighbourhood often depends on the investment structure and the period in which the investor is legally bonded, as some social facilities and urban space are provided only after the completion of buildings. The authorities could help in this respect, by bringing clarity to the distribution of responsibilities between the parties involved.

Furthermore, social diversity is usually obtained when different social classes have access to the same space offer. In order for this to happen, developments should offer a diversity of rents. Local authorities could enable this by supporting more socially focused rent regulations.

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<sup>&</sup>lt;sup>133</sup> Appendix, Interview Simon Kretz

Social aspects should be considered not only when formulating a development concept or through the investment structure, but also throughout the development process. The development phases play an important role for the *appropriation* of a place. People need time to identify themselves with a place, this identification being usually facilitated by the presence of buildings and spaces with a distinctive character. The development areas – former industrial sites – provided this background through the presence of existent buildings with industrial heritage. However, only a small part of these was retained. Their presence is important mainly for the process – even though in the end they are demolished to make place for the new, they offer the foundation for an identification process to begin, which can later be continued in other forms.

Another aspect that relates to the development phases that should be taken into account by planers and authorities is land reserves. Not planning everything from the beginning allows for land reserves, which can be developed at a later stage, once the needs of the area have been defined. A good example in this direction is the parks from Neu Oerlikon. As the parks were not designed at the same time with the buildings, authorities and planers had the time to observe how the area developed and what needs evolved as a result. The development of the parks brought a response to these needs and at the same time offered the inhabitants an opportunity to be involved in the planning process. In conclusion, time is a very important factor in this process, with some aspects needing a period of time to pass until they can actually be observed. Observing these aspects ultimately drives the need for an active re-evaluation of the development concepts.

### 5.1.2 Recommendations for investors and landowners

The main advantage of the developed framework is the fact that it helps users gain a deeper understanding of urban quality by dividing it into smaller, digestible components that are easier to analyse and understand.

Urban quality results from a series of interactions between different aspects. The framework helps bring into perspective the relation between these different aspects and the influence they have on each other.

By being aware of these aspects, one is introduced into the complexity of synergies that together define urban qualities. In this way it is easier to understand the impact all

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<sup>&</sup>lt;sup>134</sup> cf. Chapter 4.2.5

aspects involved have on a development, especially the effect of externalities. For example, investing in programs that bring less immediate profit – for example cafes and spaces on the ground floor of buildings – could drive a rise in the liveability of the space, increase attractiveness and consequently lead to higher rents in the area.

The above could be extended to the level of the whole surrounding area and open the discussion about cooperation. An active cooperation, with other investors or the authorities, to invest in aspects that are not only related to their own developments – like urban spaces – can bring important benefits at a later stage. Urban quality adds value to the places on the long term, as it is related to deeper aspects than, for example, just the immediate economic benefit one. Cities have to be built sustainably to fulfil future needs and be attractive for living even in the light of changes in the economic situation.

### 5.2 Potential applicability - a method to assist the development processes

In recent years, the beneficial economical background contributed to the materialization of the visions for the three development areas, with a considerable part of Zurich West and Neu Oerlikon having already been built. The fast pace of the development, especially in the case of Neu Oerlikon did not offer much time for reflection and evaluation. Slowly, some of the non-functional aspects of urban quality are being observed and acted upon, a proof of this being the publishing of actualized guidelines related to the further development.<sup>135</sup> In this context, it becomes extremely important to understand the causes for these non-functional aspects.

The evaluation framework developed in this paper, could constitute the basis of an instrument that supports planners, authorities and investors to integrate urban quality related measures throughout the whole development process.

Firstly, the framework can be used in defining the development goals that relate to urban quality. It provides the basis for a deeper understanding and an easier use of the concept, mainly by dividing it into factors that are easier to grasp and consequently address.

Secondly, it can be used as a control instrument during the development process. As urban development is a process that requires time, some non-functional aspects can be

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<sup>135</sup> in german Leitlinien. Zurich West in 2009 and for Neu Oerlikon in 2006

adapted throughout the process. As stated in the previous chapter, the development process plays an important role in reaching urban quality.

Finally, the framework offers the possibility to evaluate the completed development and on this basis formulate success factors, which could enrich the body of knowledge about urban quality.

The framework should not be seen as an additional rigid planning tool, but rather as one that enables discussions and reflections. The advantage of the framework is that it allows for an overarching view – it gives the opportunity to focus on a particular situation, without losing sight of all the other aspects involved.

#### 5.3 Limitations and further research posibilities

As mentioned in the previous chapters, urban quality relates to many aspects from our everyday life – the built environment, the functions existing in this place, the people living there and also importantly, their emotions – hence being an extremely complex and subjective concept. Furthermore, urban quality is something specific, it relates to culture and to the context of a space, and any attempts to evaluate it should consider these aspects.

Urban design remains complex, effectively too complex to put into numbers, but a framework, as the one developed in this research, can provide a better overview of where interventions should / could be made and offer the basis for more objective discussions. The challenges brought into discussions during the research process – suitable analysing methods for urban quality indicators, locally relevant references to enable the interpretation of the results to name a few, could constitute the basis for further research opportunities.

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Appendix 64

# Appendix

# **Appendix I: Urban quality evaluation - Centrality**

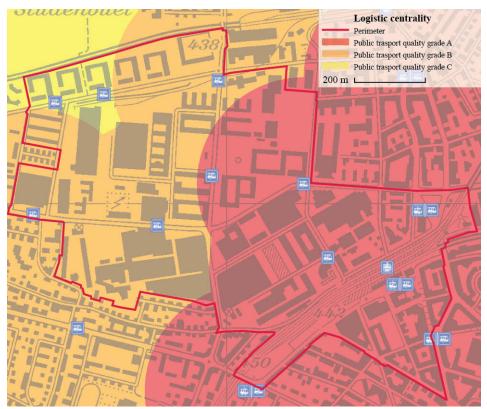


Figure 9: Logistic centrality Neu Oerlikon

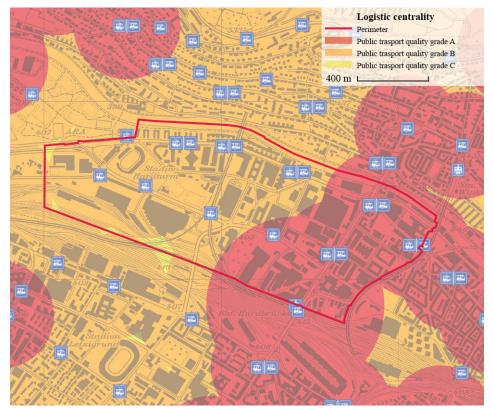


Figure 10: Logistic centrality Zurich West

Appendix 65

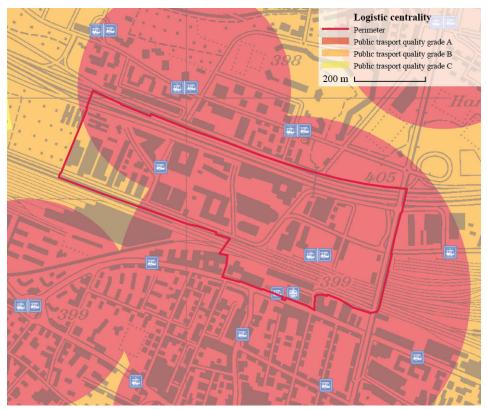


Figure 11: Logistic centrality Altstetten-Juch

Source: Geografisches Informationssystem des Kantons Zürich (GIS-ZH) http://www.maps.zh.ch

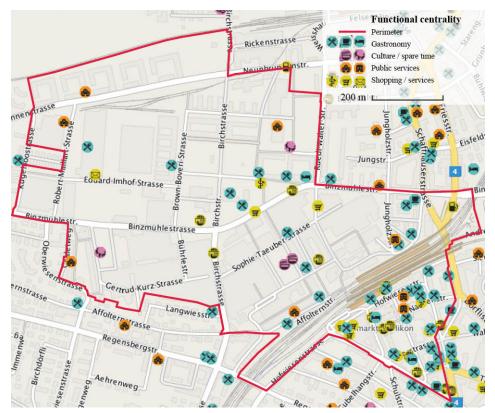


Figure 12: Functional centrality Neu Oerlikon

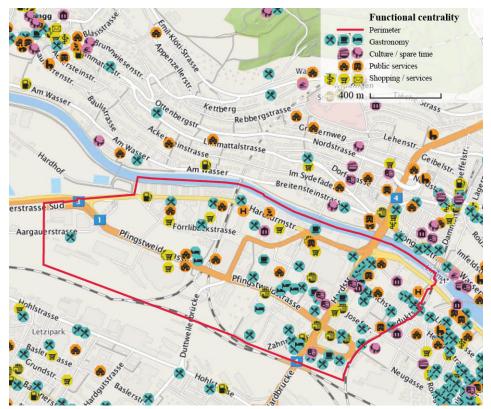


Figure 13: Functional centrality Zurich West

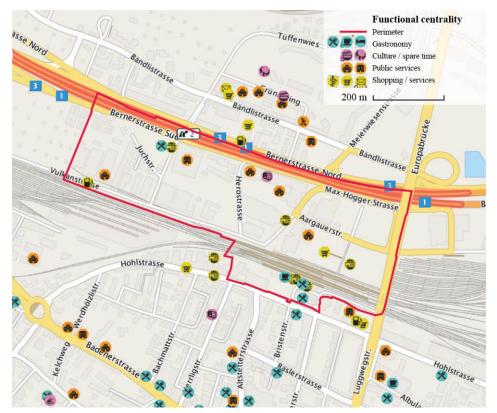


Figure 14: Functional centrality Altstetten-Juch

Source: search.ch Karte der Schweiz mit Routenplaner http://www.map.search.ch

### Appendix II: Urban quality evaluation - Accessibility

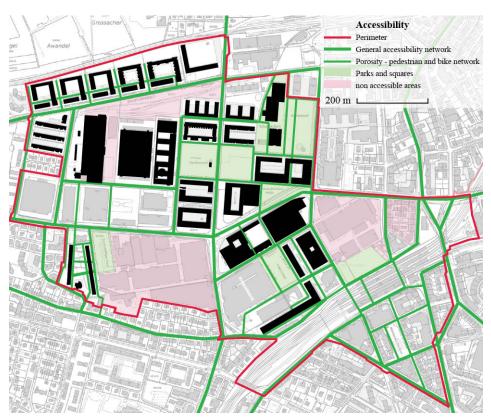


Figure 15: Porosity Neu Oerlikon

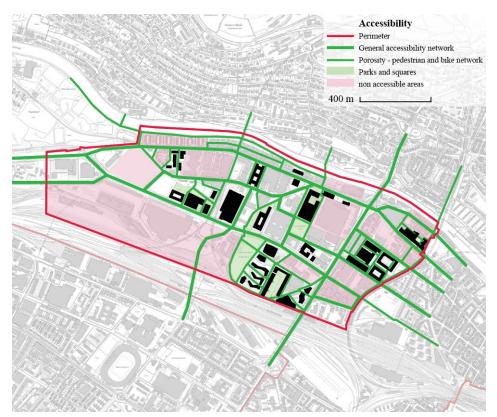


Figure 16: Porosity Zurich West

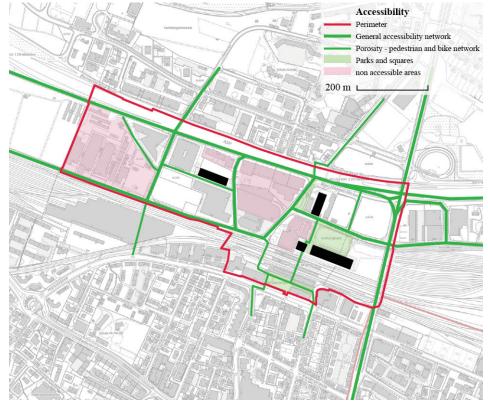


Figure 17: Porosity Altstetten-Juch

 $Own\ representation\ on\ a\ base\ provided\ by\ Gebietsmanagement\ Hochbaudepartement\ Stadt\ Z\"{u}rich\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

### Appendix III: Urban quality evaluation – Usability

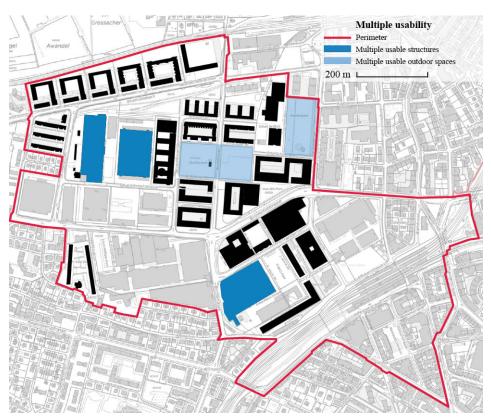


Figure 18: Multiple usability Neu Oerlikon

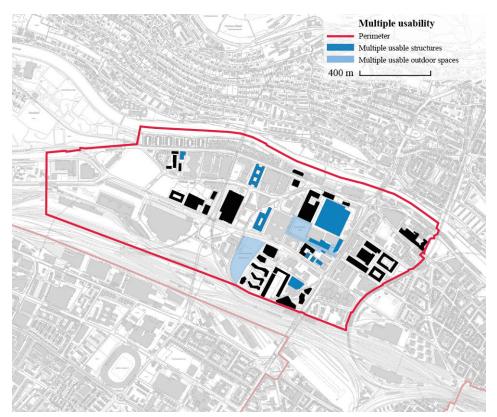


Figure 19: Multiple usability Zurich West

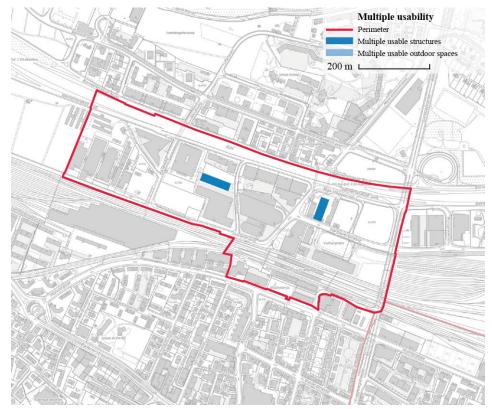


Figure 20: Multiple usability Altstetten-Juch

 $Own\ representation\ on\ a\ base\ provided\ by\ Gebiets management\ Hochbaude partement\ Stadt\ Z\"{u}rich\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

# Appendix IV: Urban quality evaluation - Adaptability

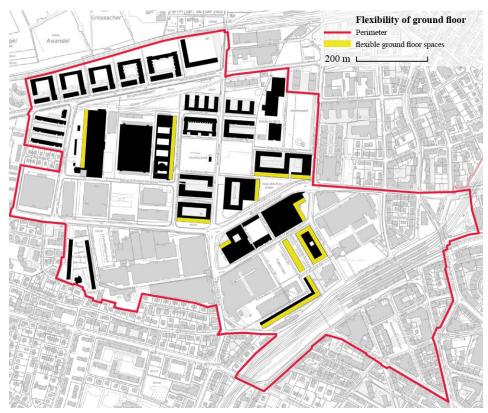


Figure 21: Flexibility of ground floor Neu Oerlikon

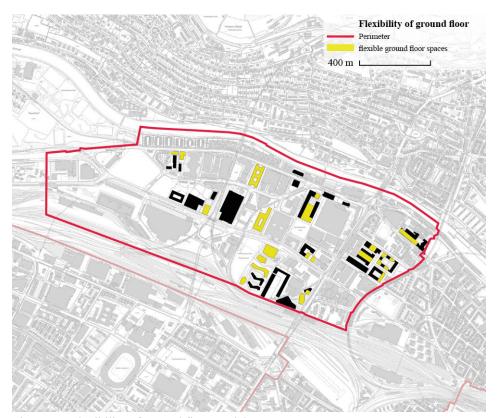


Figure 22: Flexibility of ground floor Zurich West

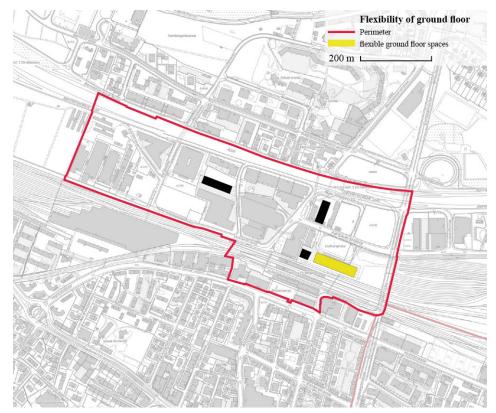


Figure 23: Flexibility of ground floor Altstetten-Juch

Own representation on a base provided by Gebietsmanagement Hochbaudepartement Stadt Zürich http://www.mapgebietsmanagement.stadt-zuerich.ch

# Appendix V: Urban quality evaluation – Diversity

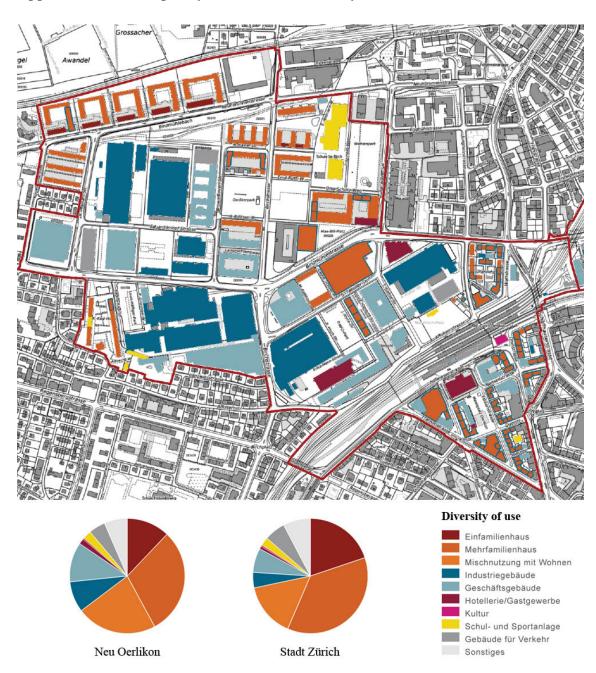


Figure 24: Functional diversity Neu Oerlikon

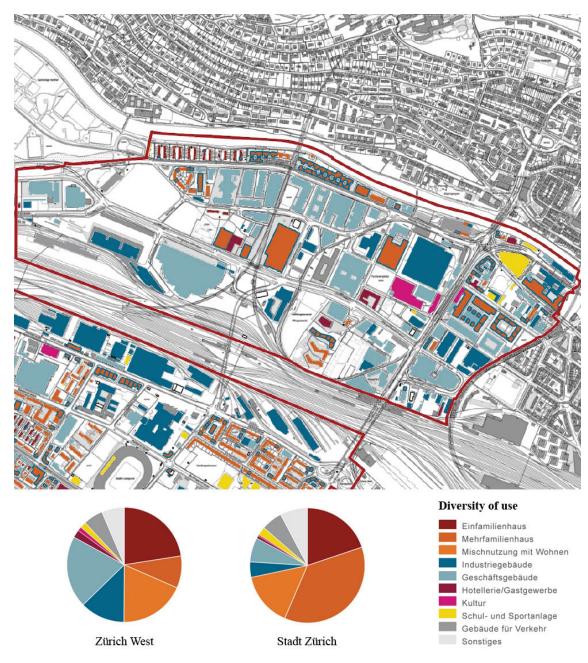


Figure 25: Functional diversity Zurich West

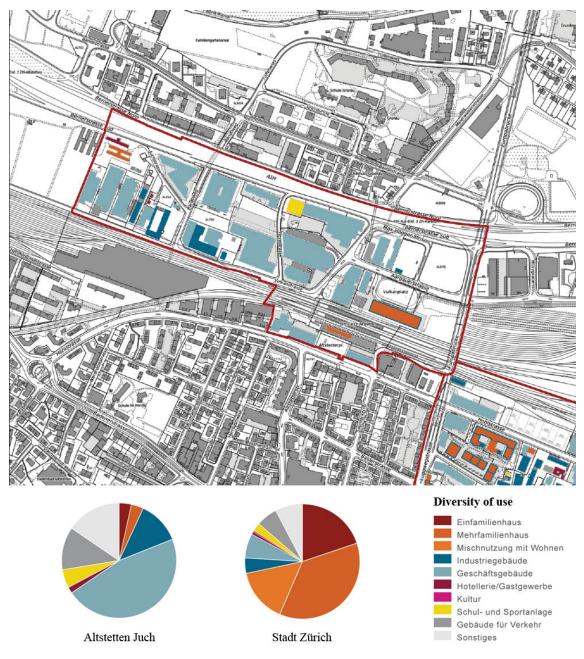


Figure 26: Functional diversity Altstetten-Juch

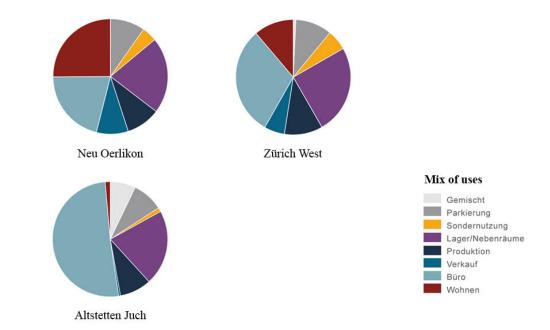


Figure 27: Functional diversity - Mix of uses

 $Source: Gebiets management\ Hochbaude partement\ Stadt\ Z\"{u}rich\ http://www.stadt-zuerich\ und\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

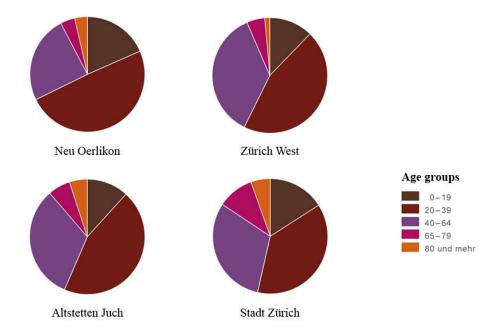


Figure 28: Social diversity - Age groups

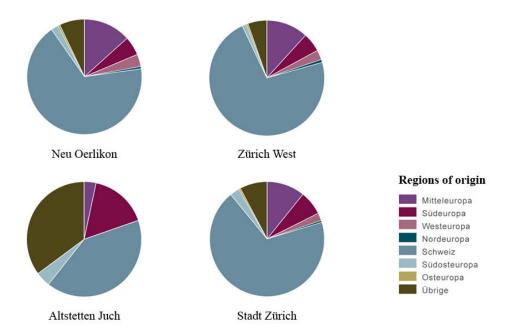


Figure 29: Social diversity – Regions of origin

 $Source: Gebiets management\ Hochbaude partement\ Stadt\ Z\"{u}rich\ http://www.stadt-zuerich\ und\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

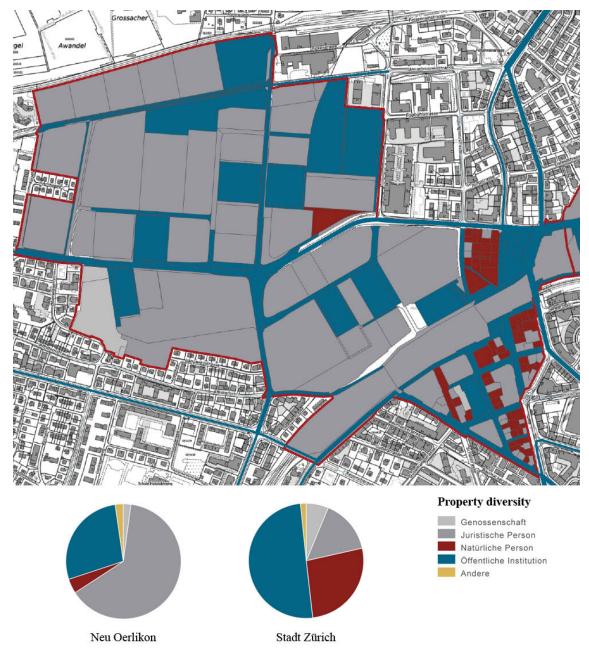


Figure 30: Property diversity Neu Oerlikon



Figure 31: Property diversity Zurich West

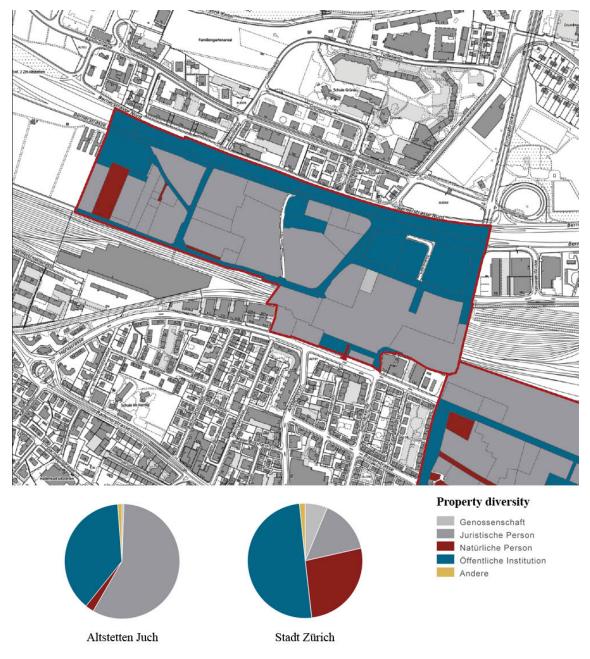


Figure 32: Property diversity Altstetten-Juch

 $Source: Gebiets management\ Hochbaude partement\ Stadt\ Z\"{u}rich\ http://www.stadt-zuerich\ und\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

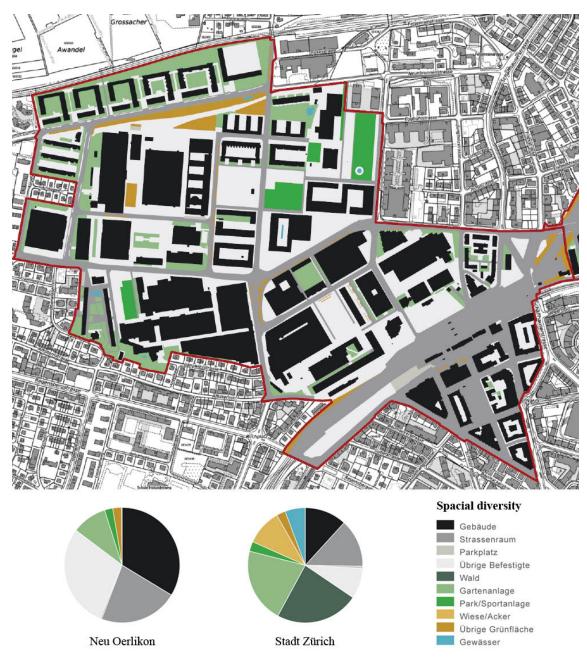


Figure 33: Spatial diversity Neu Oerlikon

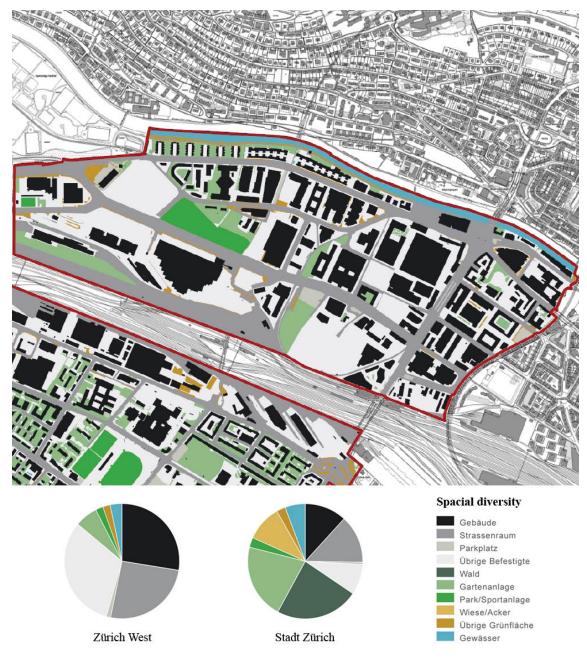


Figure 34: Spatial diversity Zurich West

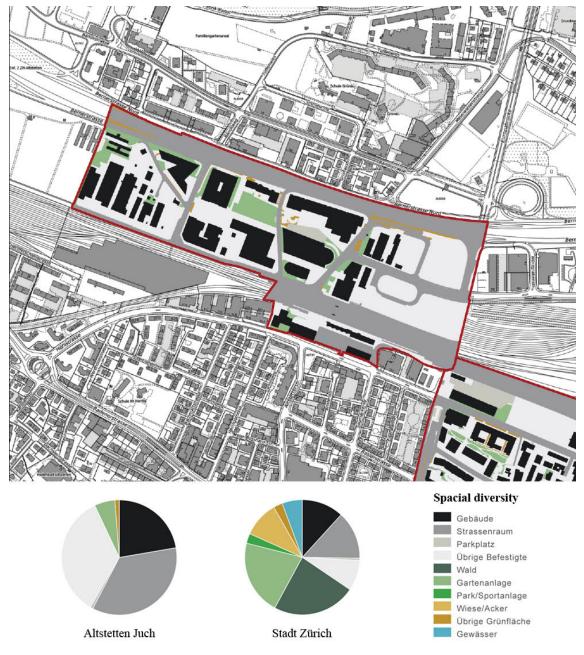


Figure 35: Spatial diversity Altstetten-Juch

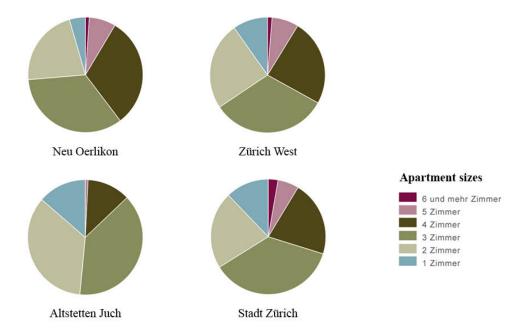


Figure 36: Spatial diversity – Apartment sizes

Source: Gebietsmanagement Hochbaudepartement Stadt Zürich http://www.stadt-zuerich und http://www.mapgebietsmanagement.stadt-zuerich.ch

# Appendix VI: Urban quality evaluation – Appropriation

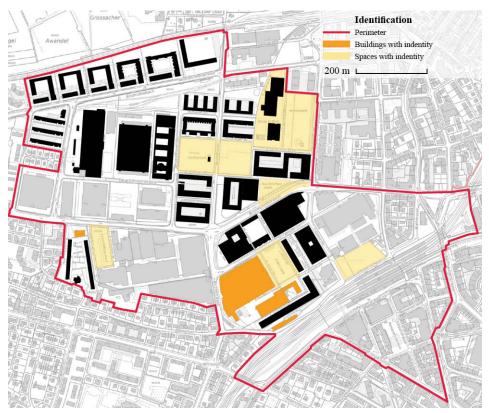


Figure 37: Identification Neu Oerlikon

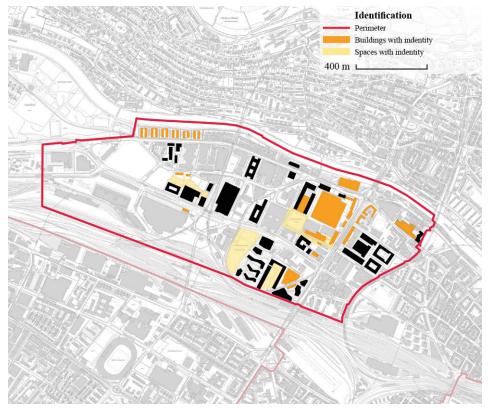


Figure 38: Identification Zurich West

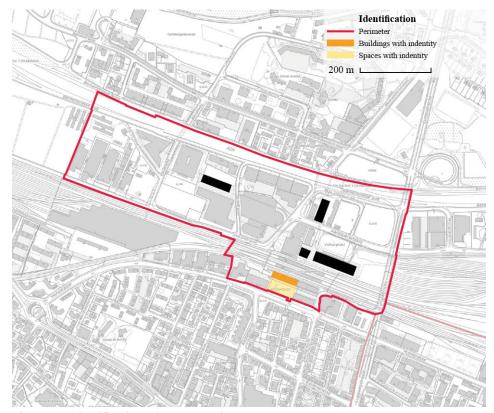
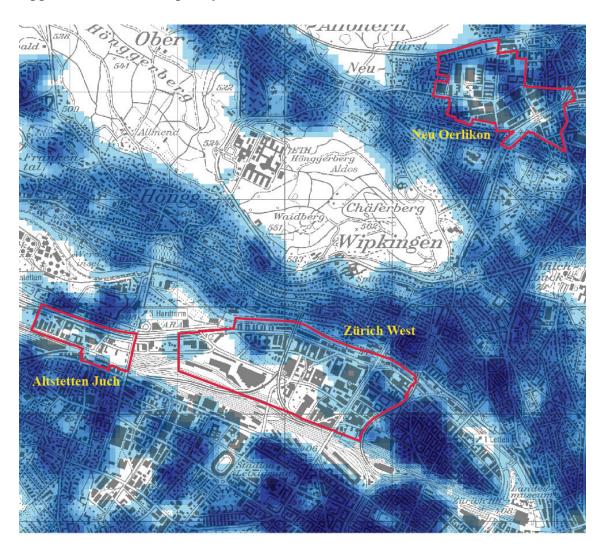


Figure 39: Identification Altstetten-Juch

 $Own\ representation\ on\ a\ base\ provided\ by\ Gebiets management\ Hochbaude partement\ Stadt\ Z\"{u}rich\ http://www.mapgebietsmanagement.stadt-zuerich.ch$ 

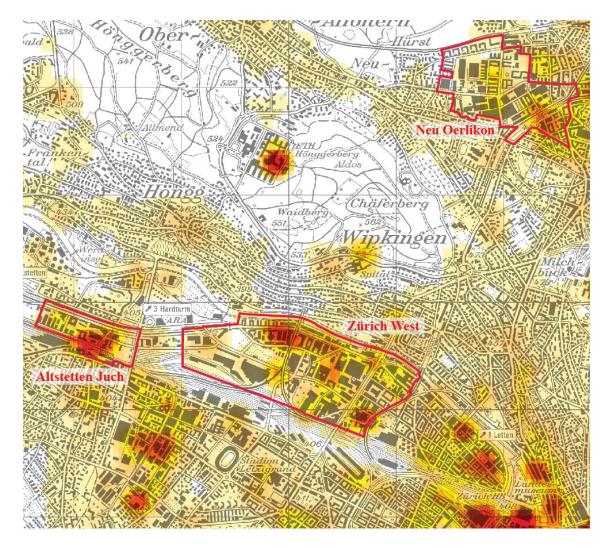
# Appendix VII: Urban quality evaluation – Interaction



Density of inhabitants

Einwohner pro	2010			
100x100m	200x200m	500x500m	1000x1000m	
0	0	0	0	
1-40	1-100	1-250	1-500	
41-80	101-200	251-500	501-1000	
81-120	201-300	501-750	1001-2500	
121-160	301-400	751-1000	2501-5000	
>160	>400	>1000	>5000	

Figure 40: Social density - Density of inhabitants



Bes	Beschäftigte pro Rasterzelle			2008	Density of employees
	100x100m	200x200m	500x500m	1000x1000m	
	1-5	1-20	1-50	1-75	
	6-10	21-40	51-100	76-150	
	11-25	41-120	101-300	151-750	
	26-250	121-600	301-1500	751-7500	
	>250	>600	>1500	>7500	

Figure 41: Social density - Density of employees

Source: Geografisches Informationssystem des Kantons Zürich (GIS-ZH) http://www.maps.zh.ch

#### Appendix IV: Experts Interviews, Questions and Transcripts

#### **Questions Experts Interviews**

- 1. How would you describe "urban quality"?
- 2. Can "urban quality" be measured/ quantified? Which urban quality components can be measured/ cannot be measured?
- 3. Which are the most important requirements in a strategy (development concept) to guarantee the success in reaching urban quality?
- 4. The following list includes 7 urban quality factors defined through the research program "Urbane Potenziale und Strategien in metropolitanen Regionen": Accessibility, Adaptability, Appropriation, Centrality, Diversity, Interaction, Usability

What do you think about this list?

Would you add something?

How would you arrange it when it comes to priorities in a strategy? How would you rate the importance of the process in the implementation of an urban development strategy?

5. In terms of goals and results, for each of the three development areas : Zürich West, Bahnnhof Altstetten and Neu Oerlikon what do you find:

Positive (e.g. success factors)

Negative (e.g. what could have been done differently)

Relevant in terms of Process/ Actors/ Soft Factors (e.g. influences)?

6. Could you name a positive/ negative example relevant for the urban quality? (examples from any place/ situation possible)

#### Simon Kretz

Dipl. Arch ETH, Oberassistent und Dozent am Institut für Städtebau der ETH Zürich; Forschungsleiter des Entwurfs- und Forschungsmoduls "Urbane Ressourcen" im Forschungsprojekt "Urbane Potentiale und Strategien in metropolitanen Territorien – am Beispiel des Metropolitanraums Zürich", Teil des Nationalen Forschungsprogramms NFP65 "Neue urbane Qualitäten".

Interview date: 08.07.2014

- How would you describe urban quality?

- Well, the research project's name was "New urban qualities ".We were asked: "What are the new urban qualities?" Within this research project we said there are some really new urban qualities, and then we went back to the notion of urbanity. One can understand the concept of urbanity and develop from there. We said urban qualities are more or less, let's say, viewpoints of the concept of urbanity. This is more or less the way we worked around this kind of new urban qualities. What is important to say is that there is not on a line from 0 to 100. This is very important, it's not like a lot or none; there are different aspects or different types of urbanity, this is very important. So, it's more, it's not a line, it's also not two axes, it is more tridimensional. We said urbanity is also a form of abandonment between no relationships at all and so many things that nobody understands. We, more or less, said that urban qualities in plural are aspects from the bigger idea and Christian and I wrote the text to define a little bit this concept.
- Can urban quality be measured, quantified and which urban quality parts can or cannot be measured?
- Urban design or city building or however you want to call it, is not a scientific endeavour in the science or hard science. There are aspects that can be quantified, of course: like how many entrances does a street have or how many meters? But, if it's good or bad, this, in the end, is a question of value, ethics. The very deep roots of urban design are based in the quality criteria, ethics, which are valuable and not epistemological hard sciences. There have been aims to completely quantify these and also then judge them by that, but the problem is that judgement is still something in relation to what you think is a good place to be or to live. So, I think no, it is not completely quantified in the sense of them already saying whether it's good or not. But, different aspects or qualities of the concept of urbanity such as centrality or let's say accessibility are very much quantified. The problem is that the quantity itself or the

number you give is not already the value; it is a value, but it's not a moral or an ethical value.

So, we rather speak of- as I wrote in this book- urban constellations. So, if there is an area that has I centrality - for example, logistical centrality - you could really mention that, a lot of trains for example but very few interaction, people do not interact and have relations with each other or lets say only few or fast relations, not like deep relations. Then it's a completely different urban area, as a neighbourhood where a lot of people know each other but it's not at all central. So, it's not this is bad, this is good, because this is high and this is not. This one is a different constellation like if you look in the sky and you see different stars. This is a constellation, we also have to do the concepts differently, year by year. The problem is when you start to quantify it. A lot of people do modifications, then have this kind of metamatrix where everything has to become like big or small, a lot or not. I think this is a mistake! One can't quantify it, one can speak about it of course. But, we have to make sure that we look at the specific places. So, the specificity of each place is different but there are types; for example, you can say we look all the train stations. The types are alike, then you can learn from each other. So, it's more like you look at the things, specific things, then you make the constellation, then you make typologies, then you relate them to each other. So, this is how we went on.

The book is based on four complete different types of reality. Landscape architects had their idea, we had ours, sociologists had theirs. We more or less said okay, everybody says what kind of things do they look at if they think about urban realm and then we tried to put them together and see if they double or not. So, it's more or less a compilation of important aspects from different focuses. That's why the method here is not a very strict method, it's more or less an assemblage of different methods. So, it's not purely hard core science.

- I asked this question because, for example now, that the term of urban quality appears in indexes or in city quality index in which they rate cities. They try to measure it somehow. Or in certificates. There are more and more sustainability certificates in which this matters. So, I think people try to quantify the qualitative.
- No, it's true. It's just not, in my opinion...
- Completely possible?
- Well, you know, it's possible. The question is if it make sense, does it lead to a better work? It is of course quantifiable in a certain sense. But, I just don't think that it leads to

a good discussion, that it leads to a better solution. But, if you look at the parameters, they look for giving these numbers; and then they discuss about how could we change this number in the end. Then, in the end, this number is away and they talk about the parameters and then, they talk about urban quality. So, if this is done, then it is possible. But, it's not possible to be a dj. That just says ok, we need a little bit more that and then, it works. There I agree. First of all, processes are more complicated than that. Second of all, this urban system is more complicated. It's more a form of understanding and see and then, starting to discuss about it. It's more a way of how to start more profound discussions. Because one of the things where I thought, where I found it makes senses... We went to some places and then, with these terms, we talked to people. We found out that they can discuss the area they live in much more precisely. They could say this is not central in the sense of I don't know, like mobility, but it is very central for me, in my everyday life. For me, it has some kind of centrality, also symbolic but not logistic. So, this is the way we kind of made the concept of urbanity less hard. We tried to soften it in order for people to better understand. It's more a framework of discussion and of solutions than hard facts.

- So, maybe in the process to quantify it you get to the factors and then, it's easy to understand it.
- Exactly!
- Somehow, even if you don't get to a result, the process to quantify it makes you aware of some things.
- In the chapter "Urban profiles " we made these sheets where people could put if it's centrality, it's low, mid-low, and this, more or less, it's like a psychoanalytical. It's like people have to think about their area and other areas and compare them, you know. It's not really important what exactly is written here.

Urbanity and urban qualities are such a difficult concept! It's also complicated intellectually. In the end, our everyday life must be designed by everyone; and also everyone must try in it, and also the people, the streets, they have to make urban realm, it's not just some intellectuals with design. So, for that, this too is very good to start a broad discussion without making it too intellectually closed. And then, perhaps the last thing, why at all do people start to quantify that? This has always been a dream- to quantify stuff. This is like one thing, the long term dream to quantify stuff. Architecture was also at one point... They tried to quantify it after the French Revolution. They said all this kind of stuff, they made huge catalogues and, in the end, they found out. It

doesn't work! It's too specific, it's time related, it's simply not possible. Here, it's a bit the same. Why do people start to quantify? Right now, it is the phases in the industry, it comes as a side product of the sustainability topic. So, they said sustainability has this trifold of economy, society and environment. So, we also need to put society. Ok, urban quality is the social aspect and therefore, they can't jump over. So, these things that are also measured as if they could measure it. We should not fall in the trap, to just do the same for urban qualities like we can do for energy, just because they started this kind of measures. So, we have to say yes, it's very important to talk about it but we need another type of discussion. I think this book tries to make a start for a form of discussion.

- Because, you think, we can fall in the trap of simplifying too much and then losing qualities somehow?
- Yes, in the worst case scenario. It also opens up. Another problem is that the people using such a method do not observe reality. Because they just say, I have this list and we need a lot of... and then, they don't even look what is here, what is the potential. It's so specific, of course, and with a lot of time spent discussing, observing. Specific strategies are much more important, just like generics. You learn from generics, you also have to base it specific at the site. The problem with such a book, if you take it with orthodoxy where you believe every word, like the Bible, we only destroy the work. So, rather not!
- Which are the most important requirements in a strategy/ development concept to guarantee success in reaching urban quality? Meant more how they should be formulated for the people who write these strategies or...?
- That's a difficult question. I've just been to America. Some areas have also direct democracy, for example. The most striking urban strategies, the most extreme that broke boundaries. So, this means that for a lot of urban strategies people are afraid of the public reaction or of the public voting. I think they shouldn't, because the hardest, the most clear and the most digressive like what of course, always, the strategy guys think the vote should be but, it's not possible comes from referendum; cause if you don't have them, you say like well, I don't know if they will like it. So, it's this kind of passivity that makes the the things not good. Well, they can't really count on a basis that we want something. I think this is the most important, than people think!

The second thing is that strategies should be made by people who really understand the way strategies are put in reality. I think this is sometimes not the case. People

coming from a extreme, very specific area of knowledge, sometimes don't get the relations to the other things, then just push something threw, which in the end, is contra productive. So, what you need is an understanding of emergency stops and of these complicated relations. So, you need a lot of good policy majors. And then, of course, the strategy - most of the time - is not really strategic which is a problem. It's called strategy but it's not. I think nowadays a lot of development concepts are just...Turn out to be like like a bouquet of flowers - this and that and that, and we also need to be nice to this section. In the end, it's so many things and so many parameters. In the end, you don't really know what you bought. I think most development concepts also, don't really have, are not based on a problem's definition. One should define the problem/the goal very clearly and also, one that is easy to understand for people who are not architects, urban designers or a strategist. I think this problem analysis and why are we doing at all anything, sometimes it's not so clear. I have seen strategies; I have come across strategies - especially in cities - that have absolutely no problem on the basis. So, they just say, well, let's clean a little bit less the streets, then it looks a little bit more messed up and then, perhaps the creative guys come and then, perhaps we still need to do something else, flowers and so. It's not really clear what they want, they can't communicate, they also fail easily in the elections. So, I think this must be clear why are we doing something, what is the goal, this can also be polarized. So, I think if a strategy has no political dimension and a lot of planners trying to be apolitical, this is a big problem! Because we also take it away from the discussion, because it's just technocracy; we can not discuss it by the look because we have 2000 things and I'm sure you find what you like. This doesn't work! Then, of course, the process destroys your strategy. People who say the process destroys the strategy. Nobody knows what the future brings us! But sure, still, we have to act! The more you can focus on what you want, the more chances you have to at least do so. I think it's a little bit strange to say. It's also hiding. Well, the process of course and everybody wants something. Yes, but this is just like a horse that doesn't jump because they say it's too high. This is just a little bit an excuse from reality because you can also say that the world is too complex.

- But you think also a good strategy can be destroyed by the process?
- Of course, everything! Every strategy can, but then, it's not a good strategy!
- I sense from your answer that you feel the need for a stronger will. Above all?
- Or below! Well, I think that a lot of strategies in nowadays just don't deserve the name ,, strategy " because they are not strategic, they do not concentrate on what has to be

done. They concentrate on stuff that is so peripheral to the development of the future of the city. Let's me make an example! In Rotterdam, the city was built in the north of the Maas - the Maas is the river - and then, they decided to develop the south. They did what they did and built the bridge. They knew that the bridge is a strategic thing; they built a huge bridge, an expensive bridge. They knew that this bridge is not only the symbol but also the access to these things in the south. And then they put some development concepts for the south. This is a very simple notion of showing what a good strategy means! It's sometimes not what you have to do exactly at the area or in the backyard of some people. There are regulations that say what you have to plant in your backyard. Of course, one can discuss about it but it should not be main strategy. The main strategy should - for example - be ,, how are we developing to the airport ?", ,, " what are the strategic most important things? " I think a lot of development concepts just lack these neuralgic terms. They are more like everything you wish, but this is the problem then, the process destroys it. You need to find out what are the neuralgic points to do something in order to get a lot with just a few things. We cannot control everything. If we try to do this kind of everything a lot of people will get angry.

- And besides the power of a good strategy, do you believe also in the certain power of the words that are written there? In terms of urban quality is it enough to ask we want urban quality?
- No, you have to say what is. You have to say not only what is this in general.
- Because it appears in many strategies as just urban quality.
- I know...I always read these things and I never know what it means and I always know that it's intelligent to put it. Because it's like this good governance. We love the people, we love good qualities". Everybody loves it but If you look at what it means, just analyse these two words then it's very easy that it's a hollow thing. Urban is already a complicated definition. We try to define it in these texts. Urban means something. So, you need to say which kind of items have the quality, which kind of quality are you looking at and then it's soft or hard. This quality means adjective, here comes the adjective. It's not a noun, it's not a verb. It's a high quality concept. So, urban quality itself it doesn't mean a lot. You have to define, you have to say. Centrality is an urban quality but then you can say, this space here has for example a high symbolic centrality because... then it makes sense. If you don't do that then it's just nothing, it just means eigenschaft. So, these two words don't mean anything to me if you don't

elaborate it. Most of the time urban quality is used for... It's just a metaword meaning good life...

- Do you find a connection with urban quality of life? Somehow do they want to suggest that urban quality of life is high or it's urban quality?
- Exactly! I think two things come with it. First it's like urban lifestyle index or urban quality index. Urban quality for them it's two things... One is a good life in urban realm and the second of course... Well, there is one that is politically important... Switzerland is kind of like urban vs. rural. So, they say we want urban qualities not rural qualities. So, we are not fostering single factory houses in a pastoral atmosphere with sheep.
- So, we offer the qualities of an urban life, of a city life...
- Of a city scale. So, the urban has a certain meaning right now...
- So, you think that further if they develop strategies their work should be clearer?
- Of course! Because this doesn't mean anything. And also urban it's very difficult! Urban is not a scenery only. It's not only the physicality as we put it, Interaction. These are the course of urban, the relations and how relations are put. You have different relations in a setting that is rural or in a setting that is urban. In a rural setting you don't have privacy more or less that's put it extreme. Everybody knows everybody and there is no privacy, you hear everything. Whereas in a city, urban life, this means that you have privacy. You have the notion of public, you have the notion of voting, the public space and private space. From these distinctions everything starts. Also, the relationships are more complicated in urban life.

We also made a distinction between urbanisation and urbanitaet, urbanisation and urbanity. Urbanisation is to bring the whole society in a complex network of interactions - economically, socially...- this is urbanisation. This doesn't lead to urbanity. Urbanity is traditionally the way of life in the big cities, broad. For example, anonymity, let's say diversity or heterogeneity, centrality, density, stuff like that. These are things that relate to the notion of urbanity not to urbanisation. Switzerland is completely urbanised; there is no one not living in urbanised networks, 'cause everybody is in relations to others. But not every area in Switzerland is highly urban in the sense of urbanity. So, from there it started to make sense that we say we elaborate on this urban/urbanity.

I think if they say urban quality in these strategies they mean...it's like a symbol for everything that urbanity means like city, also like interaction and perhaps also centrality and openness and all this other stuff. But, you know, it's like an extremely complex

symbol and it's really difficult if you start to discuss stuff on this high level, like complex levels. Of course, it's nice, people love the term, it's cool. They say urban quality, just like an image that you aspire. But, on the other hand it's also easy to destroy it like if you say no, we are not urban. Zurich is a very small city. And if you don't continue then by saying why and why not and how, it just blocks the discussion, it doesn't open the discussion. I think this is the real danger of using this kind of words without saying what exactly one wants to do.

- What it means...
- Exactly! Because you show a strategy to people by not really saying what you mean. By more or less telling them a limit of such a complex image. You can't understand everything on the urban, it doesn't even have to say densification. You can have urban life in a very un-dense area... So, if you really like want to discuss, it has to be elaborate.
- The following list includes several urban quality factors you know them... What do you think about this list? Would you add something? How would you arrange it when it comes to priorities?
- Let's put it that way... What is important or not? The single aspects but the constellations. I think what we are always looking at is what areas has what constellations? Like let's say high logistic centrality, no options for adapting the space, but a lot of different people, having very fast interactions but no deep interactions. I think about train stations. . .
- For example, for Neu Oerlikon what constellation would you make from this?
- Well, I think about the list... Well, the list is not final of course. We never said it's final, we said these are just viewpoints we think are important. It was also a discussion between different chairs, everybody wanted to add their main aspect...It should not be final or hermetic just a... It's a collection, a historic collection, what aspects were spoken when people talked about urbanity.

Would you add something?! Yes, I would add for example or...let's say another... I know a guy who wrote a text about resilience and he said resilience is an urban quality. We-more or less- did the same. We didn't know different. We just said resilience is an urban quality and then said we did like. So, resilience -for example- could be one but we said adaptability... How would you arrange it?! We arranged it in the sense that... We all have different arrangements and it's not hierarchically in the sense that one is more important than the others because I said the constellations... We said centrality

first, then...accessibility, usability, adaptation, appropriation, diversity, interaction. Why did we do it?! We said that centrality and accessibility are the two that are foremost measurable and are very clear like physical space, like how many people, from where is it, how many openings? It's more like this...People flows and access. Usability, adaptation and appropriation have more to do with the uses and how the spaces are inhabited. Can I change something in order for live or can I change the public space for a football game? Appropriation comes to...starts to the social dimension where you say like, do I like this space, do I feel at home? And then, from there on it comes more to the social realm like diversity, like it's all these things, not only for one social group but for many social groups. And then, it leads to the - perhaps the most important - interaction! I think interaction, if one of them is more important, it's interaction. Because interaction is relations, this is how everything stays in the end, because centrality just leads to interaction. Adaptability makes clear that the interaction between people and the space, interaction between people and the space is also there in 10 years. If the people want to do something else with the space. So, I think it's all about the relation and also the potential for relations. I think this is the core for urbanity.

- But, in your list of priorities if centrality is first...do you mean that if a place doesn't have centrality it can't be urban?
- Yes... No, it's more a... It's more grouped like centrality, accessibility are more like the physical viewpoints and the others are more the used.
- And only a constellation itself, a constellation of just accessibility can't give urbanity without adaptability and interaction?
- No. I think it's just a little bit used less to look at only centrality. A traffic engineer can look at centrality because he wants to organise the people in a fast manner. But, if we talk about urbanity... It's not enough to say a lot of people go to the train station, that's why it's urban! We have to say...Do they? Is the train station accessible for everybody? Already there it stops. And then, we say is the train station also emotionally for the people something you like to go or is the big hall of the city or is it just commercial space? This has completely different urban space.
- And the weight of these factors? Is it the same? So, the emotional has the same as the infrastructure? Or you can't measure this? The soft factors...
- I think they are so different; not saying that one is more important than the other. But at the specific constellation, what you have to do, has not always the same importance. For example we studied a village where it was a church with a nice old house. This has

been the main square of the city. In the 60's they made a round abound for the traffic. So, all these other things that come with the city's space are gone. Only the symbolic of the church remains. We said that quality in terms of adaptability, it is very high since the symbol is here and it has a history and people know, and people know. There is a high symbolic potential for change. I actually think this potential of change is very important. Then I think an urban planner should say that's going to be easy! Because this is something that has the potential of becoming like deep-rooted public space. Because it has already the roots, and it has already history, people will easily accept a central space for their everyday life next to the church. You don't have to do it somewhere else.

- And maybe it has a much bigger power of change than if you add all the other factors like if you had accessibility and interaction there.
- The only thing you need to do here, for example, is instead of a round abound you make a crossing and you use the rest as the public space of the square. So, here you just physically need to bring more pedestrian accessibility to the certain pavement, to the flour and that's it! And then the rest will come...
- How would you rate the importance of the process in the implementation of an urban development strategy?
- Very important! The strategy also has to be revisited, always. I think there are different time frames. If you do a strategy you also have to think of what happens in 150 years. This is one thing people always talk about -what happens with a building after 60 years, 90 years, 100 years? What we have now with the things that were built in the 1900, can we reuse them or not? Very difficult because we don't know what comes and comes, but still one could think about it.

Then, the other thing is like the 10 to 20 years issue. That's also critical. I think at Oerlikon, everybody talks about. Let's give it more than 10 years! We need 30 years. I think within these 10 to 20 years a strategy needs to change also. If you want to make it faster, if you want to make the process of this liveability - let's call it like that- faster, this you can do - I think - by using existing buildings that have caffès or bars, not destroy them. I think nowadays people just go to new areas and say this is not as cool as the old area so, it's bad. It's very difficult because it's new. That's why a lot of people do urban development strategies by trying to do them as old as possible. The faster the process goes to an everyday life, the better.

I have seen in Amsterdam that it's possible to use old fragments. So, if somebody wants to open a bar it's easy for him. There you can do a lot of things.

Back in the days the ground floors paid the living upstairs, nowadays the living upstairs pays the ground floor. So, there are a lot of soft factors.

Every urban design has three aspects: urban form, urban processes and urban managing. This was said by Kevin Lynch in 1974, in his book ,, Good city form ". He said that a good development strategy always incorporates form, aspects of form- this is the visually, the perception of space-, the process- like how can we come to this? in what kind of time? -, and management - who is then making the law, who owns the place-And only the three of them work together in a good constellation again.

- I had in my mind the idea that if the process is so long and things are changing, shouldn't it be possible on the way to revisit it like you said?
- Always!
- If you see that the economical situation changes, for example you don't need offices anymore, do you continue with a strategy that promoted offices and leads you to an empty neighbourhood.
- I think this is very crucial! But I also think that nowadays people are more aware of them. A lot of developments, also know that if we don't have this kind of process analysis after 5 years, 10 years and make small adjustments.... I think if they don't do that, the developers, their risk is just too high.
- This was also a starting point of my research. The question if you should do these steps and you should somehow verify if you reached urban quality....
- Yes...control it...
- Or just leave it and see that nobody moves in those buildings and do nothing about it.
- No, that's true...
- Now, we go to my case studies. In terms of goals and results what they want and what is reached for each of the three development areas Zurich west, Banhof Altstetten and Neu Oerlikon what do you find positive like success factors -, negative -what could have been done differently- or relevant in terms of process, actors, soft factors, in terms of influences?
- Let's start with **Oerlikon** since it's just in the area. Let's put it that way. It was a big company owning almost all the land. This makes it completely different to, for example, from Zurich West. I think everything is related to this big landowner, positive and negative. **Positive** it has certain coherence, it really became an area where families love

to live. It's very well orchestrated in terms of heights. So, it has a certain visual appearance and also it has a critical mass that you can talk about a new area, this is also in relation to these sides. Also the **negative** things come from that. For example, everything was built in a very short period of time without this kind of processes analysis, like you said. This was also because the market demanded a lot of housing that's why it was fast. I think a negative aspect is that the idea was to reproduce the industrial scale as historic remembrance of the factories but also in new buildings, new program. I think this wasn't a good idea. First of all, the analysis was wrong. If you go to industrial sites you have big and small buildings. Small houses like where the guy opens the door and you have big ones, like a cluster. Also, a lot of different things over time could use things to top on each other; the factory has to be bigger. If you already used this meta form it means more sophisticated than just big buildings. I think this was a negative aspect of this historic remembrance to say big. Because also for housing it's not good to have these huge buildings. I just don't know why one should use this meta form for such a new way of life, I really don't know.

The second thing, I think the relation between built and non built is very low. They have like 20 parks- I know in reality there are only three or four. A lot of huge parks and a lot of parks that look alike. They said they are parks but they look like squares. They are not like parks where you can hide, they are really like public squares. So, they have I think too much of the same public space...

- A lack of diversity?
- The lack of diversity is in public spaces. But then, people with kids they really love it! Then, there was the problem of the ground floor. This centre 11 has its entrance to the train station and not to the square. I think this urbanistically is really a failure. This has to do with centrality. This is what the sociologists found out. If you want in an areathat is not highly central you want a central place within this area please concentrate everything you can on this space and don't scatter centrality. Another thing is, since you have these huge buildings and the glass facades, not a lot of entrances, not a lot of places where you can really have an everyday life next to the facades. But also it's difficult to show where you have a your shop is like you can't really make a sign.
- Is orientation a problem?
- So, this is another problem. I heard a lot of people saying that orientation is a problem. So, I think the main positive and negative...Everything goes back to the idea of this has

been a big area, let's also do it as a big master project. So, the master plan idea was deeply embedded. And master planning is one strategy.

I think Zurich West is completely different! There you don't even see a master plan. If you go there, of course there is one. And if you go there, you think there is no real master plan. There are only two or three landlords who built whatever they wanted on their area, which made it to the first place very heterogeneous. Looks very diverse, they also used old things, new things. A lot of diversity and also... This area shows a very good form of appropriation, adaptability... I think this is a case study that is interesting! However, urban life nowadays could go without it. What the sociologists said, is that it's a very homogeneous, social sphere, and that the interaction between people living there and people who work here, are not very high. There are no like linked spaces where both could go. But, at least there are different social milieus that use this place. I think it's a high centrality, it is highly central. But, it is right now not a highly central space in the psychological concept. A lot of people still don't go there but this is also because it is new...

- Many people see it as a business district even if there are housing...
- Yes!
- It has to do with perception?
- I would also qualify it as a business district. Why? For several reasons. First of all, the main buildings you see are business buildings. Then, the dimensions of the spaces are also business like. If you come out from the station you see a huge business building, they are all business, you don't see any houses. The physical manifestation of housing is not really there. But, you know, I think that's not a problem. I don't say you need to put housing. I think this is perhaps too much of a business icon. Imagine there are like similar elements in the city, you live upstairs and you work downstairs. So, you look at it and you just don't say living or business. You just say Zurich. I think perhaps just because every use has such a symbolic element of itself. I think that's why people think it's business...But, we still have to be fair. It is a huge business district.
- This doesn't exclude urban qualities if it's just a function and it's not diversity in use?
- No, not at all. I think of course...It's not finished yet... A lot of people are dissatisfied because they had hopes. I think the story was that Neu Oerlikon is boring and up on the hill and everything went wrong .... And here, now, Zurich West is cool. We did different stuff, we did more like stakeholder management, all these cool things were done here. Then, they look at it and it looks the same. I think it is a little bit

disappointing! Perhaps a radical diversity was not intended, radical diversity in terms of poor, rich, business, soccer team.

- So, you think this could have helped to reach a different result than Oerlikon? A radical approach?
- Yes, I think it looks very heterogeneous but on a social level it's more or less a gentrification process. So, it's not homogeneous, socially I mean. I'm not sure if it's true because if I go there I see completely different social milieus... For example, Saturday night you hardly see any people from Zurich. I think there are people from outside the city who come there. And the guys who work here are also perhaps not from Zurich, but they work here. So, it's a little bit an area in Zurich for people not from Zurich. This is also interesting.
- The last question, which is more general... Could you name a positive, negative example relevant for urban quality? From your experience, something that you like or it's your example in practice...It doesn't have to be from Zurich...
- Yes, the project Babel in Lucerne... I think is very good! This is a project that wanted to do something with Bernstrasse/ Baselstrasse in Lucerne. And this wasn't really an urban design concept. It was more that they wanted to have a little bit less criminality. But still, the people who did this project, they knew that this is also some kind of social work. So, it's not making it clean and rich! Not at all! It's just life... They helped people to start; to start a restaurant or they even gave people money for their rent. They even planted some trees...So, it's a very small thing. And they looked a lot about these urban politics and asked themselves who goes there? For whom is it acceptable? Let's say people from university also go there. They put I think a bar with some kind of library and then, also people from there came.
- But not in the direction of gentrification, somehow?
- The whole thing is that they are not renovated. Not physical change, really. It was more a way of diversification, interaction. Also, bring these foreigners to more everyday interaction to people whom are from Lucerne. It's more a relation, it's about relations...I think a lot of good examples start from thinking like in terms of the relations and not in terms of space. Do you know the Idea stores? So, in London they wanted to help poor, less educated areas with a lot of foreigners. They wanted to put libraries. David Adjaye got the commission and said we should not do libraries in the classical temple form. So, he said what physical appearance should something have that this people go? So, he said shopping centres. They have no problem with accessibility. He did this shopping

centre design and in the end he said not only library, it should be an idea store- games and stuff. And then, always a public space next to it. Now, it's a gathering place, it's centrality, it's the main place. It's really a public building. Everybody goes there, completely packed and then a lot of people start to read. He did this project by thinking of urban qualities, of accessibility, of who goes, who can, how is the interaction between the people and the building.

I think this is a very good example, at a very small scale. Other examples? I think at bad examples where urban qualities are used as clichés, when they want to play as if they were urban projects without really going deep in the DNA of what urban means in the sense of diversity, centrality, and adaptability. They just show an urban facade and in the back it's still the same. So, I think you can also use this kind of urban qualities and urbanity, you can use it for selling projects that have nothing to do with urban, it is just manufacturing urban. I think there are even more negative examples because people don't like this kind of urbanity idea and you point on it and say well, this is not what we want, it looks the same/it doesn't even change. It also shows to the people who look at it that this is urbanity. I think that's wrong! It's also contra productive! Because if we say that it's the relation between people, the space, people in the space and then you come with the facade and say it is enough, then you say that the image itself is urbanity. We all always claim no, it's the relations that bring out urbanity.

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Interview date: 07.07.2014

- How would you describe urban quality?

- That's a philosophical question. It has to do with quality of life, quality of urban space public space; it has to do with the place you like to be, identity. So, it's a place... urban quality it's a place I like to be in. I would say so...It's an emotional quality and if you go to the next question I think it's difficult to be measured. Maybe, it has something to do with dimensions, with proportions, but I wouldn't say that places with a very high density, for example, have less urban quality than places with a low density; so, it depends on the place.
- And you say it's more of a personal experience?
- Not only. I mean if you are alone in a place that can be. It's a place where me and other people like to be...where they like to be.
- Can urban quality be measured, quantified, and which urban quality parts can be measured or cannot be measured?
- No, it cannot be measured. Parts of it can be measured. When you, for example, in terms of circulation, how many pedestrians/hour go threw a place, or go threw a public space, or how many bicycles, or how many cars, or how many business/ certain amount of time are there? I mean that part of urban quality, the circulation aspects, traffic aspects, they can be measured. But, spatial criteria...you can talk about dimensions maybe, that can be measured or compared. So, how does a place where you have two story buildings, what kind of circulation frequencies does it host in comparison to a place where you have five story buildings, with or without ground floor, public use, private use? So, public/ accessible use. Maybe, you could try to find certain rules of engagement. But, I don't know such kind of investigations. Maybe, that could be a theme for a dissertation. Maybe, you should define, in terms of space, you know dimensions, that could be the scale of different buildings and compare measurable aspects, measurable criteria like the circulation, as I said before... compared to scale, to the questions of scale. Architecture and urbanism aren't exact sciences. So, how do you describe the quality of a good space? It's often linked to the well being of the person that is in it, that works in it, that lives in it, that moves in it; so, that's very difficult to be

discussed and yet quality is something that you can see or that you could detect in a building or in a public space.

- Which are the most important requirements in a strategy/ development concept to guarantee the success in reaching urban quality?
- I think that the process to reach a goal is also part of it and that has something to do with the process; to get there is something that involves the ground owners, the population, working population, living population, residents... it involves professionals, so people who work in urban design, space design, in landscape design or architecture... it involves groups of interest, investors... So, I think you need to go threw a process with those people in order to find out what could be adequate for that room, what could be the adequate solution for the adequate mix of use, for example, for this place, which is identity in itself, but also part of a bigger urban tissue. You need a process to get the appropriate mix of use, or the appropriate amount of identity, or the appropriate amount of free space in relation to built environments and then, within that, it's a design process that you try to find the right solution for this specific place. Maybe, there are people, you know the Chinese they do it in a very different way; they have thousands of square metres, square kilometres, and they build towns, thousands of inhabitants, but I don't know... and of course it's a matter of culture. The Arabic culture, they have a notion of introverted homes, with restraint areas of action for women, for example... The public space is not something that belongs to everyone, it's something that belongs to men. So, they have a completely different way of thinking what urban quality is. But we, I think so far we just make system limits; we limit our system to our western notions of urban quality. And I think you can, from our point of view, you can just say they are completely different notions of what urban quality is and that have nothing to do with what we intend.
- So, this guidelines that are written in the strategies, they are just guidelines to know the direction and then what really means for a place urban quality to be discussed during the process...
- Yes, during a process that also has to be designed; maybe, for a small village of 3000 inhabitants it's a different thing than what you do in a suburb of Zurich, where you're in a different context; that's why I say it's something that is an entity in itself but at the same time it's part of a bigger context, a bigger scale, a context with its own rules of engagement. I think, from my experience of working in this field, the better you prepare such a process, the better you try to find solutions with the stakeholders, the more

sustainable the result will be. And in the best case, in the best case you start the process maybe one year, two to do it, then you put your results into a guideline, and maybe one of the participants starts developing his own area, and he refers to the concept that he has participated in, and you don't start from the scratch. You can build up on a strategy, on a concept that you had developed together, in the best case. Sometimes, it doesn't work. But, if there is interest of developing a certain area, town, I'm sure that you'd find, you must find the solutions that satisfy everyone.

- The following list includes 7 urban quality factors, as defined in the research paper "Urbane Potenziale und Strategien in metropolitanen Regionen": accessibility, adaptability, appropriations, centrality, diversity, interaction, usability. What do you think about this list? Would you add something to it and how would you arrange it when it comes to priorities in a strategy?
- I think usability is more important than adaptability; maybe, it's not necessary that spaces are adaptable. But, before a place, if you have to make a choice, the first thing I want is for the place to be usable, and if it's not usable, we can just break it down or something. Of course, it's better if you adapt it but it should be usable first, because otherwise you don't go there... as a working population, as a living population, as a resident, as a visitor, a tourist. So, centrality is not so important, adaptability is important, but not as important as usability. Diversity, maybe... In general, I think diversity is a very important aspect of whatever we do... But it depends if it's a place where you have all the sports facilities... that's not very diverse.; but these sports facilities have an important role for the whole town or the whole region.
- So, you mean that also, for example, office districts where people just go to work, can be urban?
- It can be urban, it can be very sustainable. Maybe, you know, if it's a place where at daytime they go to work and at night there's a whole kind of restaurants, nightlife, why shouldn't this place be sustainable and/or urban? It's like here in Zurich West.
- How would you rate the importance of the process in the implementation of an urban development strategy?
- The importance of the process... I think I already answered this question, it's crucial... it's crucial because there are so many layers of... and that's why I love my job! I just love it! I'm passionate for my job and I didn't realise that when I studied architecture but it's so... The built environment, the towns, the city environment, it's so dense, it has so many layers.

- In terms of goals and results, for each of the three development areas, Zurich West, Neu Oerlikon and Altstetten- Juch what do you find: positive (e.g. success factors), negative (e.g. what could have been done differently) or relevant in terms of Process/ Actors/ Soft Factors (e.g. influences)?

- I think in Zurich West what worked great was the public transportation. So, this whole accessibility by public means, by public transport, it's done beautiful... And what I also think has been done beautifully are these new buildings that have been built, made, also based on this excellent circulation access. For example, the Prime Tower, I don't know how many parking spaces they've got, maybe 20, they have about 3000-5000 workplaces and so this is a very successful development, densification in a node, a public transportation node. What hasn't been done very well or hasn't succeeded very well is some of the public spaces. Some of the public spaces have been beautifully done like the Viaduktbogen, this network of the circulation, pedestrian and bicycle, this network is good.

In terms of public space like the Turbinenplatz, it's not very successful, it has to do with the adjacent use, ground floor use, like the hotel...maybe, there should be more ground floor/public ground floor use, but also the backside of the Schiffbau they wanted to destroy this building and then they changed the plan, the whole planning instrument, and left it here because it's a valuable cultural building, industrial cultural building... So, they left here and moved Public Square here but at the same time this has already been realised and it's the backside of this house and you can sense that. There you can see how important it is to have access to public use to publicly used ground floors. If you don't have this, there's a problem. This well is a problem with the Technopark... I's just so small, it's not oriented to that public square, that's why it doesn't really function. It's a beautiful place but it's empty. Usability and accessibility but not prone to the buildings. So, this interaction between the buildings ground floor and the public spaces...

What I don't like at all is the price development... Now, that is so expensive! So, they miscalculated. They built in a too expensive way... So, they can't get rid of their flats and it doesn't help anyone if these flats are so expensive that no one can just live there...

- But isn't this something that the city of Zurich would have regulated threw the process?
- Not really.
- So, in terms of economy you can't tell an investor that you should do this price for rent?

- You can make a suggestion but in the end it's the market... He can have a rentability calculation and do this, generate a certain amount of income, he will try to realise it. So, they fear that through this economic pressure these whole neighbourhoods are going to be broken down... because there is a densification process... because of this economic pressure. Not only because of this economic pressure, but also because we use more and more space for living. Because we can afford it.

- But going back to the process and the subscription that you write in the strategy, this kind of soft things, you can't see them from the beginning.
- No...
- And how the economy will change.
- There, I think at the concept, adaptability. Adaptability in the concept, in the strategy, of how to develop the whole thing, that's very important. You have to have a concept that allows changes in the game... I think large scale adaptability, you also have to take it into consideration that maybe one of the land owners does something completely different, will not follow the concept that you have developed and yet, it has to be as strong... it has to be so strong that it doesn't matter if one just does something else...you know. That's process design and that's the simplest thing and the most difficult thing! Speaking about Neu Oerlikon, it was a little bit difficult for this whole area to start living... It's a bit different now because I think it's been 15 years or something, and it's been there, people live there, they have a history.
- They adapt...
- Yes, they adapt, they take it... s'approprier in french... appropriation.
- But do you think people can appropriate anything or it matters a little bit how you encourage them to appropriate it? How you make the facade, access to the building....
- You can put a frame. The way they do it it's very individual, you can put the frame. You can encourage but you can't push them. If they don't want to, or if they do it in a different way than you thought, you can't do anything... It's a question about...for every architect that builds a house; you can't control the way the people use it afterwards.... I think that is also valid for the urban scale...
- Once it has usability...
- Yes... I think what is beautiful here is the public spaces, the parks, and that's something. Actually Zurich West and Oerlikon they were in transformation at the same time and there was Ursula Koch, maybe you heard about her... She was very strong, she was from the left, the social-democratic party, and she was attacked to blood from those

investors around her but she was the one who negotiated with all land owners; she negotiated that they would clean those public spaces and give them to the town for 1Franc in order to be able to densify their ground floor.

- This functioned in the end because of her power?
- Because she was capable, she was competent. She was capable, she had vision and she was not interested in maximising profit for the private owners, she wanted something for the whole community. And the things that were lost during this whole process were the monuments.
- You feel that the processes are more refined now?
- Yes, because we have experiences, they don't have to invent it. They invented the whole process here, they invented it in Zurich West. I heard people who had been here at the very beginning, the first round tables were about "what are you talking about ?", "what is urbanism?" So, they had to clarify, to define their terms. The situation was really dramatic. Finally, they started talking to each other, they started a whole process, there were people living here, still are in this part... There were people here who would start this whole discussion about what they were talking about; it's all on the internet, very well documented.
- Could you name a positive, negative example relevant for urban quality? It can be any place, a place that you like and has urban quality.
- I think it's mainly the public spaces, the ones in Oerlikon. I think this is very nice. I'm very curious about the inner garden in Leutschenbach and this would be realized, I'm very curious about that. I think, I see for me the urban quality of a place is directly linked to the urban quality of public space.
- Do you think it matters how much time you allow a space to develop?
- Yes, I think you have to give a place... the space to develop, to be adapted, to be used by the people who live there, come there. People need some time to appropriate the place. Maybe, it goes quickly... Maybe, it doesn't... It depends on the frequency of people who experience that, people who go there, stay there, live there, work there. The experience they make, it's a pleasant place to be, then others will follow...

I think yes, it needs some time. Urbanism is a discipline that needs time.

Günther Arber

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Interview date: 04.07.2014

- How would you describe urban quality?

- I would describe it in terms of architecture, or design, or public spaces. My concern is in general. I would define it with three terms: Diversity, its from Louis Wirth, it is a very important concept from the forties, and I would say the intensity of exchange between people and change, Wandel in german. I would say these terms could define urban quality.

- Can urban quality be measured, quantified, and which urban quality parts can be measured or can not be measured?
- I would say there are a lot of indicators/indications when we can measure parts of urban quality but I am sure there will never be a consensus between experts who authorises indicators to measure it. So, I would say, it's a very important concept, it's better to talk about it, to look for qualifications/quantifications. Surely, we measure things, we use statistics, but the concept of urban quality, I am sure, cannot be measured.
- For example nowadays there are many certificates, like sustainability, and they contain conditions -soft factors that cannot be measured. So, I feel that, there is tendency to try to measure what cannot be measured, this issue gains importance nowadays, when we have to choose between things.
- Sure, I think to argue it's important, to base the arguments a little bit on hard facts, but often there are no direct things we measure or we don't have to. So, there are concepts like urban quality, which is a very aggregated, I think, a very complex concept. For me, it had this three terms. Diversity only diversity -, social mixture. I mean it's only this part of my definition, it's even there a very complicated thing, and nobody knows which measure of social mixture will be there. The right thing to say is it is diverse or it is homogenous.
- Which are the most important requirements in a strategy (development concept) to guarantee the success in reaching urban quality?
- I would say it's the process. You can have the strategy, have aims, goals and then you identify measures, actions, but the implementation is all! Without it, there will never be an impact on reality. So, for me, number three and number five, it's the same answer;

process it's crucial, without process there's no implementation and without no implementation the strategy is absolutely useless.

- So, there are no magic words that if you write in the strategy?
- No, I mean to try to have a formulation as clear as possible even with such complex concepts like mixture or quality. I think it's important to really be as exact as possible, otherwise it's more complicated to implement things. But, I think it's the process, people have to talk about it, they have to think strategies, mostly there are tensions between aims you have, it's never as clear, people have to talk about it. What is your understanding of things, what is my understanding of things, can we find a common shared space? This is very important.
- The following list includes several urban quality factors; you find in the research paper NFP 65: accessibility, adaptability, appropriation, centrality, diversity, interaction, usability. What do you think about this list?
- Oh, this list makes sense to me, even if I don't think these terms are all on the same level. Not sure about it, but I think some of them are in a very close relation without affirming.
- Would you add something to this list?
- I think there are seven terms... This is enough...
- How would you arrange it when it comes to priorities in a strategy, in another way?
- For me, as I said, diversity is the main concept of urbanity, this is like a preliminary concept. But the others, I think without usability, all is nothing. So, it's very important. Usability seems connected with accessibility. If you can't access, there's no access to things, so, it's useless. And appropriation, it's a very important concept.
- So, for me, diversity is important, centrality is also; I mean these are important concepts in urban areas. Interaction it's the same. It's a basic concept of urbanity. For me they are not on the same level, but they are all very important terms.
- How would you rate the importance of the process in the implementation of an urban development strategy?
- As I already answered it in question number three, it's crucial. Without process there is no implementation, without implementation the strategy is absolutely without impact. Also, I think that not only in the implementation, also in the development of the strategy, the process is all.

- The process can also be a sensitive issue in terms of influences. For me, it was always this question: how do you keep the goal, but at the same time be open to the changes and to adapt?

- A challenge! I mean today urban settings there are a lot of factors. We are only one, we have some regulations, tools, but they all depend on political actors, they are interconnected with real estate...
- In terms of goals and results, for each of the three development areas Zurich West, Neu Oerlikon, Altstetten what do you find positive for example, success factors -, negative, what could have been done differently or relevant in terms of process, actors, soft factors, influences?
- It's a very complex question. The process started in the 90's, so the actors aren't anymore here, and maybe this was a different culture, a different framing; Zurich was in the 90's, in a big crisis, and it's absolutely different conditions back today, and maybe many things we think today they are very important, they weren't on the agenda those days, they weren't not so important or it wasn't part of the planning culture then.

For me, on the critical points for these two areas Neu Oerlikon and Zurich West. I think today, maybe, we give more importance to the aim, really to make places, diverse, liveable places, and I'm not sure this was so important those days. Today, we have it different, we have a lot of investment pressure. I think... I wouldn't rate this as a negative point, but today, under our conditions, the aim to really create and discuss about it, what art is, what kind of spaces, where do things happen?!

For me, it's not so visible in these planifications from those days... But, as I said, these were really different conditions.

The framing was totally different; to attract investors was the main goal then, and today we have a lot of investors. We have more experience in the process, we have a different framework. Our job today is to think more about it, to think more about urban quality.

I mean some years ago Altstetten was here and the rest of Zurich was here, you never had these connections, people never took this direction. Now, this is totally different, the geography, the way people choose, there are forces...ya, there will be traffic there, people interaction, and also people want to buy food and things like that... this gives power to such forces. The infrastructure it's a powerful force.

- Do you differentiate somehow urbanity in a working place, in a district that has more offices and in a housing place or it is just urbanity?

- I mean this is a very heavy question because if you look at some parts of Zurich, they are in Zurich, but they look more similar to something outside the city, on the level of morphology. On which spatial scale must urbanity be defined or is defined, I'm not able to say this. Must it be on a square feet, a quartier, a district, part of the city?

- For example, can an area with only offices, just one use, have urban qualities?
- I mean nobody would say that New York Manhattan isn't an urban area of Mid-Low but they are absolutely boring business districts. But, from there, people go in, go out, they have meetings, buildings, entertainment, food, drinks etc... I mean we don't have it here like in America. Here the mixture is on a very small scale; also, for me, a guarantee for quality! I don't have nothing to add to this but this is again a question of scale, because a city can have new/loose things, but also huge boring business centres. Maybe it's also a very different concept of urbanity as we have here in our middle-European cities, which are in general small scale, mixt and we don't have these things.
- Could you name a positive, negative example relevant for urban quality?
- I mean, one of my favourite places is Josefswiese. Now, I moved to Albisrieden. I really learn to estimate also the qualities of a space which are little bit different. I like this kind, that they have a market for example. They are really, u can feel this urban mixture, they have these qualities, these outdoors paces, there is safety, there a lot of different people, to a lot of things, have a lot of ground space uses, restaurants, shops.
- But you think it became a quality place during time, by soft factors like appropriation and so... or it has an influence how it was planned?
- I mean it was never planned as a gentrified living quartier for young urban people. It was behind the main station and everywhere until the 80's, in the districts behind, they weren't so good. So, it wasn't planned. But the built conditions and what the planners do with this, during time, they created this quality that some urban, some social groups adapted for their needs. It sometimes came and met at a certain point in the history the needs.

## Regula Iseli

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- How would you describe urban quality?
- Urban quality is like... has a lot to do with also emotions not only with rooms all with functions but also with feelings going threw these rooms. I think there is of course, the let's say the hard way of a room itself that has to be like strong enough to allow urban life. Also, urban quality depends a lot on how we can live or how we can work or how we can feel. I think it's a part a question of architecture or urban design, it's a part also of how we feel in, its rooms, spaces. I think there's not like a recipe how this room has to be but has a lot to do with how it is made in sense of also material, in sense of how narrow, how high, how big, how whatever these spaces are. It has to do a lot not with style but expression of architecture, with the colours, with the surfaces, and maybe also how the room's structured with not architecture or non-architecture trees- like whatever we need to live in there. But, this is just one part. I think there is also... quality starts to be richer when it's filled with different and lots of people. So, it means it needs the people to live, just to like these rooms; without it it's like an abstract thing. I think this urban quality is not an abstract term but it has lots to do with how you live it... Yes, how you live in it.
- So, an empty space can have an urban quality? Where there are no people...
- I doubt it... I mean maybe you can feel that this room has the potential to become or to get a great or an urban quality because you start to invent how you would use it. But, to say that an empty abstract space...I don't think you can talk about urban quality.
- Can urban quality be measured, quantified and which urban quality components can be measured or can not be measured, in your opinion?
- That's the most difficult question! I think you could. One can start to measure proportions of rooms, of streets, of squares of whatever. And then, you say I have to qualify them because there are lots of good urban spaces. You can also count the people or you can, during daytime you count 5 in the morning or whatever... You can count or you can gather all ground store functions what's happening in this space? or you can just measure what are the dimensions of the ground floor, what is it allowed, or you

could measure or count all elements structuring this room like how many trees or how many root soil. But there, I think, that's what we ... What I tried to explain just to your first question. That is something you most probably can not measure. You can maybe describe it because it has to do with feelings, it has to do also with your connection to the rooms, how you like it or how fast you'll go in. These emotions are different for all this people. I don't know if you can measure it but it belongs to it.

- So, for example, taking a space that you feel it has good urban qualities, could you take the conclusions out if this and make a project with same elements that you think would bring urban quality?
- Maybe, it would help not to have only one but to have like a series of spaces where one would agree they have great urban quality. I would take different ones because I think that's also the secret of this urban quality. It's not just a classical space that it meets but there are different spaces that you can feel like yes, it belongs to this city, it's a very important part of this city. I think if you have a series of different spaces, that you have twenty criteria and then, maybe you can see like a pattern what is essential, what makes it richer or what could make it richer. This would help you.
- So, I mean then it's very important to have comparable?
- Yes. It helps to say are we talking about European cities, are we talking about Japanese cities, are we talking about Arab cities. I mean, I think even if we don't know the culture of these people we feel urban qualities when we are there. So, maybe that helps or maybe it helps more just to say I concentrate on the European tradition...

Since we are travelling a lot, we take a picture with us. I mean if we look at Zurich and we have emotions that pictures are coming into our minds and melting together with these feelings about urban spaces or urban qualities.

- So, somehow when you design here you have in mind also characteristics from other cultures even if it's not conscious?
- Well, memories we have of good places, strong places. I mean we try to take the strength, to develop something new. And this of course is a very normal phenomenon in architecture. We pick up what we like and we transfer things.
- This is how cities developed in the last 1000 of years...
- Yes...
- By communication...By exchanging...
- Yes, by exchanging. Like the Italians who built up completely new... Saint Petersburg is an Italian city, you feel it more you're there when you come back to Europe

- Which are the most important requirements in a strategy/development concept to guarantee the success in reaching urban quality?

- I think it has something to do about the functions. And this is a very difficult thing to know when you start these processes. You may imagine in different scenarios what could happen and the only thing you could...look at this that the ground floors are made to allow these functions... I think it's one of the things we can consider when you don't know that. What I also realised is, talking about urban quality without having a project or without having an idea what it's very difficult, it's so abstract, everyone thinks anything. So, it helps to discuss and in these developments or in the processes to have an architecture or a urban project. Just to measure it and to say is it possible to reach the quality we think of, or not.
- And this project is like an example in the beginning when you write the strategy or to show it to people, which are not necessarily architects...
- I think it's both. It's to communicate to people who are not architects or planners or whatever... Just to show them in terms of having like a supposing possible project. But, it's also for professionals. Just to measure what they say. It's a very effective instrument to accelerate also the process. Because when you see it you can say no, that's not what I was talking about! As long as you can not show it, this person thinks something different and the others.
- And this doesn't create the danger to limit somehow the possibilities? Doesn't create for some people a fix idea after?
- Yes and no... I mean the most intelligent way is to have not only one model or one project but a range of projects like three, two. And as soon as everyone realizes even if I write it exactly the same give it to three groups of architects, get three different results. And this helps to know... this won't be written in concrete nowadays. But, this is how we get more and more precise, we understand this urbanity. Also, about amount, how big it is, how narrow it should be...
- But, are you quite free when you write a strategy, to be very precise or you should always leave room for...
- Both... I mean of course when you start this process or this development or this concept, you are not in an abstract place, you know there are rules, conditions already given. I mean this is a hard frame. So, you start to look where you might maybe open it and to what extent. So, it's just to have an idea, a direction but then to be open, open enough to allow new ideas to turn into direction maybe you didn't expect it...

But, just to start and wait that something happens...it's inefficient.

- The following list includes several urban quality factors: Accessibility, adaptability, appropriation, centrality, diversity, interaction, usability. What do you think about this list? Would you add something? And how would you arrange it when it comes to priorities in a strategy?

- I like in a way, I like this list! I was astonished that there is nothing about the room itself, about the frame, frame of all these factors. I would think about if we should qualify in a way the room, that should happen. I think it's useful. I mean some like centrality if you have a site that's given and you cannot choose another.
- And there are spaces that have very high urban quality without being central...
- Yes...What I think is important is the adaptability and appropriation. And, of course, interaction and diversity. But then, I would like to have also the good proportioned space.
- And do you think this can happen without a good space?
- Urban qualities... That's what I was wondering when I went threw your questions. Maybe, but I don't have a picture for it...
- Or is it always possible that a good space creates these things also with people with space together? Stimulates interaction?
- My feeling is that it helps for all these actors when you're feeling good in space... It's the accessibility, of course you want to go there. Appropriation is easier because you feel better! Good space influences what can become of this urban quality.
- How would you rate the importance of the process in the implementation of an urban development strategy?
- It can help to accept, like the result can be better accepted. I'm not sure if it's always needed to have long processes. But, when at the start you realise that there is opposition against it or people being against it, I think a process to explain, to discuss, it is very important. Maybe, it takes a little bit more time but like urban strategies when they're accepted it's easier to go for them.
- And, for example, do you think what you define in the beginning, that you want to reach, should be changed if the external situation changes? For example, there is no more need for housing or can this have an influence for the urban quality to be able to adapt in the process?
- You will always have to adapt it. I think it's normal. I mean you learn as well as the others will learn or will understand. So, I think adapting it's necessary!

- In terms of goals and results for each of the three development areas - Zurich West, Neu Oerlikon, Altstetten- what do you find positive - for example, success factors -, negative, what could have been done differently or relevant in terms of process, actors, soft factors, influences? What influenced the process?

- Starting with New Oerlikon, I think it is a success, it is the open space... I mean now, they are becoming dense, they are growing, they are changing the picture. Just to have realised so many of these open public spaces, I think that is a success. But, we all know what is the problem with Oerlikon. It has also to do with this ground floor function, it's too private, it's... there's not enough public spaces on the ground floor. And this, I think one should consider in the future if there is maybe a possibility to open them up. I also like in Oerlikon the proportions or the scale of the volumes

And Zurich West... Maybe, the quality lies also in these public spaces like the opening of these industrial areas. And maybe it's a quality, maybe it's not. It seems like a collection of different architectures, a little bit of something. In scale, in style, in colours... They're all a little bit different...Some of them I don't like at all, some of them I think they are quite ok.

I know there are a lot of critics and in Zurich West you see it now...it's architecture or quality or urban quality not everywhere, right away. But, in a way is changing, it's still changing, it's not so bad...

- And you feel that for all of these development areas you have to give them time?
- Yes, but that's something about appropriation and adaptability... Yes, you have to give them time and maybe Zurich West it is the easiest to get into because you still have some of these industrial buildings. You still have this transition space who helps to feel better from the beginning and in Neu Oerlikon it never happened... So, this is maybe the good thing in Zurich West, that it's a slower transformation and you can also react on maybe it wasn't that good...
- And do you find it important to evaluate them during this period, until they get mature? That you can maybe have the opportunity to adapt or change?
- It's always good to have a look and say is it...are we there, what we wanted? Maybe we dreamt of more diverse city. And then you can try. Because it's like 1000 more people just put there and have to live, work and then of course then we are going to see how the adaptability of the quarter is. I think it's a tough and a rough place and it will change a little... It's like a very normal process because when it started let's say in

Zurich West - it was a constellation of people. The constellation mixed into the game, has new ideas, new realities, reacts on something which was already decided. Maybe conscious or unconscious, react on what's already here. And this - of course - this is the most exciting thing about it, to see how it changes.

- Could you name a positive or a negative example relevant for urban quality? A place that you like, it doesn't have to be from this list, it can be general.
- This is a nearly impossible question because I was in Valencia 10 days ago and there were many places that I would like because of their qualities but I wouldn't have liked to reduce it just to a historical site. Because I really love the atmosphere, it's not very urban but it's a good place to be. We reconnected too strong with urban density or big round rooms, classical spaces. When we talk about urban quality we should also think about these small places.

When we look back to the meaning of the word urban it meant not a place but it meant a behaviour and a thinking of mankind. I was urban so I have a certain education. That's what I think it's very interesting...First we needed to describe a person and it was the opposite...The rural, the farmers were less educated, had just their fields in opposition to the city who cultivates people and that's urbanisation: cultivating the minds...

Ehrenwörtliche Erklärung

Ich versichere hiermit, dass ich die vorliegende Arbeit mit dem Thema "Developing a

framework to assess urban quality. An approach validated through three development

areas in the city of Zurich" selbstständig verfasst und keine anderen Hilfsmittel als die

angegebenen benutzt habe.

Alle Stellen die wörtlich oder sinngemäss aus veröffentlichten oder nicht

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Angabe der Quelle (auch der verwendeten Sekundärliteratur) als Entlehnung kenntlich

gemacht.

Die Arbeit hat in gleicher oder ähnlicher Form noch keiner anderen Prüfungsbehörde

vorgelegen und wurde auch noch nicht veröffentlicht.

Zürich, den 18. August 2014

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Bianca-Ioana Brici