Social Housing in Different Cultures
Comparative Study Western Europe and East Asia

A First Attempt

Introduction

Value Judgements by Comparison using the Example of selected Housing Estates in Graz

Marlis Nograsek, Dissertation 2001, Faculty of Architecture, University of Technology, Graz

Sociologic Study – Interviews

"Housing Satisfaction and innovation of architecture in Styria since 1960"[1]

Interviews with residents of 16 housing areas in Graz

▼

Subjectiv value judgement of the inhabitants

Marks von 1-5

1: very satisfied

5: very unsatisfied

Housing Evaluation System

Swiss WBS 2000 [2]

List of criterias defined by experts

▼

Intersubjective value judgement

Value 0-3

0: target not met

3: target met

≅

⟷

Comparison of the Results

Starting Point of the Research

The social housing in different cultures using the example of Western Europe and East Asia

The attempt of a comparison of the same term in extremely differing circumstances.

It is assumed that the goal of creating social residential buildings in both regions is the same:

to create high-quality housing to the satisfaction of the residents

Projectleader Graz: Wolfgang Dokonal

Projectleader Hong Kong: Prof. Tsou Jin Yeu

Authors: Wolfgang Dokonal, Marlis Nograsek, Ernst Dengg

1. Definition of the terms

Social Housing, Public Housing

So that is meant basically the housing, subsidized by public institutions (state, country, community....) for social groups that can not meet their needs on the free housing market.

Housing Satisfaction is a subjective judgment of the occupants that can be measured using a questionnaire that is created by sociologists. If one uses always the same scale of values, the result is quite comparable. But the result does not make any statement about the objective quality of the studied buildings.

The Evaluation System is an inter-subjective judgement made from experts based upon the research over many years.

For some of these inter-subjective values much agreement (consensus) is prevailing within a given society at a given time that one can speak of a collective value development. These values are then fixed in the form of standards, minimum requirements and other regulations like that. These include technical, design, building physics and medical-hygienic requirements for the apartment and the standardized functions such as eating and sleeping, psychological and social factors, such as the protection from unwanted interference and insight.

2. The methods for the comparison

2.1. The sociological method to make resident´s surveys about housing satisfaction with the questionnaire in Hong Kong and in Austria

2.2. Researching for the inter-subjective evaluation criteria for Hong Kong and its society and to compare it with the Austrian criteria.

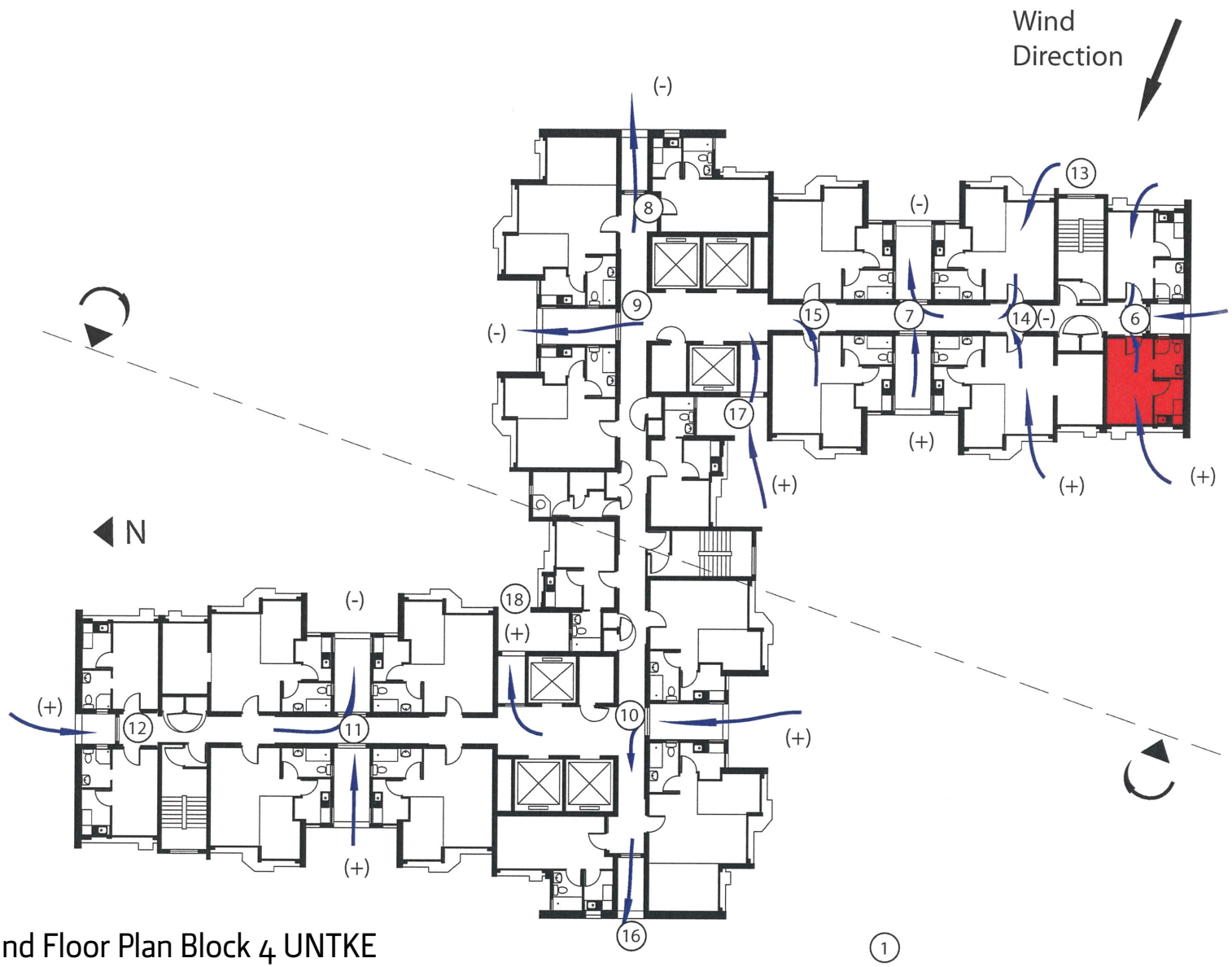
This could also be find out on the basis of key projects, survey of residents and the cooperation of housing experts: Architects, social scientists, university teachers, social workers), like the Swiss System was created up from the 1960ies.

The Housing Estates

Upper Ngau Tau Kok Estate ...

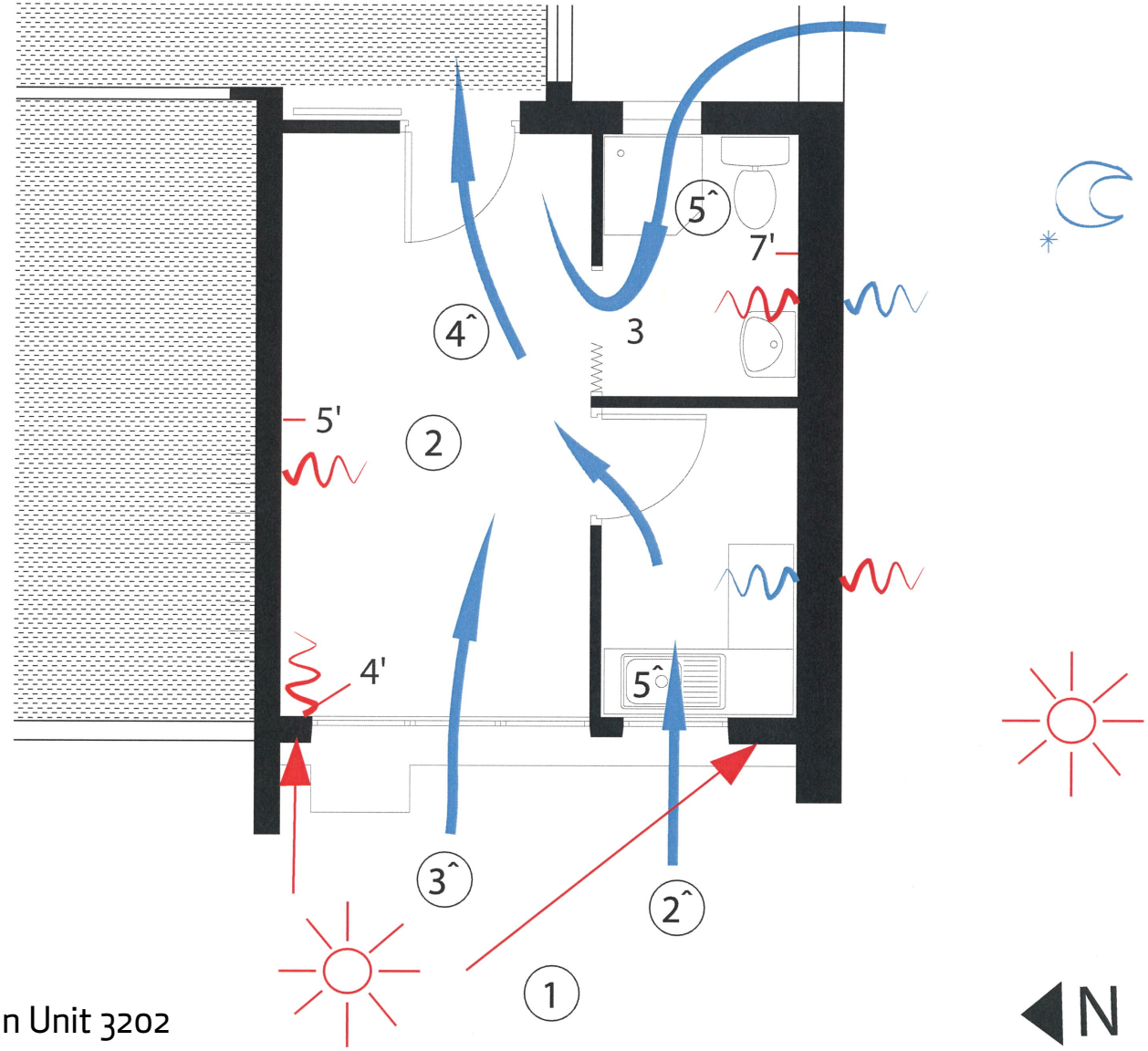
Central plaza UNTK

Upper Ngau Tau Kok Estate



Ground Floor Plan Block 4 UNTKE

Analysis from Architectural Concepts for the Reducing the Utilisation of Air Conditioning in Chinese Residential Buildings
Ferdinand Oswald, Oktober 2016

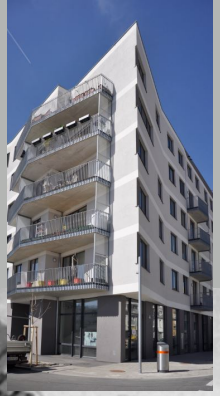


Ground floor plan Unit 3202

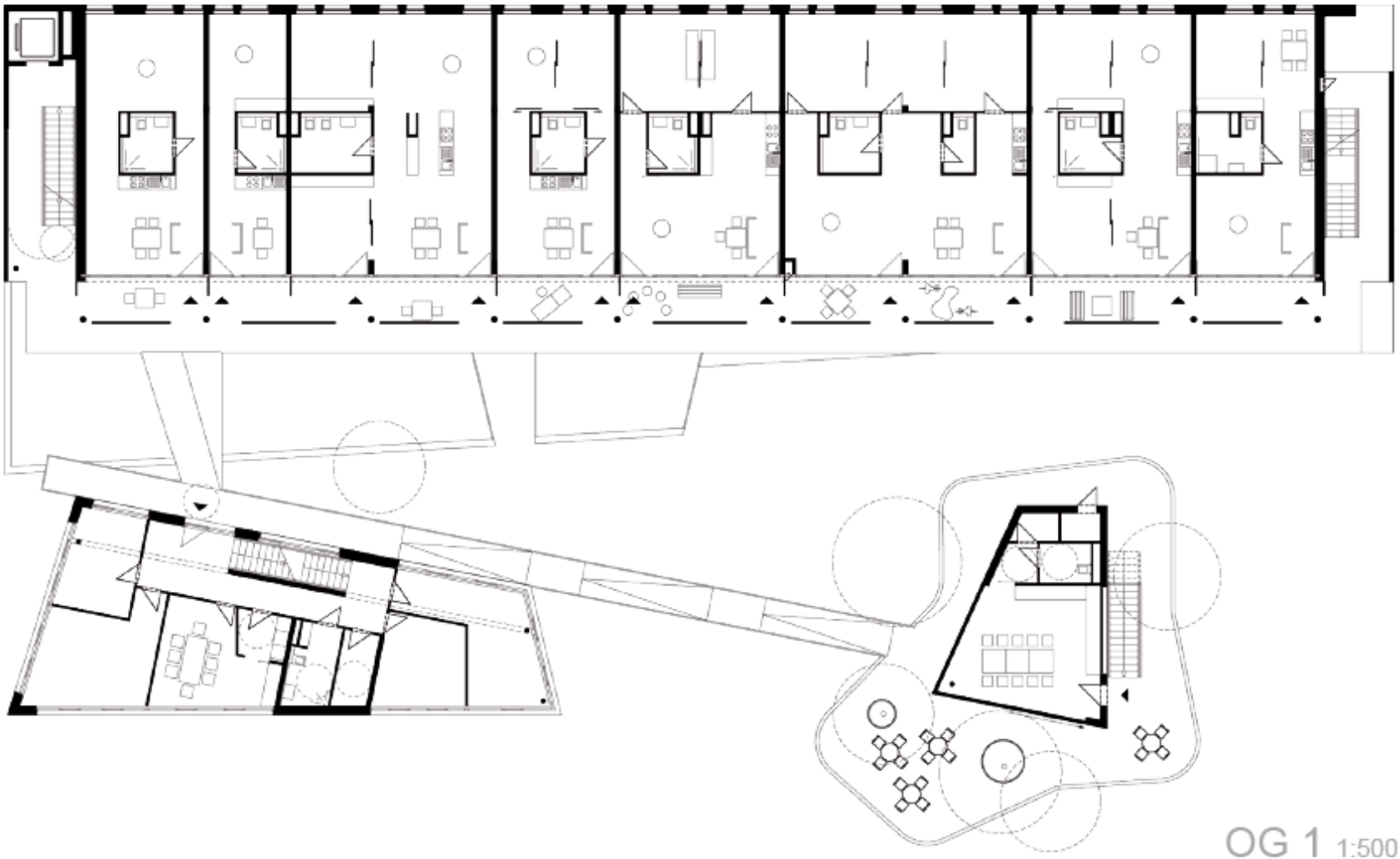
aspern
Die Seestadt Wiens
1
2
3
4
5
6
Seestadt Aspern Project..
z·koor
zoom in
zoom out
1 Film
2 Rundgang
3 Beispiel-Architektur
4 Luftbild
5 Information
6 Stadt-Vision

Seestadt Aspern 2016

The site with the assemblies: D13

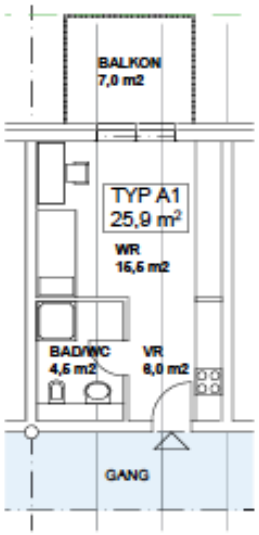


Ground Floor Plan

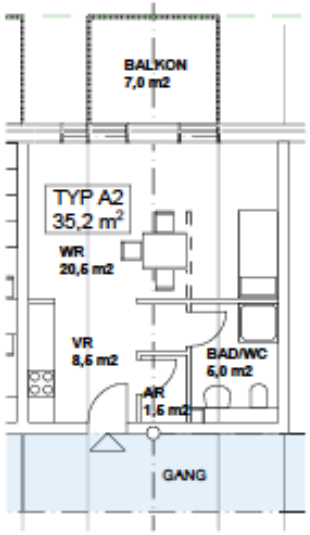


OG 1 1:500

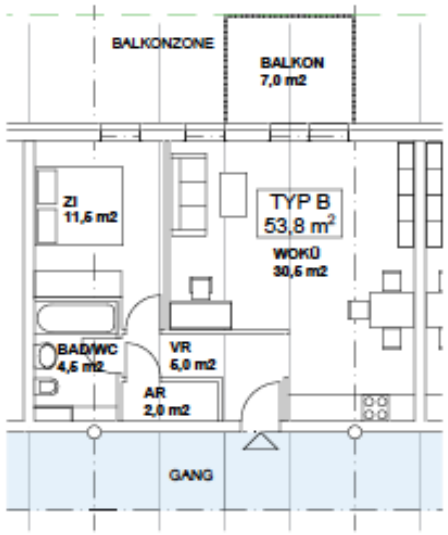
LISA



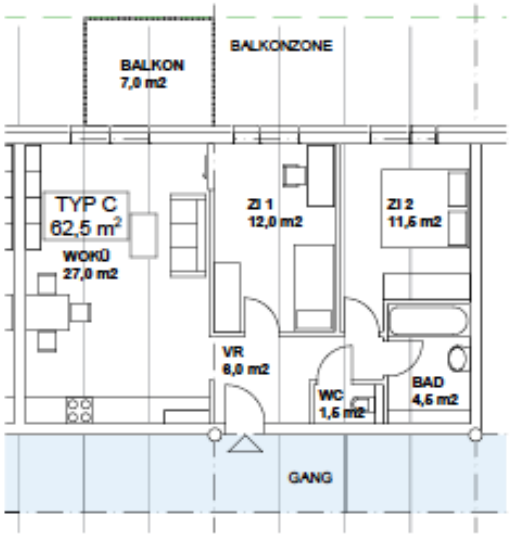
3 ACHSEN



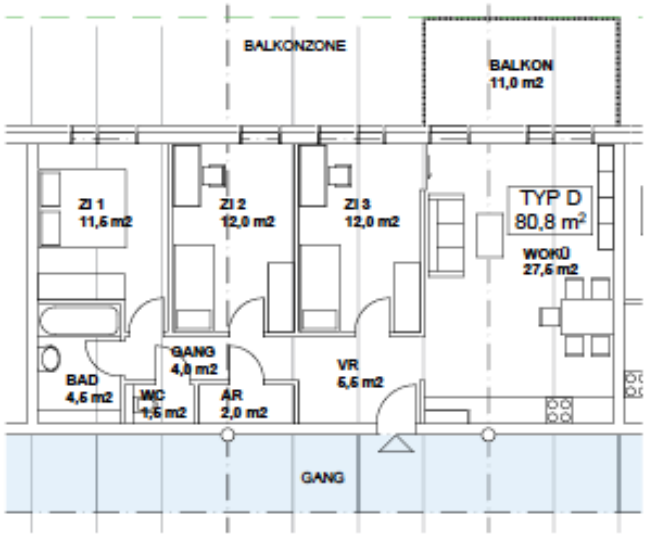
4 ACHSEN



6 ACHSEN



7 ACHSEN



9 ACHSEN

B.R.O.T.
Beten.Reden.Offensein.Teilen

Central square

Upper Ngau Tau Kok Estate finished 2009

Population: 12.200 people

Net site area about 32 200 m2 (3,2 ha)
Gross domestic floor area about 22 ha

6 Blocks with 4.584 units
Storeys: 39-40

Public housing

Average Living Space: > 7m2 /person

Green Building Award 2006 organised by the Professional Green Building Council, Hong Kong
Quality Public Housing Construction & Maintenance Awards 2009

Aims:
Social Sustainability
Environmental Sustainability
Economic Sustainability

Residents' Participation: https://www.housingauthority.gov.hk/hdw/ihc/pdf/empow1_5.pdf

Landscaped area ratio > 30% of site area

Common areas like:
a central plaza,
a podium garden on top of the commercial centre
extensive plantations and preserved mature trees
children's play areas, a basketball court, ICYSC (integrated children and youth service center)
footbridges and shuttle lifts

higher level than the usual standard of public housing in Hong Kong

Prevailing rents: HK$ 990 - 2,730 (113 - 313 Euro) /unit

https://www.housingauthority.gov.hk/en/common/pdf/about-us/publications-and-statistics/UNTK.pdf

Seestadt Aspern finished 2018

Population: 20.000 people shall live and work there

Seestadt site total 240 ha
D13: 7000 m2

Townhouses with 10.500 units plus 20.000 work stations
D13: 5 Townhouses with 170 units
4-8 Storeys

Social Housing (Viennese residential building subsidies)

Average Living Space: > 22,5 m2/person (Social Housing Austria)

European Green Building Integrated Design Award 2014
World Smart City Award for Seestadt-Project 2016

Aims:
Social Sustainability
Environmental Friendliness
Low Energy Standard
Mix of Functions and the Variety of Architecture
Affordability

Self- initiative and participation of the residents

Public space: 50 % of site area

Common areas like:
public squares
a sea with a park
working rooms, common kitchen, music- and rehearsal rooms, library, sauna, indoor playground,
foyer

higher level than the usual standard of social housing in Austria

Rents /m2 in Wien 22. Bezirk: €16 .- /m2

http://www.aspern-seestadt.at/
https://de.wikipedia.org/wiki/Seestadt_Aspern

The Questionnaire

The chapters of the questionnaire

- Satisfaction with the flat
- Satisfaction with the estate
- Daily Life

From the questionnaire out of: 1 Wohnbund Steiermark, Wohnzufriedenheit und architektonische Innovation in der Steiermark seit den 60-er Jahren.
Eine Studie im Auftrag der Steiermärkischen Landesregierung, durchgeführt vom Wohnbund Steiermark, Werner Nussmüller, Markus Müller, Winfried Moser, Dieter Reicher, Graz, März 2000

Additional chapters:

- Background and wishes for the future
- Housing space efficiency
- Sustainability

We asked also the sociodemographic data
Each Chapter is one sheet of paper, so they can be asked in different orders and sequences

The questions

Background

1. Where did you grow up?

2. Where and in which type of accommodation do you live?

3. If you would move again, where would you live in the future?

4. How long do you live currently in your apartment? (Years)

5. How much longer are you planning to stay in this apartment?

6. Should your (eventual) new apartment be larger or smaller than the current one?

7. Do you usually stay at home for weekends?

8. To what extent are following statements correct?

Satisfaction with the apartment

9. How satisfied are you with your apartment?

location of the apartment
size of apartment
storage space
brightness
order of rooms
number of rooms
room size
ability to refurnish the apartment
flexibility of the apartment / within the apartment
housing costs
noise
heating
facilities
sanitary facilities
building quality
view
private outdoor space
property management

Satisfaction with the Housing Estate

10. Please tell how satisfied you are with your housing estate and its surrounding.

location in the city / specific location/position of your estate
connection to public transport
road links
parking inside and around the estate
bicycle parking inside and around the estate
safety, especially for pedestrians
arrangement of houses in the estate
access to your apartment - floor/staircase
appearance and aesthetics of the settlement
construction materials
accessibility of school/kindergarten (ⓘ If no relevance to leave blank)
sports grounds and leisure facilities in the vicinity
supermarket
bakery/convenient stores/providers
accessibility of medical institutions (doctors/pharmacy)
nature/green in the vicinity
parks within the estate
air quality

11. Are there problems within your housing estate?

construction (look)
garbage
too strong sunlight
too dark
too hot
too cold
not enough playgrounds
there is no place for housekeeping (laundry to dry, wash etc.)
standard furniture does not fit into the apartment
vandalism in the housing estate
neglect of public land
problems with ventilation
humidity
mould
house Administration does nothing
pets
operating expenses
road noise
noise in the housing estate
noise transmission (structure-borne noise, e.g. betw. apartments)
community facilities (children's playgrounds, waste places...)
visibility from the outside
conflicts between the residents
others:

12. How do you and your neighbours get along with each other?

Is there communication taking place within the building? (staircase, floor, mezzanine etc.)
Are there certain rooms built for communication?
Is there a club (e.g.: dancing, playing cards etc.) in your housing estate?
Are you a member of one of these clubs? If Yes, which kind of club?
Are there many small children in your estate?
Did the inhabitants knew each other already before?
Is there a huge fluctuation within the estate?
Are there many foreign inhabitants?
Are there conflicts among the inhabitants of the estate?
Could it happen in your estate, that an elderly inhabitant, who is living on his/her own, dies and won't be found for several days?

13. Are there enough community facilities (green areas, playgrounds, storage rooms, etc.) in your estate?

14. How satisfied are you with existing community facilities?

15. Are there enough parking spaces in your estate for cars and bicycle
    Do you have a car?
    Do you have a bicycle?

16. You ever had experience with crime in your vicinity? (ⓘ Just if happened to you or to one of your neighbours.)
    material damage (theft, fraud, burglary, vandalism, etc.)
    conflicts, disputes
    harassment, ruthlessness, love, touch
    threat, brawl, physical injury
    drug offenses
    morality offenses

17. Are you satisfied with the architecture of your estate?

Daily Life

18. Life in your home

    In which room are you spending most of time?
    What is your favourite place in the apartment?
    Which room are you using the fewest?

19. How do you spend a typical weekday?

Housing Space Efficiency

20. Do you think your apartment is space efficient?

21. Could you imagine that a good planner can design an apartment that customers get either...
an apartment with the same size, but having much more accessible/usable space and qualities, ...
or a smaller apartment with the same programme and qualities - with the advantage of lower costs?

22.1. How much more usable space do you think, can the planner gain/generate, when designing an efficient apartment of the same size as yours?

22.2. How much space do you think he can reduce your apartment, when a planner is designing a very efficient floor plan?

22.3. How much space do you think he has to enlarge your apartment that you feel satisfied?

23. Would have helped you a more flexible floor plan during different living situations?

24. Would you agree to combine kitchen and living room (in a hypothetical future apartment) ...
...to get a larger room?
...to save about 3 - 5 m / 32 - 54 ft, which would properly reduce your rental fees, operation costs etc.

25. Would you share housing relevant functions with one or two neighbours to either save money or have more space in your apartment? For example bookshelves (library), washroom, kitchen etc.?

Sustainability

26. Please comment following statements:

The estate is consuming less energy than an average in my region.
The estate is considered as a green building.
I have to pay less electricity, heating and operating costs than others, since it is a green building.
It is consuming renewable energy produced in the area.
It is generating energy (e.g.: solar heat for hot water, photovoltaic, thermal heat pump).
The house I am living in has a good thermal insulation.
Windows in my estate have low-E glass (double or triple glazing).
I would consider my estate as very sustainable.
The apartment allows adaptions so that a family/couple does not have to move out when the living situation is changing.
The rooms are easy to furnish with standard furniture (think about IKEA or similar shops), and if I would move out the new tenant would very likely acquire them, since they fit perfectly.

Sociodemographic Data

27. Age

28. Sex

29. Marital status

30. Profession / activity

31. Household
    - How many people are currently living in your apartment?
    - How many generations are currently live in your apartment?
    - How many children are currently live in your apartment?

32. Monthly household income

33. What do you pay for your apartment per month?

34. What is the size of your apartment?

35. How many rooms does your apartment have? (Please exclude toilet, bath, kitchen, and storeroom.)

36. What means of transportation are you using to go to work?

37. How long is the commuting time and what is the distance you cover (one way)?

The Test Runs

First Test Run

December 2016: Interviews at the Upper Ngau Tau Kok in Hong Kong organized by Professor Jin Yeu Tsou CHUK carried out by students of CHUK: Cao Xiuan, Amy Liang, Lei Qinghua, Ji Jie and Yin Huai attended by Ernst Dengg

Comments on the last Test – Questionnaire – changes

- Survey too long, either subdividing the survey into different topics or shrinking it – both done
- Many questions are too technical, especially elderly cannot answer them frequently
- Some questions are existing twice (need to check on that) checked

General information and comments:

- The surveys are done in the oval court of the "Upper Ngau Tau Kok estate"
- Not all of them are living in the "Upper Ngau Tau Kok estate" since the quality of the "outdoor sitting area is that convenient (airflow, sunny areas, shady area...)
- Personal questions like age, sex etc. at the beginning – solved, making it flexible
- Survey must be definitely shorter! > Therefore we have two/three possibilities:
  - Making a few questionnaires?
  - Subdivide into topics, ... but one evaluation - done
  - Reduce the number of questions (a lot!) – done

Particular critique on questions (Student's comments):

- To tick e.g. 2 boxes, takes some guidance (e.g. 1-3) – done 10-12 now
- 9-11: Too long, do not want to file out…. Test person often want to stop at no. 9 - a little bit shorter
- Question 19 "is not wanted" – put away – other form: 21
- 21 a or b, 22 needed to be explained by students – after 21 put away, because the most did not answer, and the few answers were not believable.
- 26: very difficult to people_ much more shorter now

Second Test Run

April 2017: Resident´s survey at Seestadt Aspern in Vienna arranged by Marlis Nograsek TU Graz

done by the students of TU Graz: Athina Antonopoulou, Maria,Kougia, Alexandra Nenadic, Anela Nuic, Theresa Reisenhofer and Laura Tamandl

Preliminary Findings from the Test Runs

40 Questionnaires were evaluated and analysed related to significant differences.

The trend showed significant differences at the following questions:

Number of Rooms in the apartment (average higher in Aspern)

I am pleased with this apartment (agreement higher in Aspern)

The satisfaction is higher in Aspern with the:

arrangement of houses in the estate

access (floor, staircase) to the apartment

parks in the estate

nature/green in the vicinity

accessibility of school/kindergarten

The agreement in Aspern is higher to:

enough community facilities in the estate

enough parking spaces in your vicinity

On the question: Would like to move into a different settlement? the refusial in Aspern was higher than in UNTK Estate

Some more facts:

fewer problems in Aspern with the place for housekeeping.

more clubs in Aspern

more inhabitants of Aspern knew each other before

more small children in Aspern

higher fluctuation in UNTK than in Aspern.

more conflicts among the inhabitants in Aspern!

The questions about the satisfaction with the apartment showed, that the people in Aspern were rather satisfied with the ...

size of the apartment

storage space

brightness

order of rooms

number of rooms

room size

flexibility of the apartment

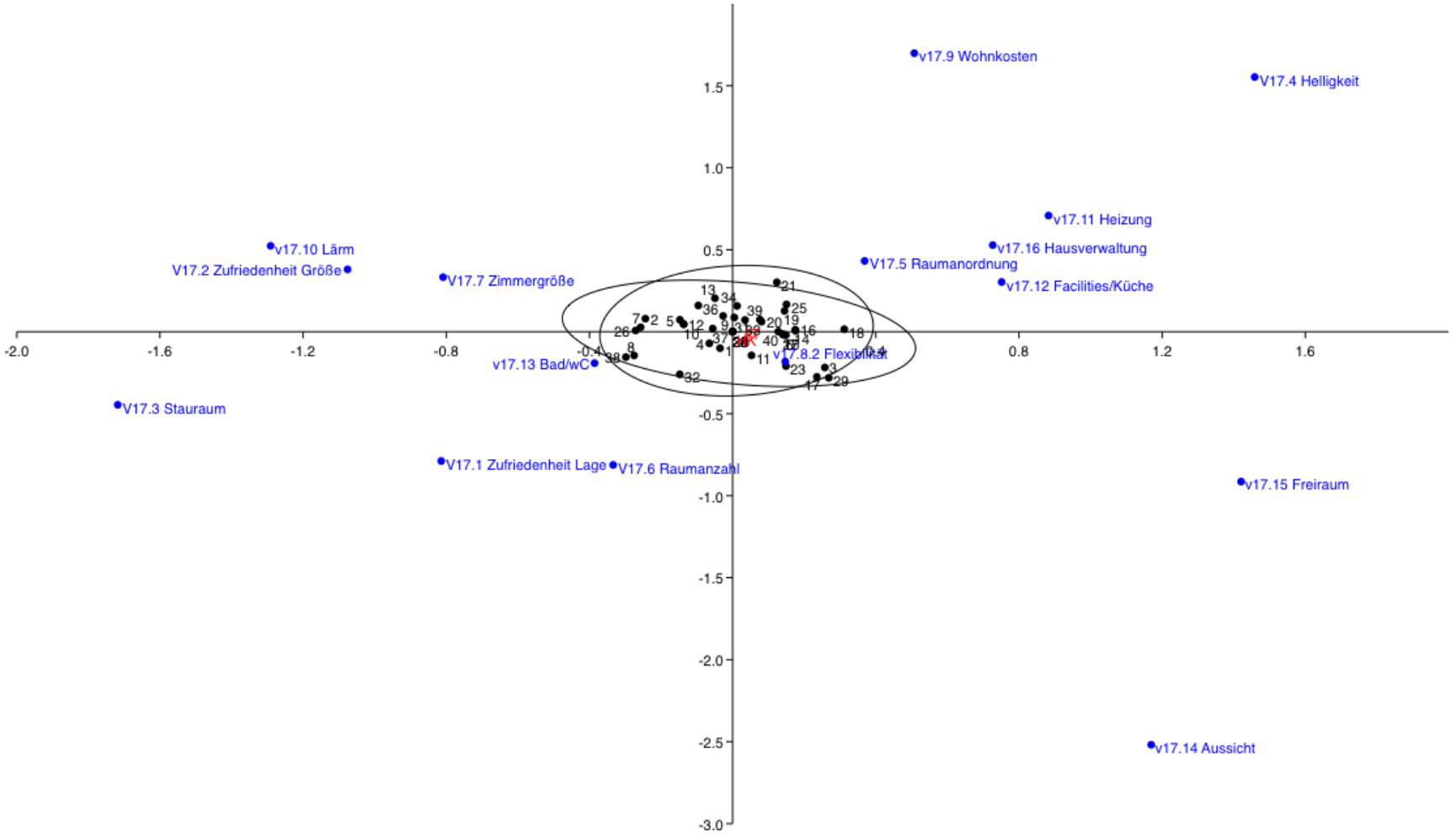
housing costs

noise

heating

facilities/kitchen

private outdoor space



Correspondence Analysis: Satisfaction with the Apartment

The Comparability of the Survey and Cross-Cultural Influences

Facts, that can influence the survey are for example:

The language:	Simple direct translation Modified direct translation Translation/ Back Translation [3]
The social desirability:	Respondents portray themselves too positively each culture has different behaviours, that are desirable – universal and cultural specifics in social behaviour Interviewers from different culture[4]

3 Translating Questionnaires and other Research Instruments: Problems and Solutions, Orlando Behling, Behling Associates, Kenneth S. Law, Hong Kong University of Science and Technology, 2000 by Sage Publications, Michael S. Lewis-Beck, Editor

4 Cotter et al. 1982; Anderson et al. 1988; Finkel, Guterbock, and Borg 1991; Davis 1997, Chapter 13 Social Desirability in Cross-Cultural Research, Timothy P. Johnson and J.R. Van de Vijer

Outlook

2. The methods for the comparison

2.1. The sociological method to make resident´s surveys about housing satisfaction with the questionnaire in Hong Kong and in Austriain a bigger scale at different social housing estates (public and private in Hong Kong).

2.2. Researching for the inter-subjective evaluation criteria for Hong Kong and its society and to compare it with the Austrian criteria.
This could also be find out only on the basis of key projects, survey of residents[5] and the cooperation of housing experts: Architects, social scientists, university teachers, social workers), like the Swiss System was created up from the 1960ies.

The goal: Recommendations for future developments in residential buildings on both sides.

5 Residential Satisfaction in Housing Estates: a Hong Kong Perspective, A.M.M. Liu 1999, Article in Social Science & Medicine, e-article

Many Thanks to

Prof. TSOU Jin Yeu for supporting this survey

Mag. Rainer Rosegger for contributing his expertise as a sociologist into the evaluation of this survey

Ji Jie for the translation of the questionnaire

The students for making the interviews and filling out the questionnaires:

Hong Kong:
Cao Xiuan, Amy Liang, Lei Qinghua, Ji Jie and Yin Huai

Graz-Vienna:
Antonopoulou Athina, Kougia Maria, Nenadic Alexandra, Nuic Anela, Reisenhofer Theresa, Tamandl Laura