

Wohnwert

Architektenplanung und Wohnzufriedenheit an
Beispielen aus Graz

The value of housing quality using examples of housing estates in Graz

Content

Method of the researching process

Examples of the analysed Housing areas in Graz from 1960-2000

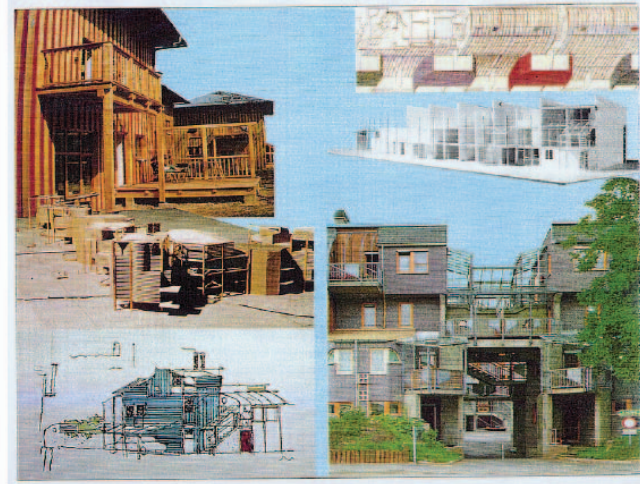
Results of the sociologic study and the researching work

Can architects build housing satisfaction?

**Housing Satisfaction and architectural innovation
of architecture in Styria since 1960
Interviews with inhabitants of 18 Housing Areas in Graz**

**A Sociologic Study by order of the Styrian Government made by
Architect Werner Nussmüller and the Sociologists Markus Müller,
Winfried Moser, Dieter Reicher Graz, März 2000**

**Wohnzufriedenheit und architektonische Innovation
in der Steiermark seit den 60er Jahren**



**Inhaltsverzeichnis
Zusammenfassung
A: Allgemeiner Teil
B: Die Siedlungen im Detail
C: Anhang**

Eine Studie im Auftrag der steiermärkischen Landesregierung, durchgeführt vom Wohnbund Steiermark
Werner Nußmüller, Markus Müller, Winfried Moser, Dieter Reicher
Graz, März 2000

9. Please tell me how satisfied you are with your flat.

1...very satisfied to 5...very unsatisfied; 6 do not know

1) location of the apartment	○ ○ ○ ○ ○ ○	
2) size of apartment	○ ○ ○ ○ ○ ○	
3) storage space	○ ○ ○ ○ ○ ○	
4) brightness	○ ○ ○ ○ ○ ○	
5) order of rooms	○ ○ ○ ○ ○ ○	
6) number of rooms	○ ○ ○ ○ ○ ○	
7) room size	○ ○ ○ ○ ○ ○	
8) housing costs	○ ○ ○ ○ ○ ○	
9) noise	○ ○ ○ ○ ○ ○	
10) heating	○ ○ ○ ○ ○ ○	
11) facilities	○ ○ ○ ○ ○ ○	
12) build quality	○ ○ ○ ○ ○ ○	
13) view	○ ○ ○ ○ ○ ○	
14) property management	○ ○ ○ ○ ○ ○	

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

- less than one year
- 1-5 years
- 5-10 years
- more
- until I can afford something else
- wants to stay in this apartment: (i)continue with question 9)

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

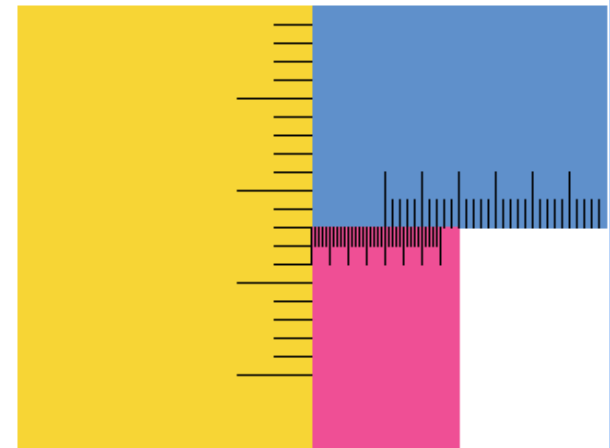
- greater smaller same size don't know

What do experts say to housing examples, where the inhabitants are satisfied?

Band 69
Schriftenreihe Wohnungswesen

Wohnbauten planen, beurteilen und vergleichen

Wohnungs-Bewertungs-System WBS
Ausgabe 2000



Housing Areas Designing, Evaluating and Comparing Housing Evaluation Sytem Issue 2000

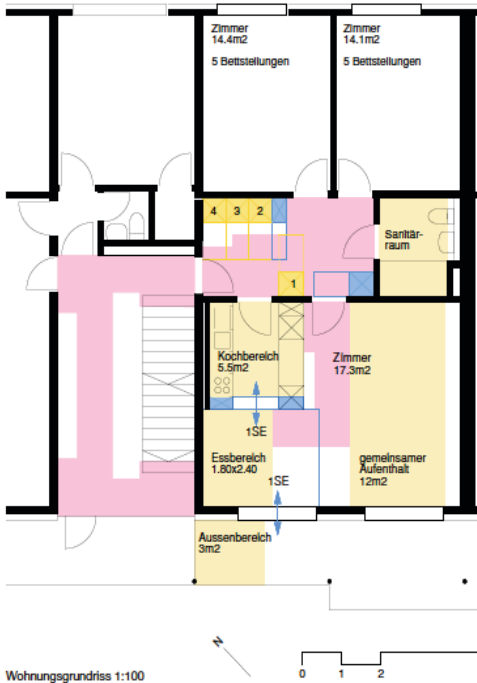
Architects Hanspeter Bürgi and Peter Raaflaub
Sociologists, University Teachers, Scientists and Social workers
federal office for housing Grenchen 2000

 BUNDESAMT FÜR WOHNUNGSWESEN
OFFICE FÉDÉRAL DU LOGEMENT
UFFICIO FEDERALE DELLE ABITAZIONI
UFFIZI FEDERAL D'ABITAZIUNS

Wohnsiedlung: **Wohnsiedlung Siedlungsstrasse, im Lerchenfeld, 3600 Thun**

Wohnung: B04, B14, B24 Anzahl Zimmer: 3 1/2 Fläche: 75.8m² PHH: 4

Beurteilungskriterien		Punkte	Gewichte	Gewichtete Punkte	Messwerte
W1	B 1 Nettowohnfläche	2.0	3	6.0	75.8m ²
	B 2 Anzahl Zimmer	1.5	3	4.5	2.5 Zimmer
	B 3 Vielfältige Nutzbarkeit	3.0	3	9.0	3 Aufenthaltsräume
	B 4 Möblierbarkeit von Aufenthaltsräumen	3.0	3	9.0	5 Bettstellungen
	B 5 Fenster der Aufenthaltsräume	1.5	2	3.0	./ 1 Punkt für N-Richtung
	B 6 Platzierung des Essbereichs	3.0	2	6.0	2 Möglichkeiten
	B 7 Möblierbarkeit des Essbereichs	3.0	2	6.0	> 300x240 möglich
	B 8 Verbindung zum Kochbereich	3.0	2	6.0	
	B 9 Fenster im Kochbereich	1.0	1	1.0	Essbereich trennt, Distanz < 3.00
	B 10 Ausstattung im Sanitärbereich	1.0	1	1.0	nur Grundausstattung vorh.
	B 11 Fenster im Sanitärbereich	0.0	1	0.0	fensterlos
	B 12 Stellmöglichkeiten	2.5	4	10.0	2.5 zusätzl. Schrankmodule
	B 13 Veränderbare Raumbeziehungen	0.0	2	0.0	keine
	B 14 Veränderbare Raumaufteilung	0.0	2	0.0	keine
	B 15 Wählbare Wege	1.0	2	1.0	2 ./ 1 SE für Raum mit 2 Bereich.
	B 16 Privater Aussenbereich	3.0	3	9.0	13.35m ²
W1 Total			36	72.5	
Gebrauchswert W1		2.01	= ∑ Gewichtete Punkte W1 / 36		
W2	B 17 Wohnungsangebot	1.5	2	3.0	61% Anteil an 3- und 4-PHH
	B 18 Zumietbare Wohn- und Arbeitsräume	3.0	3	9.0	> 1.5m ² / PHH
	B 19 Veränderbare Wohnungsgrößen	3.0	2	6.0	> 50% veränderbar
	B 20 Wohnungszugänge	2.0	2	4.0	Durchschnitt ca. 0.7m ² /PHH
	B 21 Hauseingangszone	1.0	2	2.0	Durchschnitt >0.2m ² / PHH
	B 22 Wasch- und Trocknungsräume	3.0	3	9.0	Durchschnitt >1.0m ² / PHH
	B 23 Private Abstellräume	3.0	2	6.0	Durchschnitt >2.5m ² / PHH
	B 24 Gemeinsame Abstellräume	2.0	1	2.0	1.0m ² / PHH
	B 25 Mehrzweck- und Gemeinschaftsräume	3.0	1	3.0	> 0.5m ² / PHH
	B 26 Gemeinsamer Aussenbereich	3.0	4	12.0	> 12m ² / PHHt
	B 27 Fuss- und Velowegerschliessung	2.5	2	5.0	./ 1/2 Punkt für geringe Gefährd.
	B 28 Autoabstellplätze	2.0	1	2.0	< 80m, geringe Gefährdung
	B 29 Abgestufte Öffentlichkeitsgrade	2.5	1	2.5	Durchschnitt
	B 30 Lärmbelastung und Schallschutz	2.0	2	4.0	geringe Beeinträchtigung
W2 Total			28	69.5	
Gebrauchswert W2		2.48	= ∑ Gewichtete Punkte W2 / 28		
W3	B 31 Quartierspielplatz	3.0	3	9.0	180m
	B 32 Parkanlage oder Wald	3.0	2	6.0	Wald angrenzend an Parzelle
	B 33 Haltestelle des öffentlichen Verkehrs	3.0	8	24.0	220m
	B 34 Ortszentrum	2.5	8	20.0	600m
	B 35 Kindergarten u. untere Stufe Volksschule	2.5	3	7.5	600m
	B 36 Mittlere und obere Stufe Volksschule	0.0	1	0.0	> 2000m
	B 37 Soziale Einrichtungen	2.5	1	2.5	600m
	B 38 Naherholungsgebiet	2.0	3	6.0	100m, 100m, >2000m
	B 39 Regionalzentrum	3.0	7	21.0	< 12 Minuten
W3 Total			36	96.0	
Gebrauchswert W3		2.67	= ∑ Gewichtete Punkte W3 / 36		
Gebrauchswert W1 + W2		2.22	= ∑ Gewichtete Punkte W1 + W2 / 64		
Gebrauchswert W1 + W2 + W3		2.38	= ∑ Gewichtete Punkte W1 + W2 + W3 / 100		



Criteria for the flat

- Size of the flat
- Number of rooms
- Flexibility
- ability to furnish the rooms
- Direction of the windows
- Position of the eating place
- Connection to the cooking place
- Windows in the kitchen
- Facility of sanitary rooms
- Windows in the sanitary rooms
- Place for cabinet moduls
- Flexible connections between rooms
- Choosable ways
- Private space outside

Criteria for the housing estate

- Different flats
- Rooms for work to rent
- Flexible size of flats
- Size of place before flat
- Size of place before the house
- Laundry
- Storage space
- Common rooms
- Common space outside
- Access for the pedestrians and the bicycle
- Place for the cars
- Noise

Criteria for the location

- Playground for children
- Park or forest
- Public traffic
- Centure of the quarter
- Kindergarten and ground school
- Upper school
- Social infrastructure
- Refreshing area
- Centure of the region

Utility value for the location

Utility value for the flat + the housing estate

Utility value for the flat + the housing estate + the location

Sociologic Study – Interviews

“Housing Satisfaction and innovation of architecture
in Styria since 1960“

Interviews with inhabitants 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

List of criterias defined by experts



Intersubjective value judgement

Value 0-3

0: target not met

3: target met



Comparison of the Results



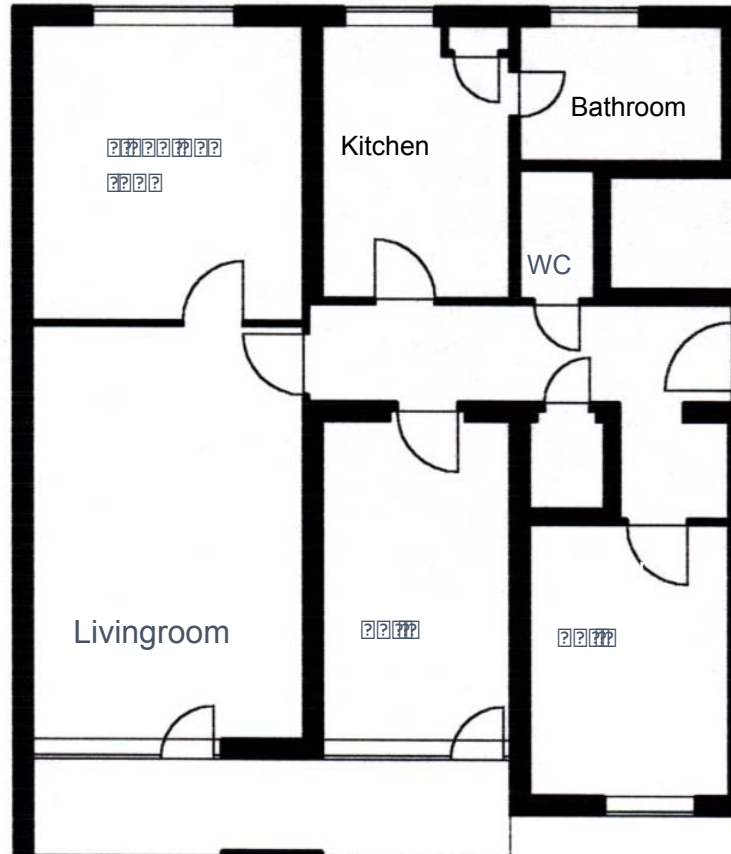
High-Rise Buildings and Sprawl in the 60-ies and 70-ies in Graz



Eisteichsiedlung 1958 – 1964, Terrassenhaussiedlung 1972-1978, Wienerbergersiedlung 1981



Eisteichsiedlung Dr. Robert-Grafstr.19-21, ÖWGes. 1964



Eisteichsiedlung Dr. Robert-Grafstr.19-21, ÖWGes. 1964

Housing Satisfaction: 12. of 16
 Evaluation system: 14. of 16



Grazer Schule - School of Graz 1966 - ?



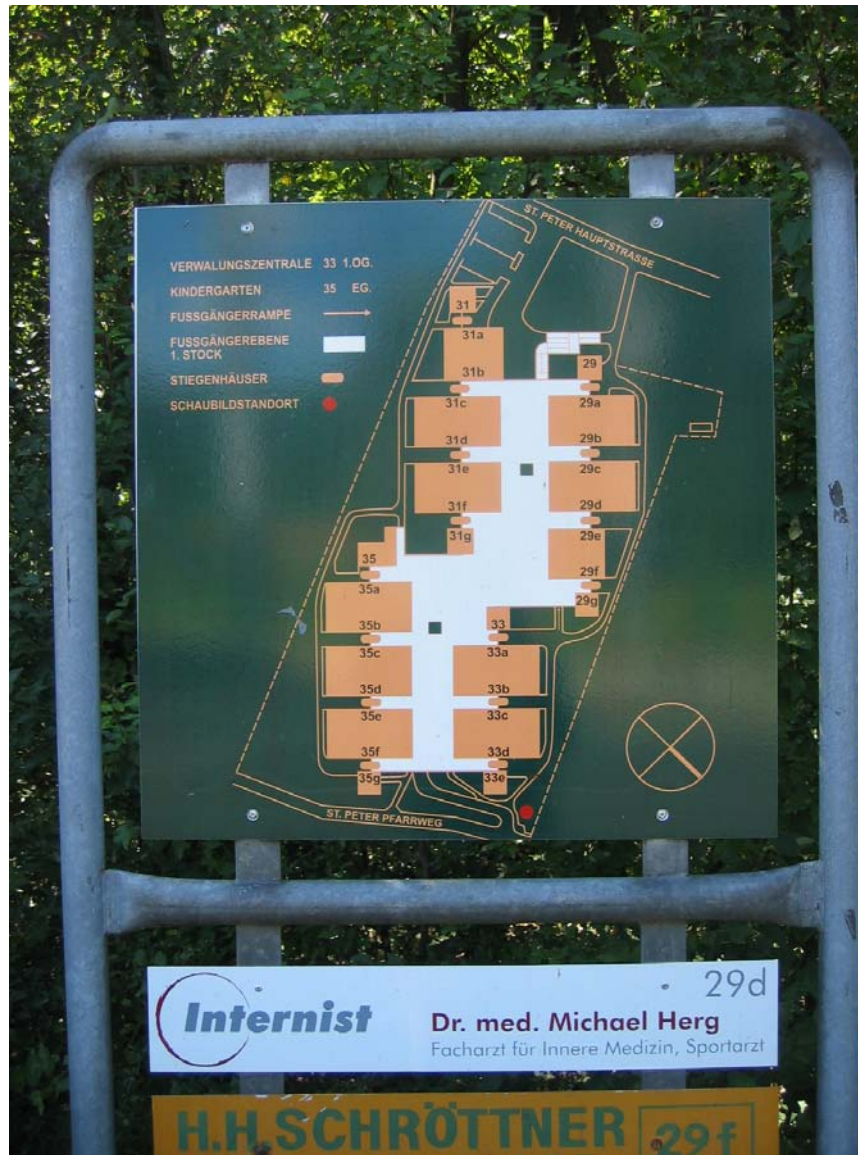
Terrassenhaussiedlung 1966

Requirements of the architects of the Terrassenhaussiedlung 1966

- **New Housing forms** within new urban concepts with new laws
- **Mix of functions:** housing and working, recreation and education
- **Integration of private and public** for common contacts
- **Higher Density of development** for new urban housing
- **Family Housing** with the one family house as inspiration
- **New technical preproduction methods** by research
- **Creative Activation of the inhabitants** for personal fulfillment
- **Highest artistically quality for the most responsible task: housing**



Terrassenhaussiedlung 1978





















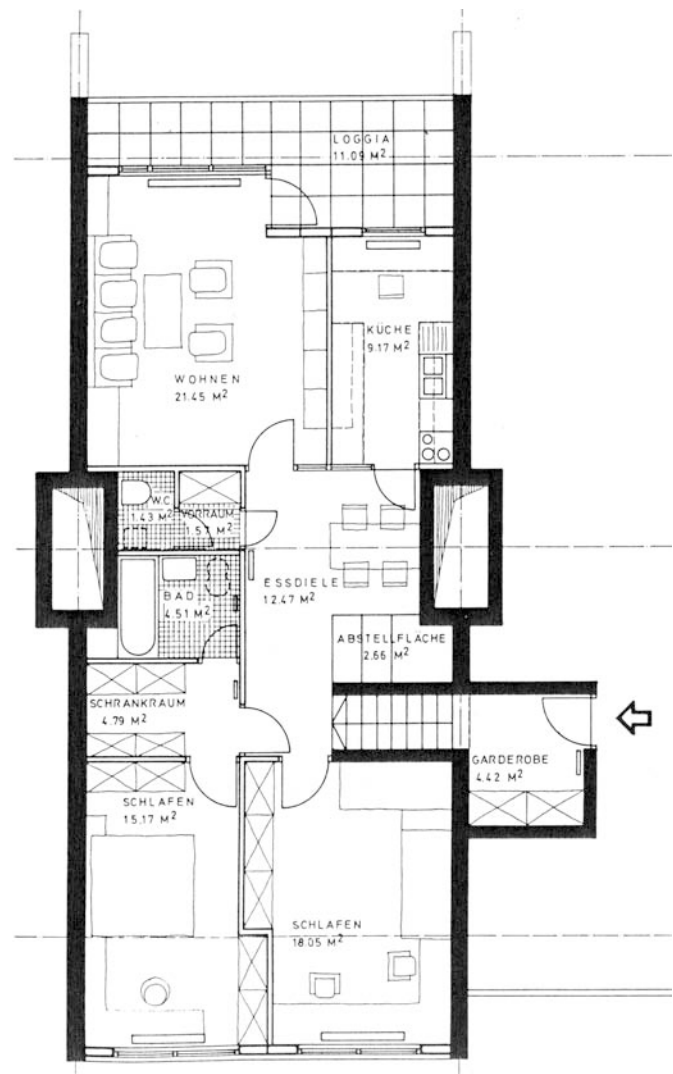
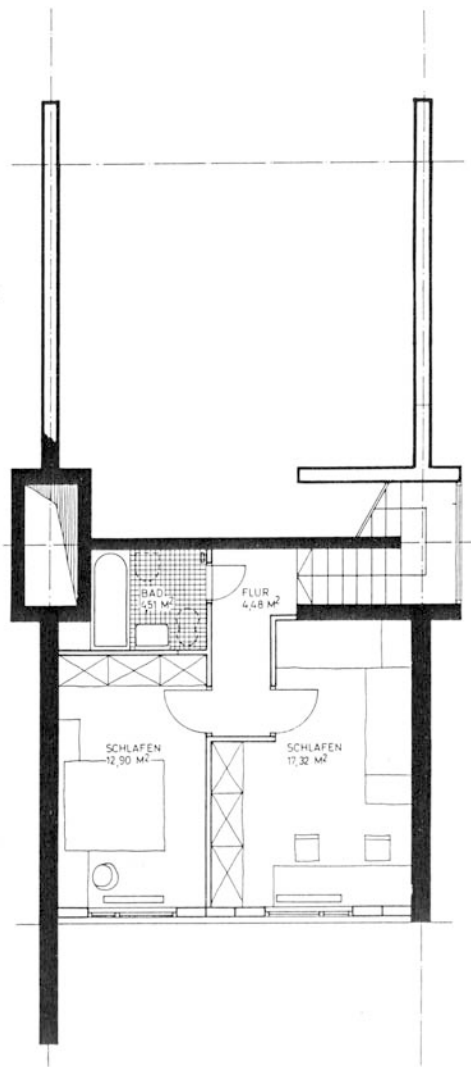
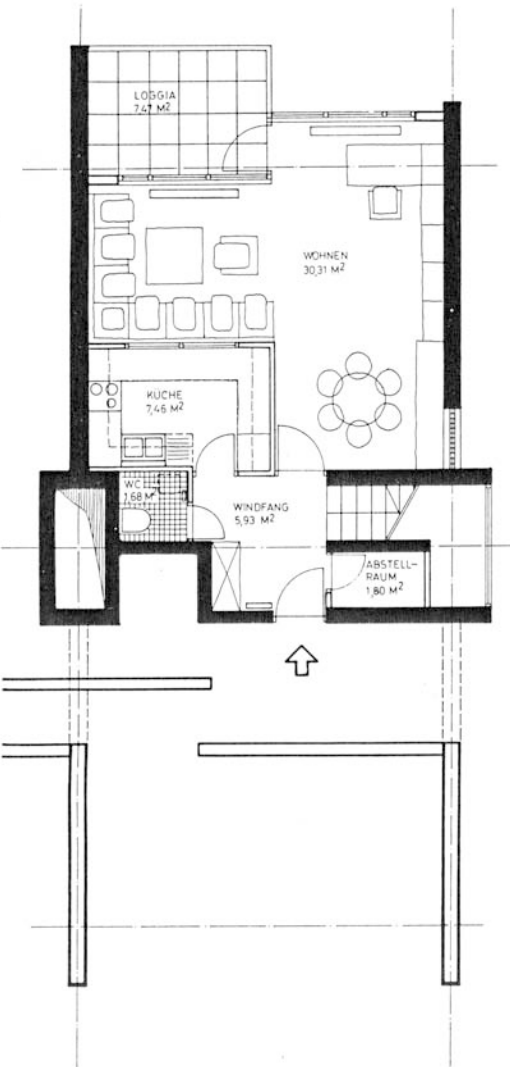


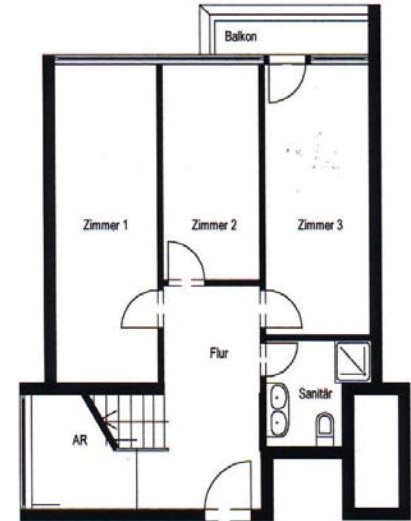
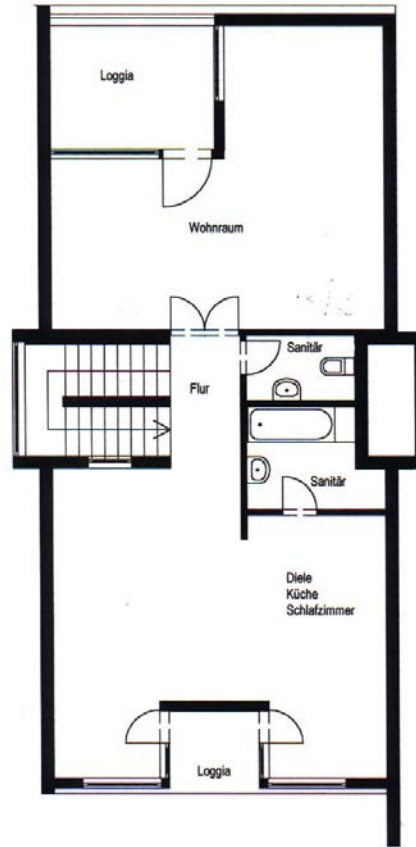
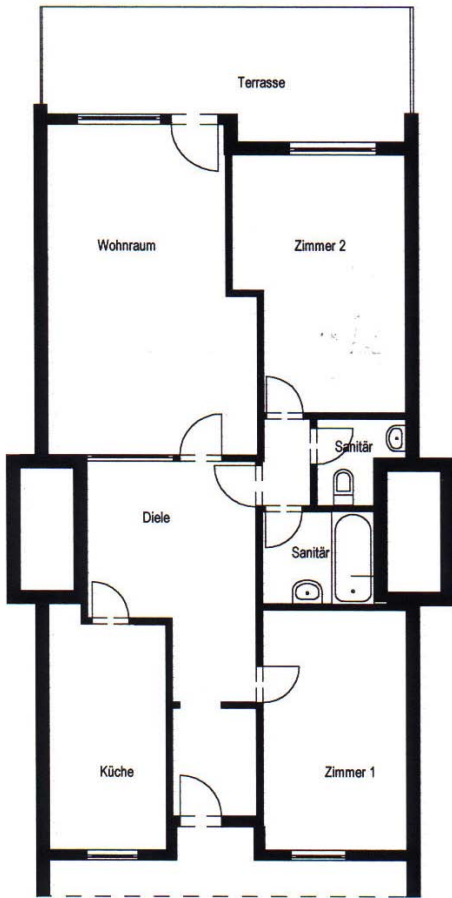


Terrassenhaussiedlung Zentrum



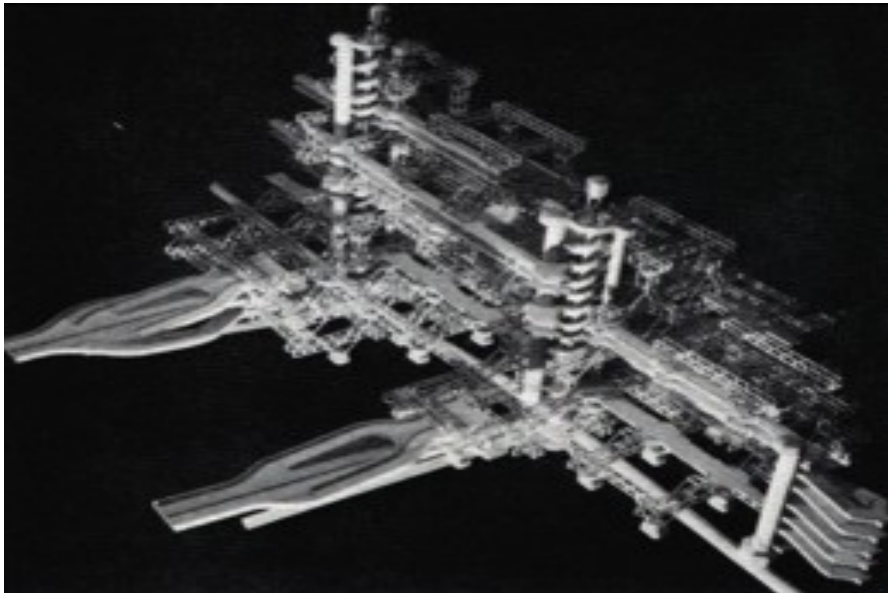
Kindergarten







Terrassenhaussiedlung Moduls of the Facade



The Vision : Neue Wohnform Ragnitz 1965

Günther Domenig, Eilfried Huth



The Reality: Berlinerring Ragnitz



Eschensiedlung Eilfried Huth 1972 - 1982



Modell Steiermark The Styrian Model

Not the housing authorities should determine where and how housing buildings were made, but the people, who find together and live together.

The best architects should work with them, competitions shall choose the best, each building should be individuell, no copies from the drawer.

Housing is more than a roof over the head, is the feeling of security and home.

Requirements

Architects of the Terrassenhaussiedlung 1966

- **New Housing forms**
- **Mix of functions**
- **Integration of private and public**
- **Higher Density of development**
- **Family Housing**
- **New technical preproduction methods**
- **Creative Activation of the inhabitants**

- **Highest artistically quality for the most responsible task: housing**

Working Team 12 Styrian Model 1972

Variety and Plurality

Development Plans

Common Rooms and Infrastructure

Greater Units

Variability of groundplans

Housing Research

Participation

Groups as Interested Parties

Housing Competitions

Catalogue for qualities

Social Integration

Mix of young and old

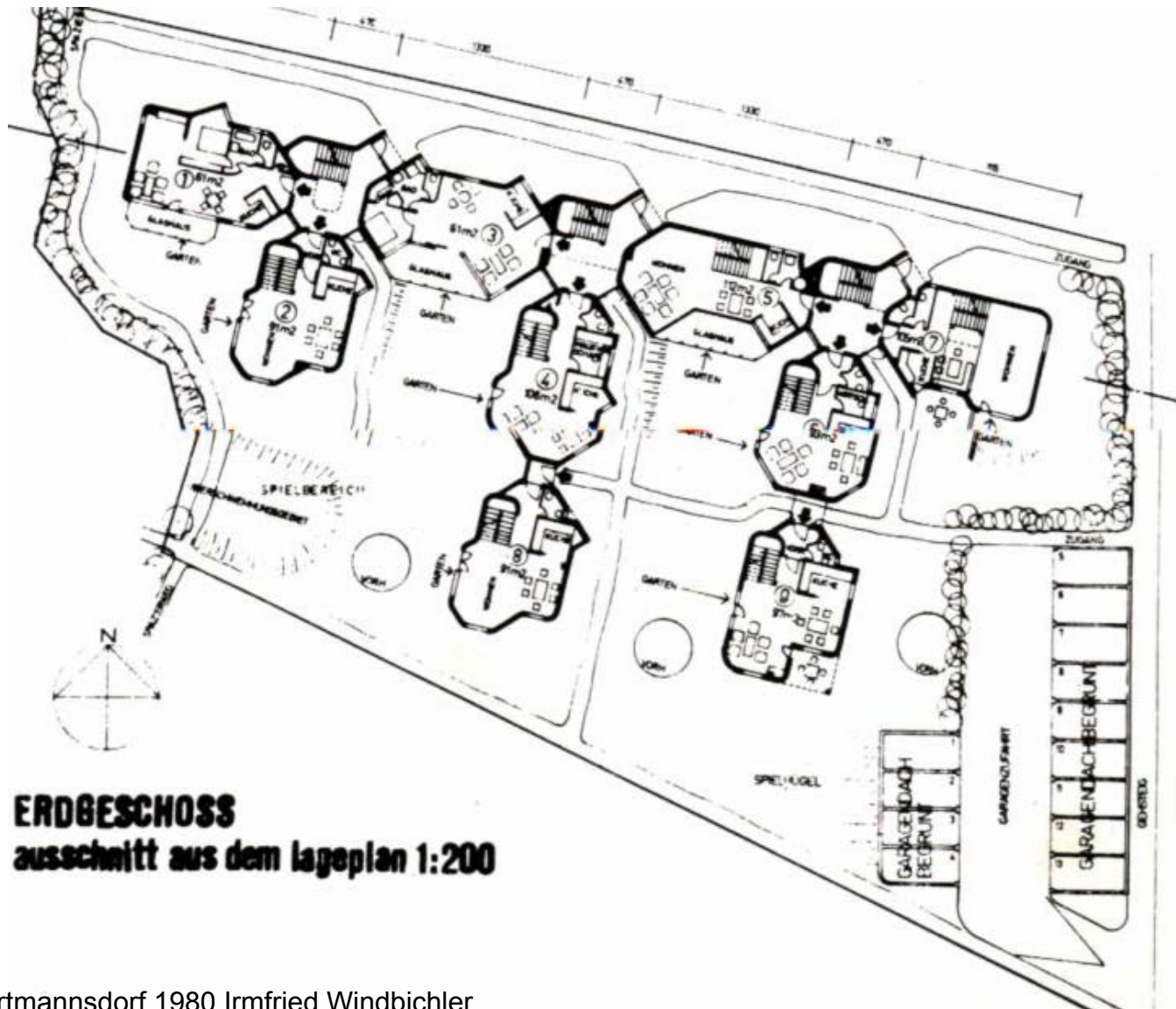
New Law for Housing Subvention



1. Development Plan of Graz 1982



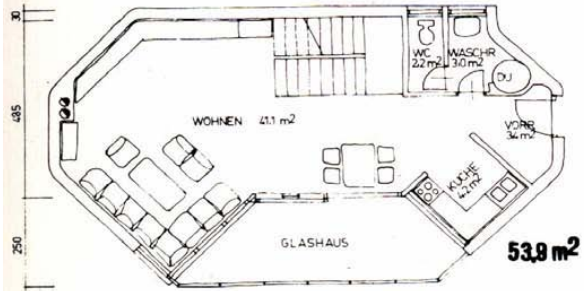
1. Competition of the styrian model 1980: Markt Hartmannsdorf Architect Windbichler 1. Price



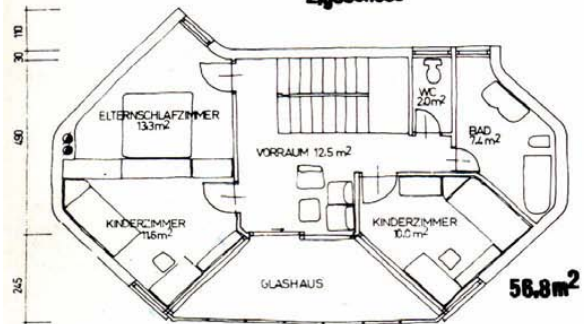
ERDGESCHOSS
 ausschnitt aus dem Lageplan 1:200

Markt Hartmannsdorf 1980 Irmfried Windbichler

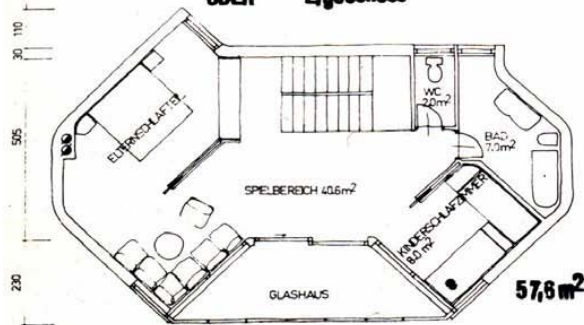
typ 120 1.geschoss



2.geschoss



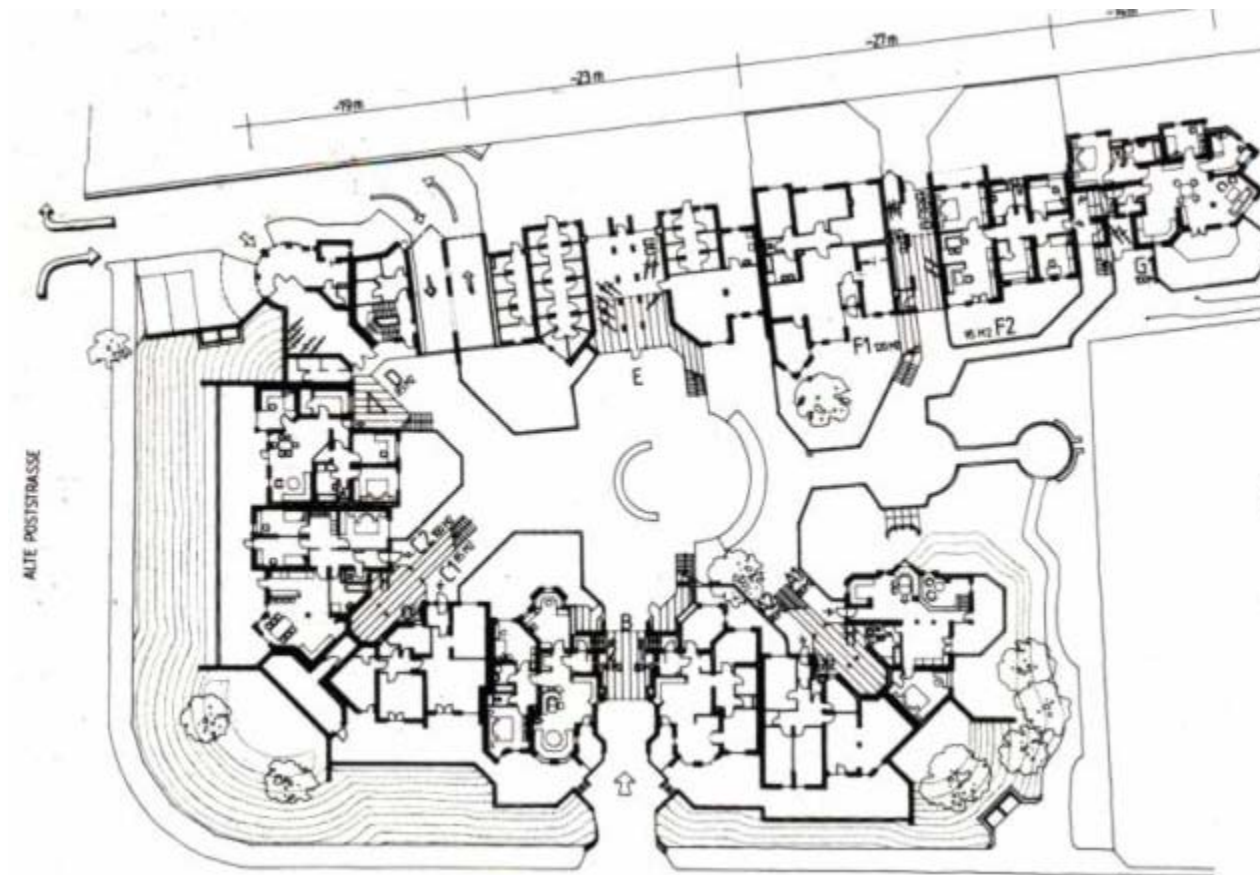
ODER 2.geschoss



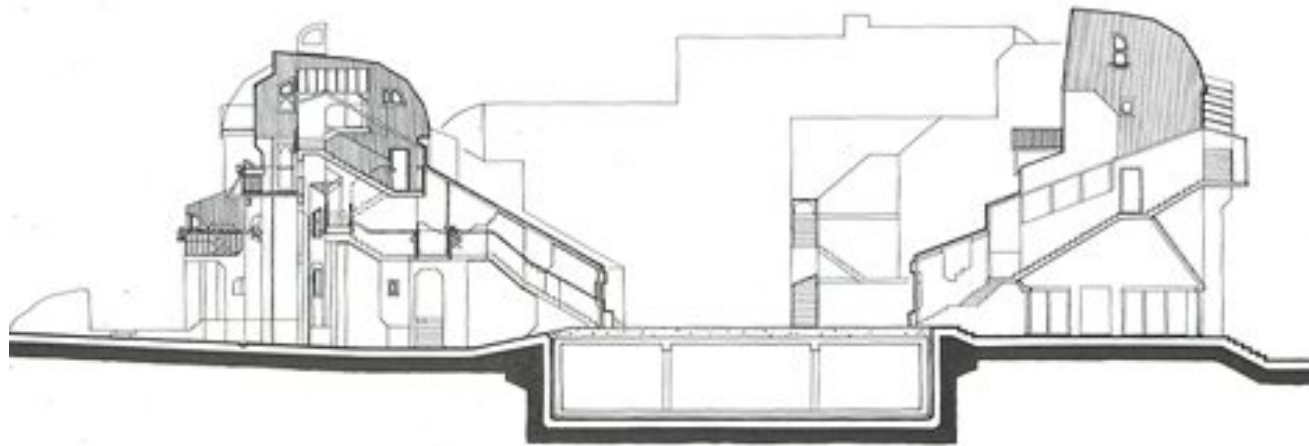
Markt Hartmannsdorf 1980 Irmfried Windbichler



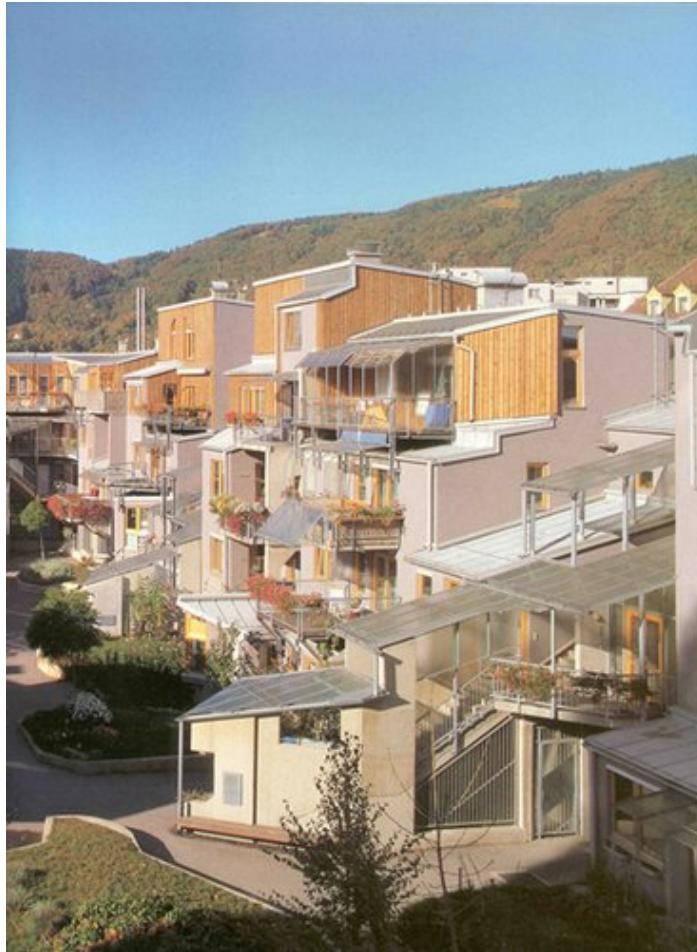
Alte Poststrasse Szyszkowitz / Kowalsky 1981



Alte Poststrasse Szyszkowitz / Kowalsky 1981



Alte Poststrasse Szyszkowitz / Kowalsky 1981



Alte Poststrasse Szyszkowitz / Kowalsky 1981



Alte Poststrasse Szyszkowitz / Kowalsky 1981



Alte Poststrasse Szyszkowitz / Kowalsky 1981



Wienerbergersiedlung 1. Competition of the Styrian Model in Graz 1981 1. Price Erskine/Riess



Wienerbergersiedlung Ralph Erskine build „Johnny“ as recently as 1985 because of the Clay Ground



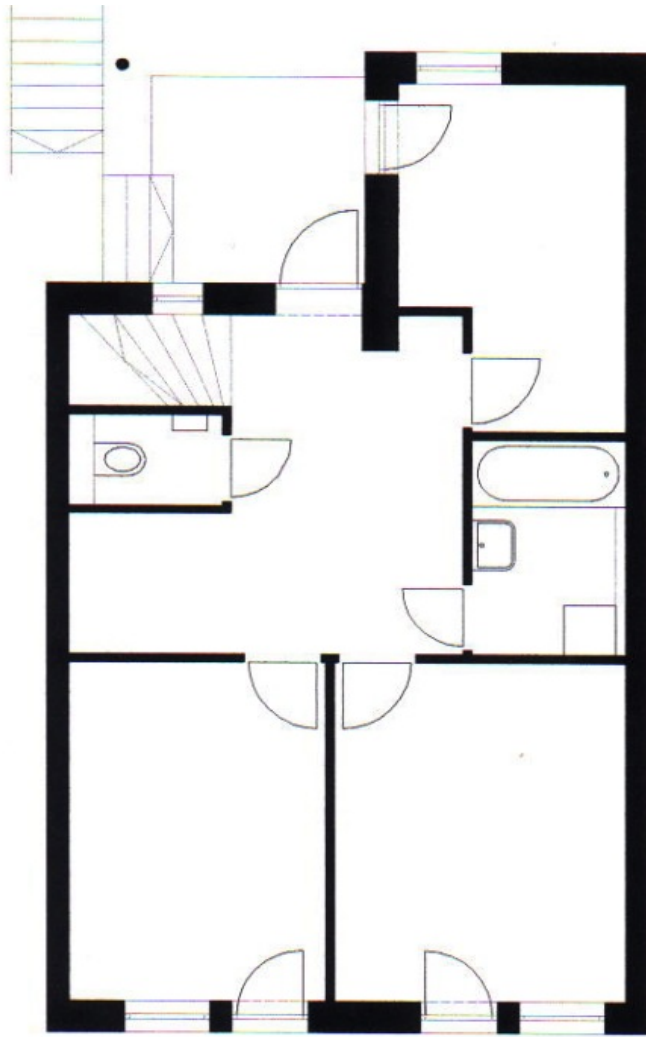
Wienerbergsiedlung Erskine and Riess 1985: Laundry-Houses for Meeting Points



Wienerbergersiedlung Erskine and Riess 1985

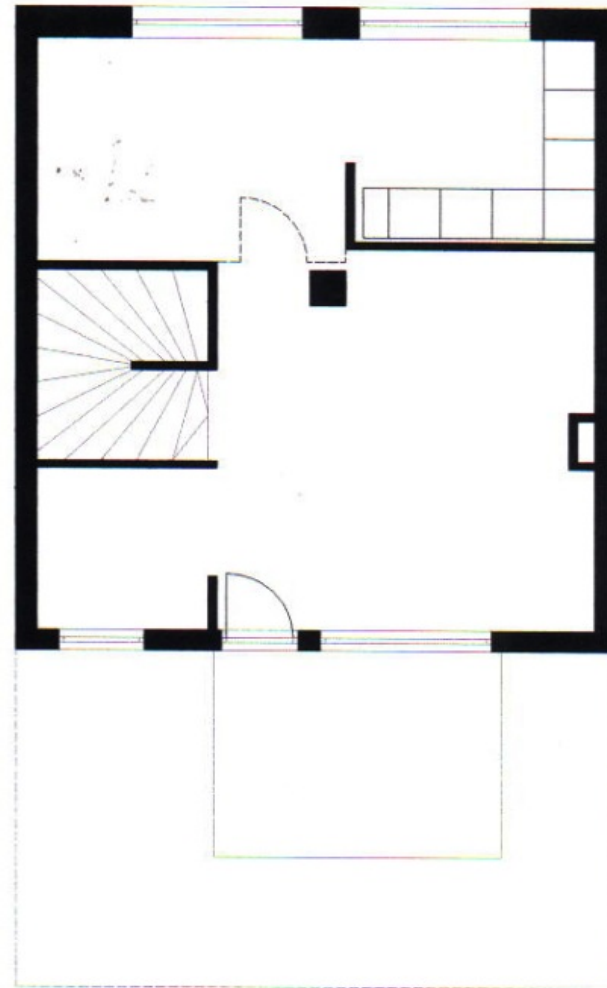


Wienerbergersiedlung Bakery Cafe and a small Lake



Maisonette 90 m² 3 Personen

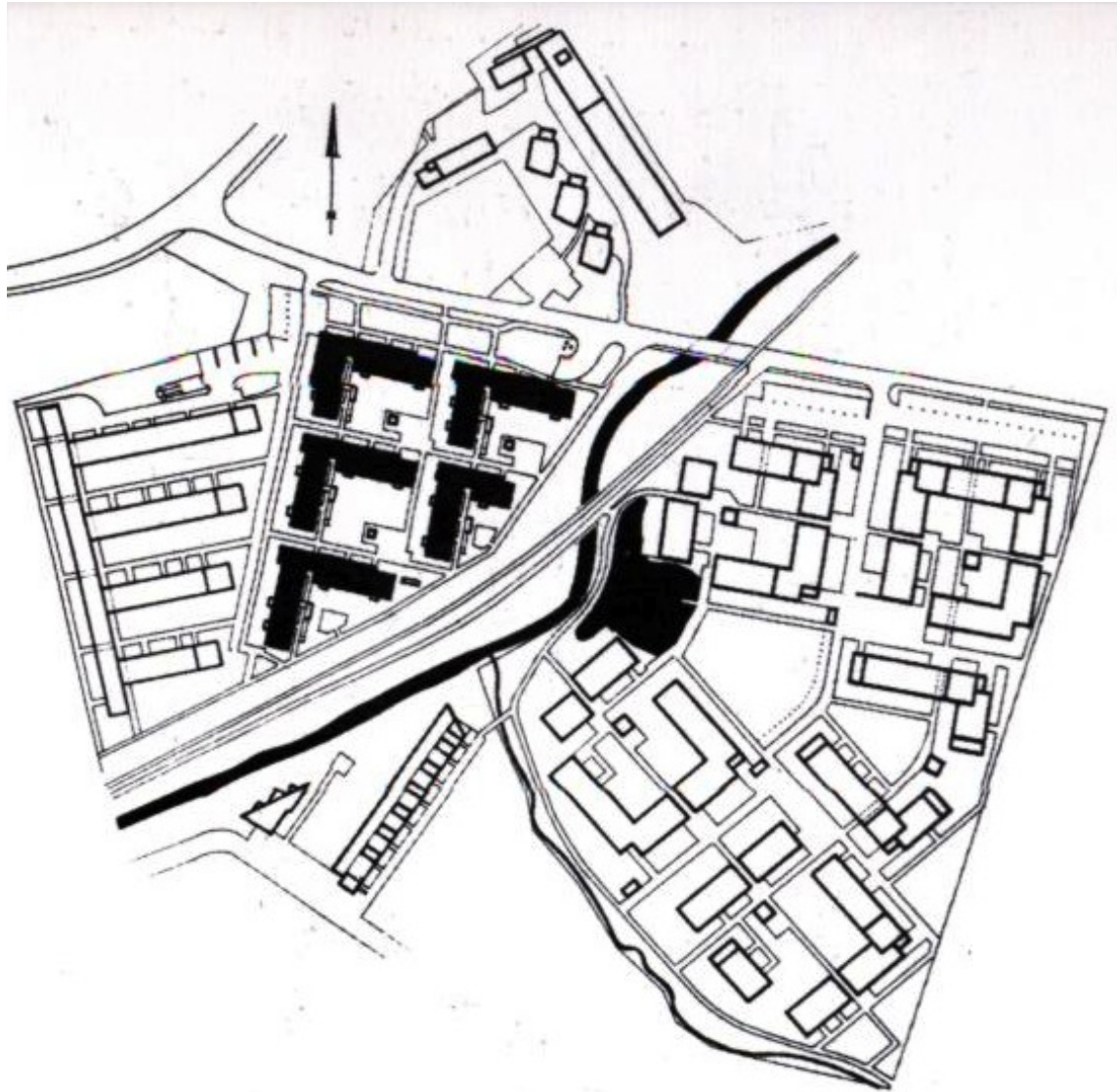
Wienerbergersiedlung Erskine and Riess 1985



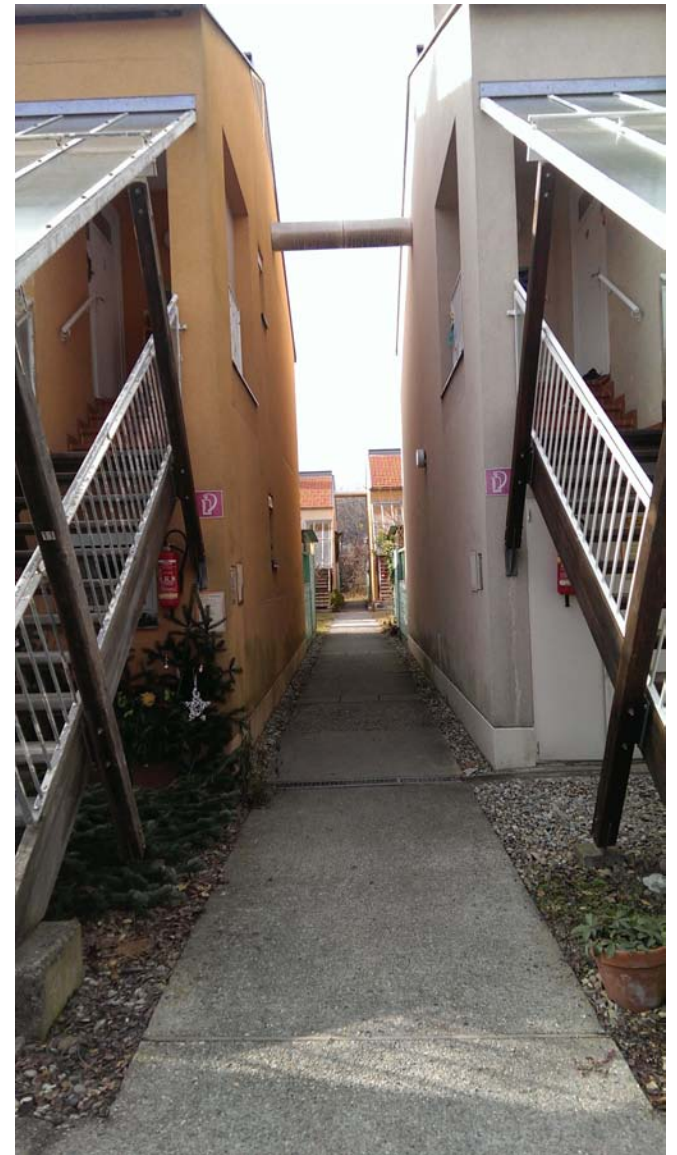
Housing Satisfaction: 7. of 16
 Evaluation system: 5. of 16



Tannhofgründe 1987-1994



Tannhofgründe Competition 1983



Tannhof I 1987 - 1988



Tannhof I 1987-1988



Tannhof II 1989-1990



Tannhof II 1989-1990



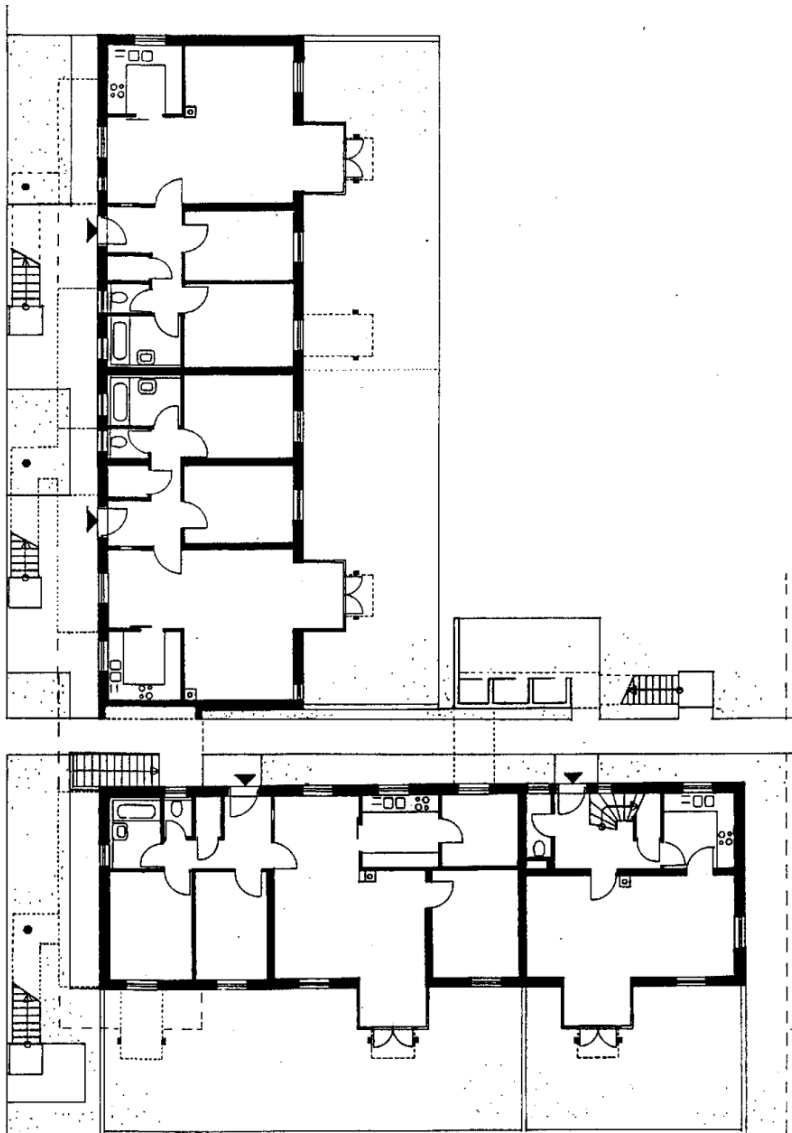
Tannhof II Passages



Gardens



Tannhof II Playgrounds and Common Spaces for Meeting Points



Tannhof II Groundfloor Plans

Housing Satisfaction: 4. of 16
Evaluation system: 2. of 16



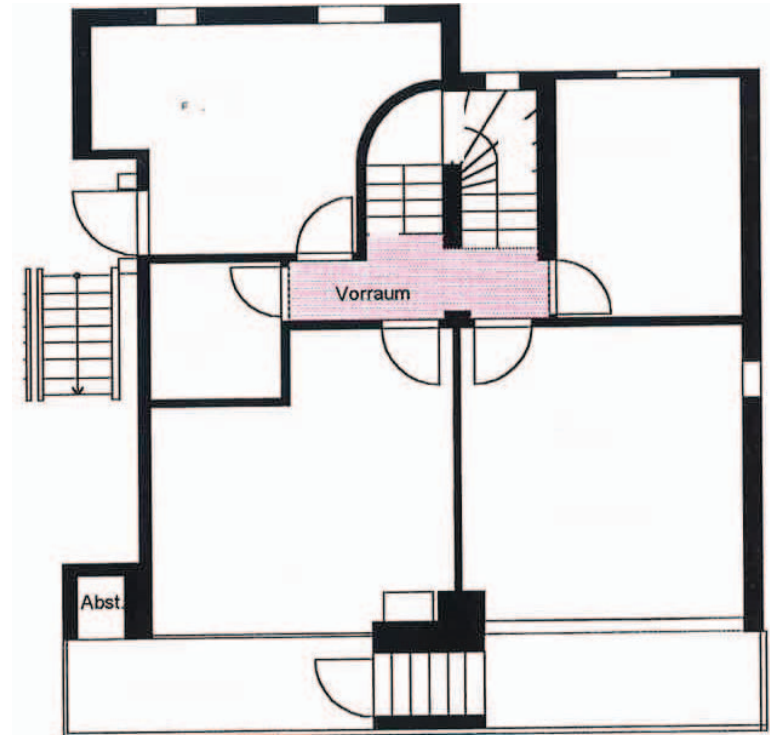
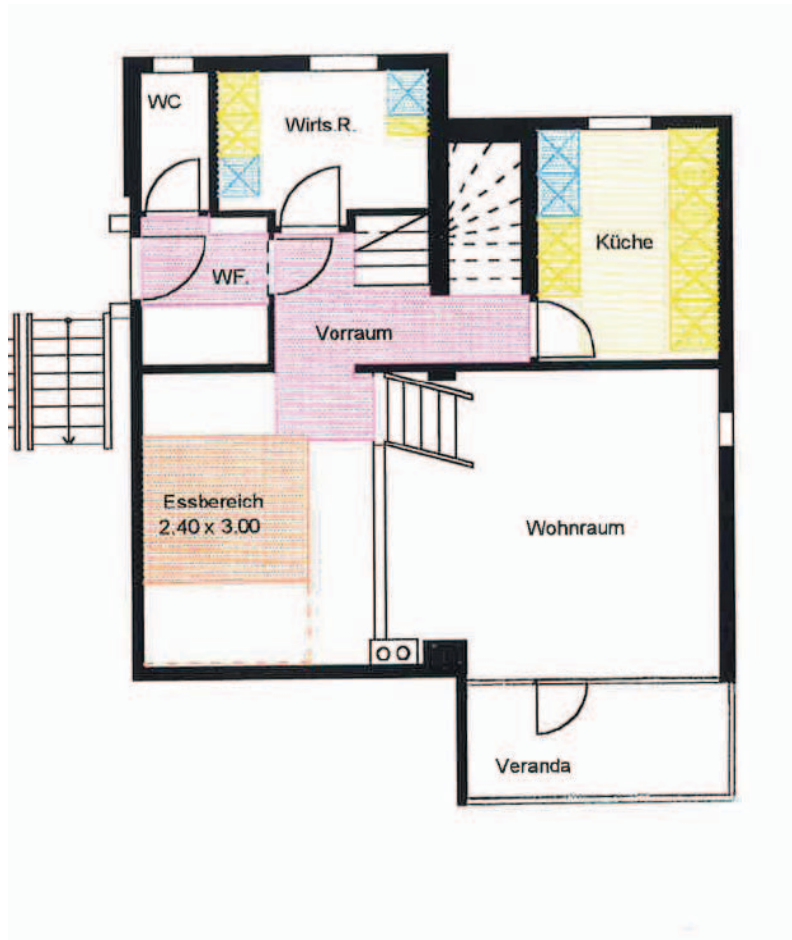
Rettenbachersiedlung Bernhard Hafner 1986-1989



Rettenbachersiedlung Bernhard Hafner 1989 und Kernhaussiedlung Gruppe 3 1984



Rettenbachersiedlung 1989



Rettenbachersiedlung 1989 Floor Plans with Evaluation System

Housing Satisfaction: 1. of 16
 Evaluation system: 3. of 16



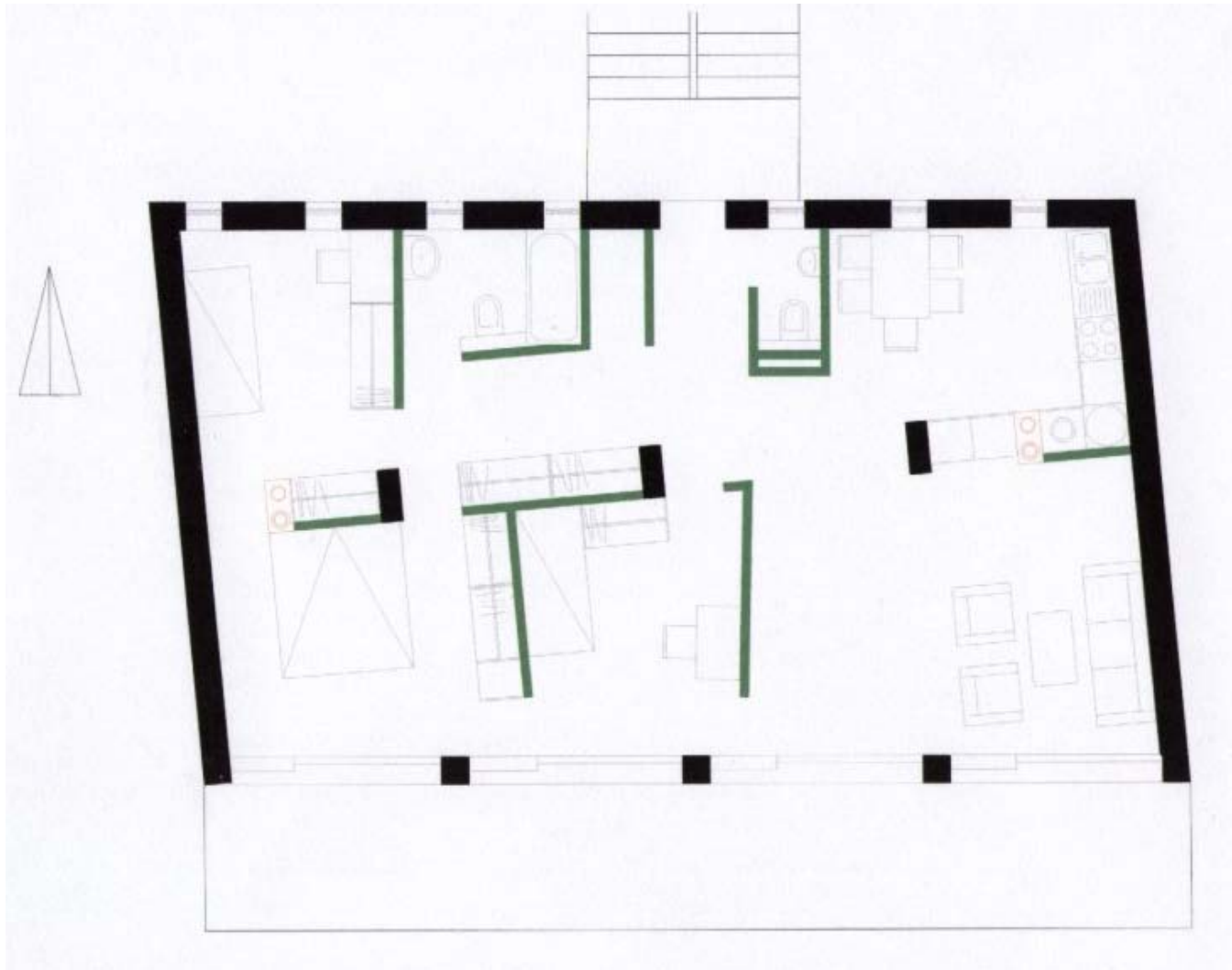
Heidenreichstrasse Wolff-Plottegg 1987



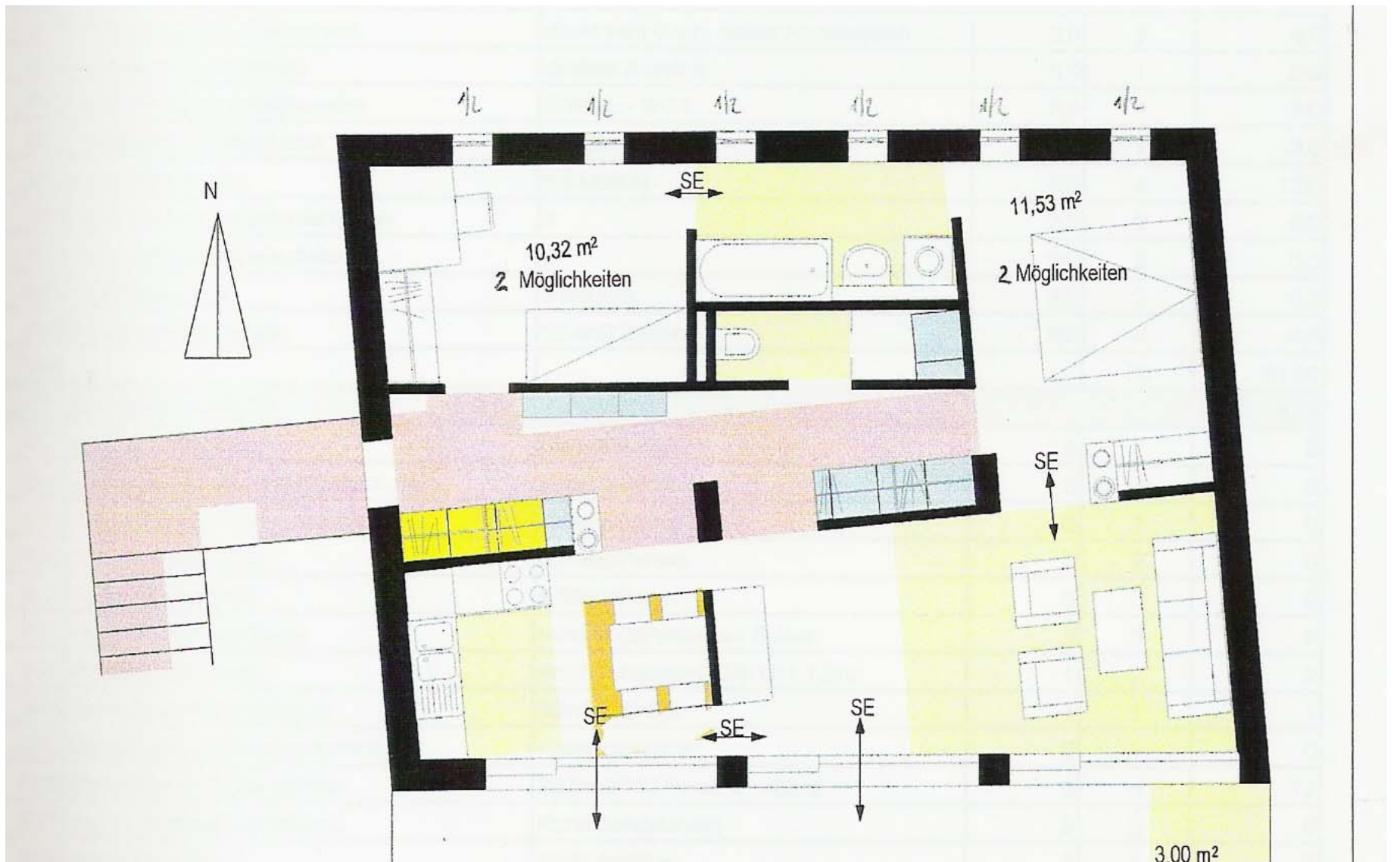
Heidenreichstrasse Wolff-Plottegg 1987



Heidenreichstrasse Wolff-Plottegg 1987



Heidenreichstrasse Wolff-Plottegg 1987



Heidenreichstrasse Groundfloor Plan with Evaluation System

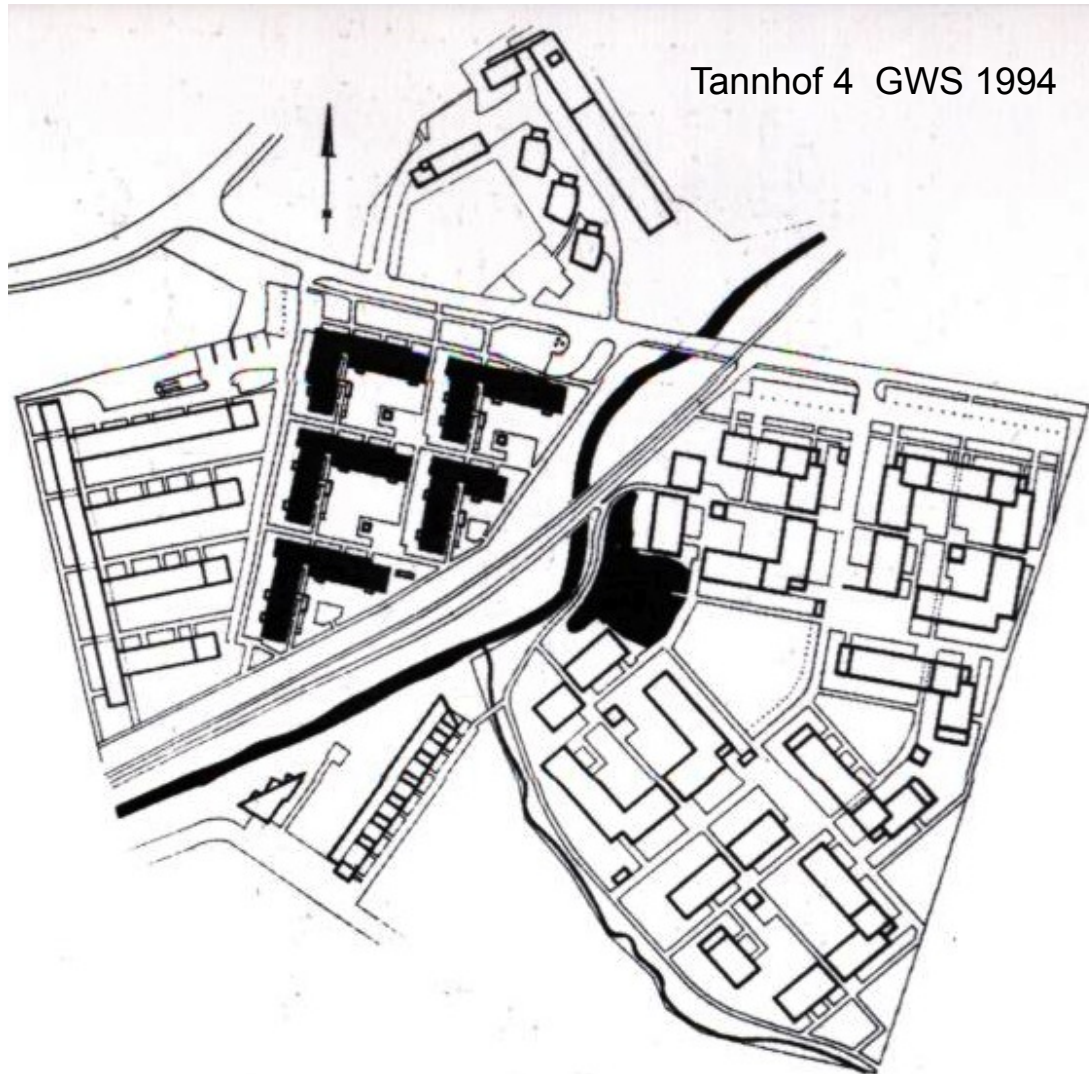
Housing Satisfaction: 3. of 16
 Evaluation system: 1. of 16

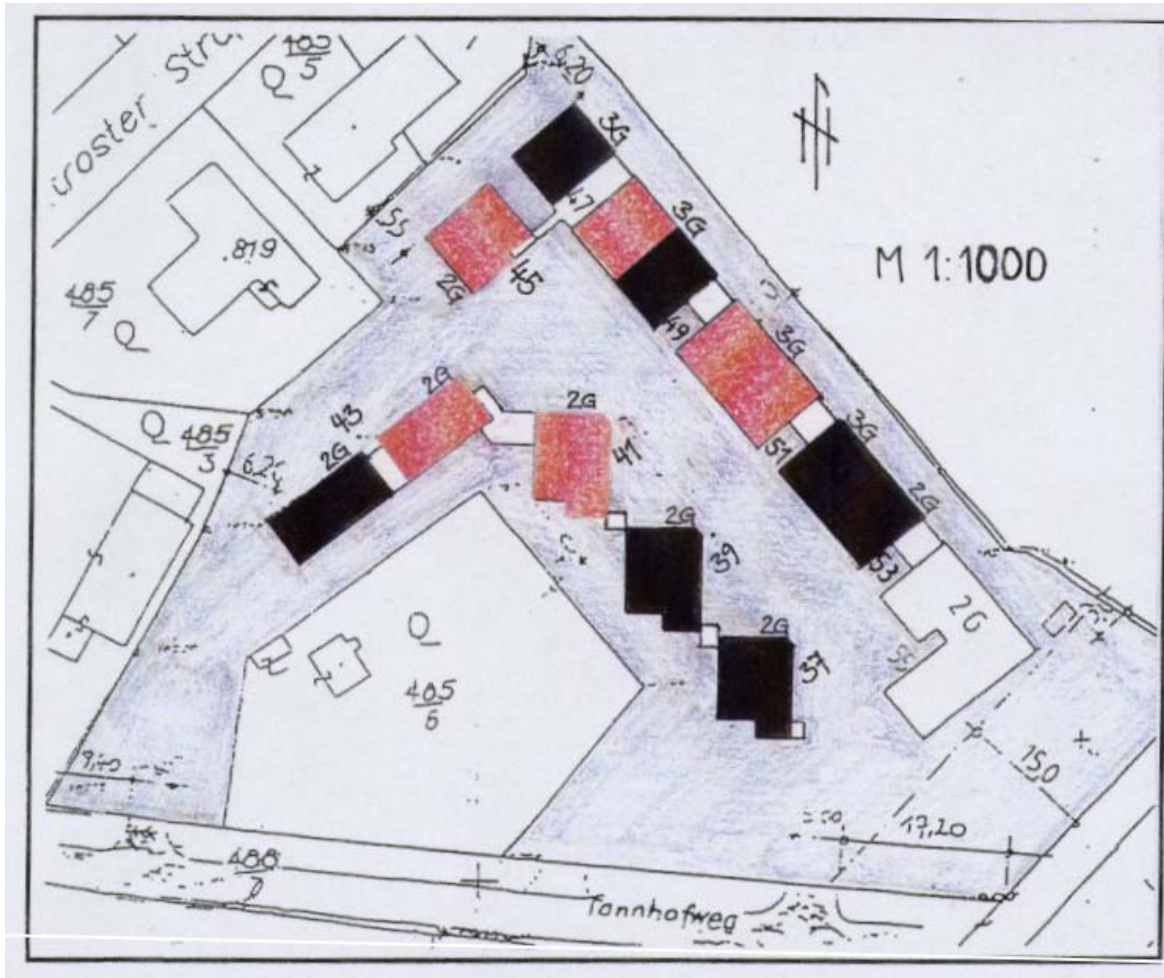
The economic recession in the 90-ies, the unemployment and the population decrease are influencing the housing activities in a negativ way. In 1991 the political party in styria was changing and so everything changed in the housing field. The experiment Social Housing coud not be continued.

Instead of public competitions, architects were invited to build conservative architecture in the following years.



Tannhof 4 GWS 1994

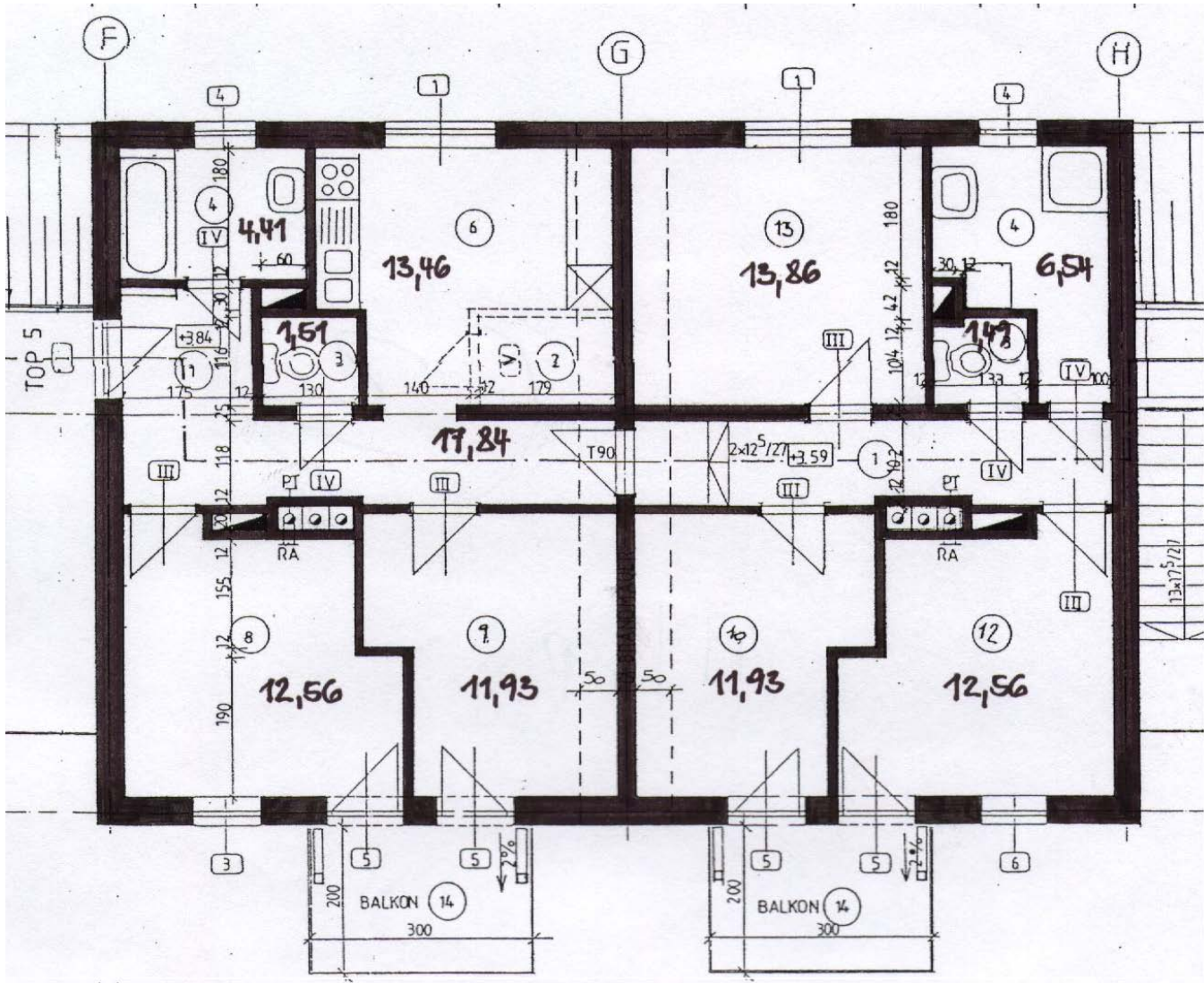




Tannhof 4 GWS 1994



Tannhof 4 GWS 1994



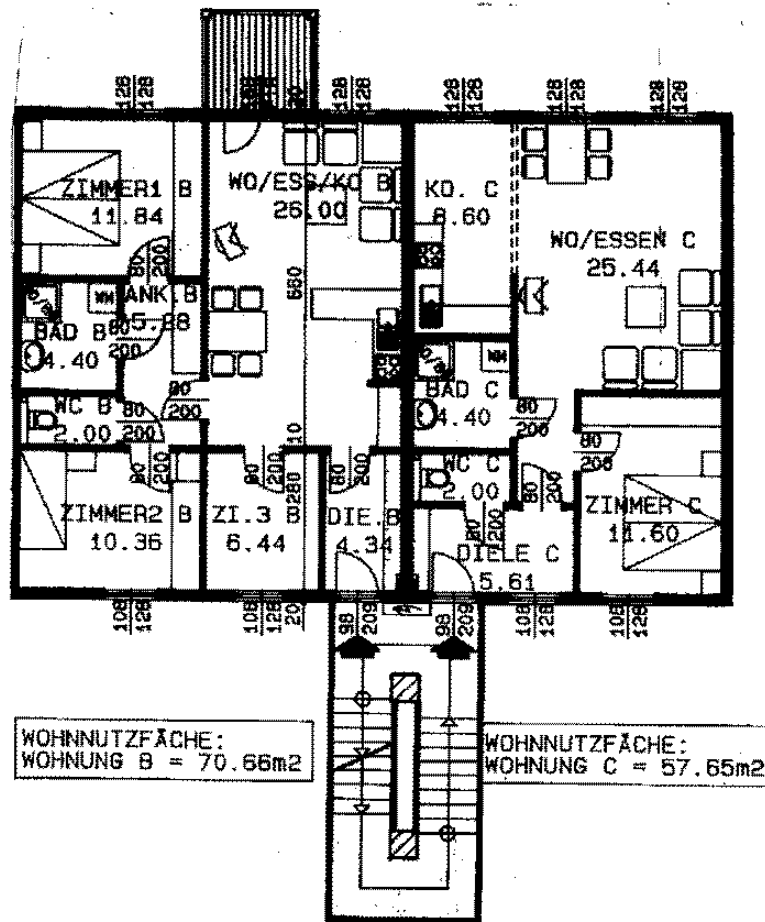
Tannhof 4 GWS 1994



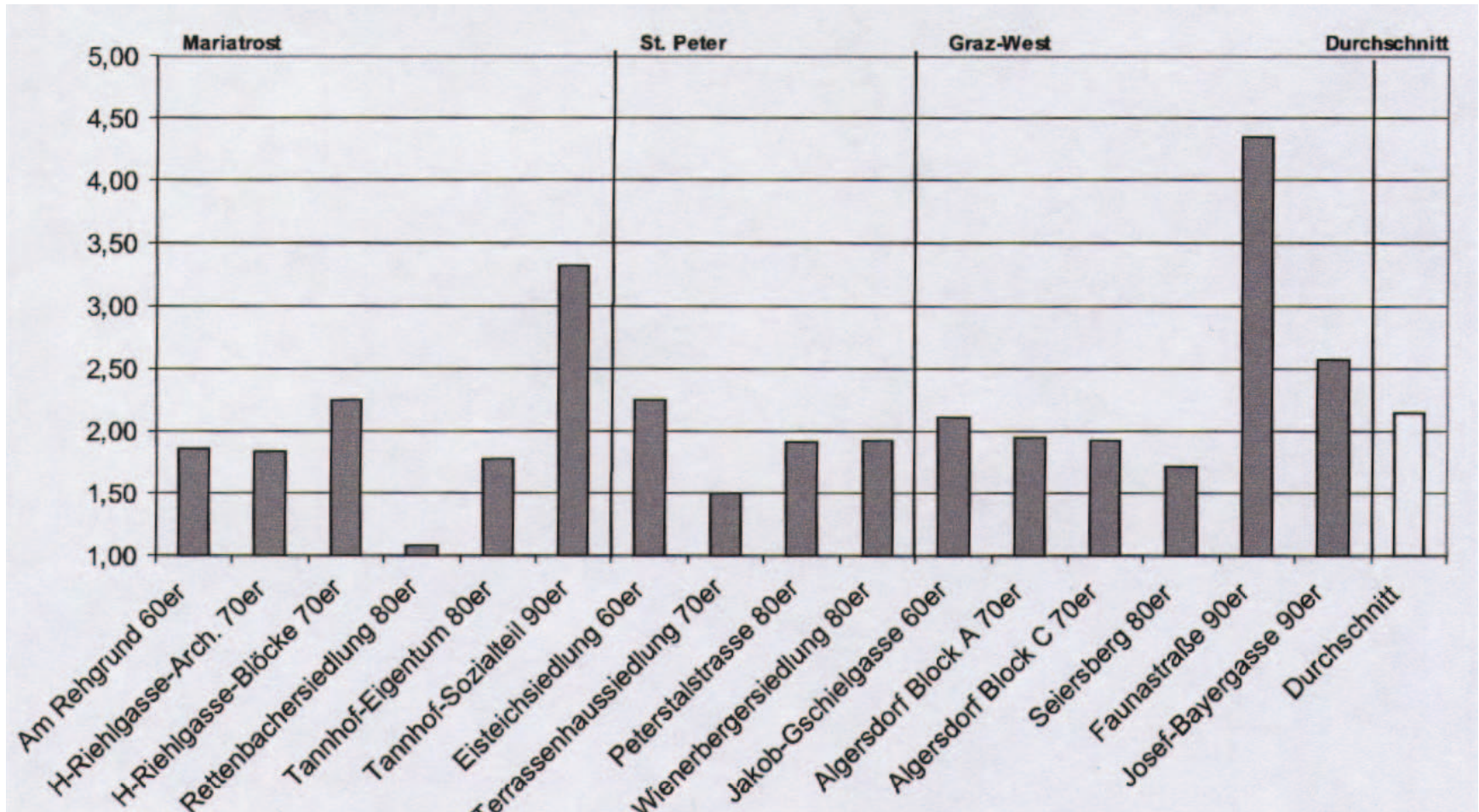
Faunastrasse 1996



Faunastrasse 1996

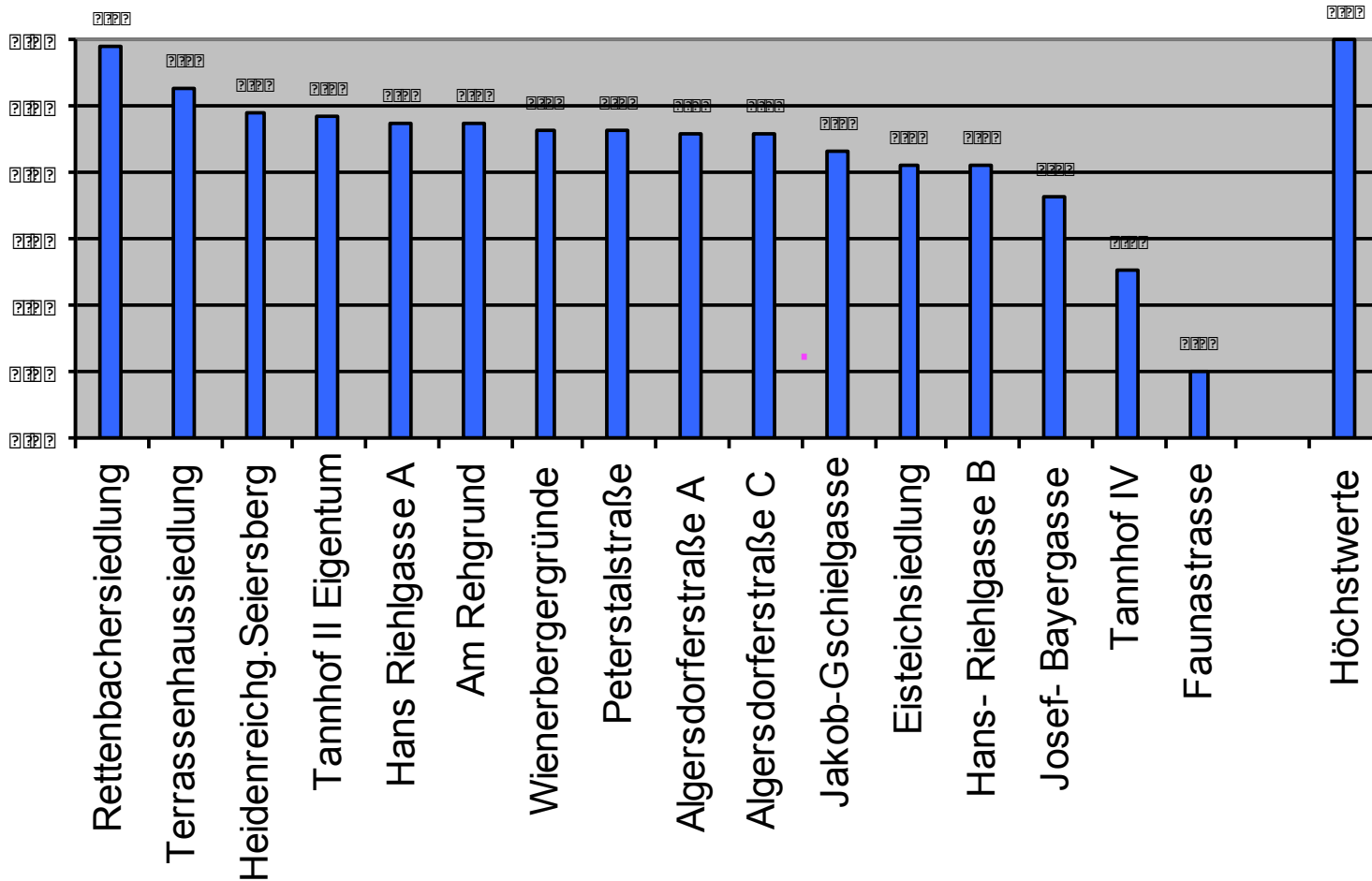


Faunastrasse 1996



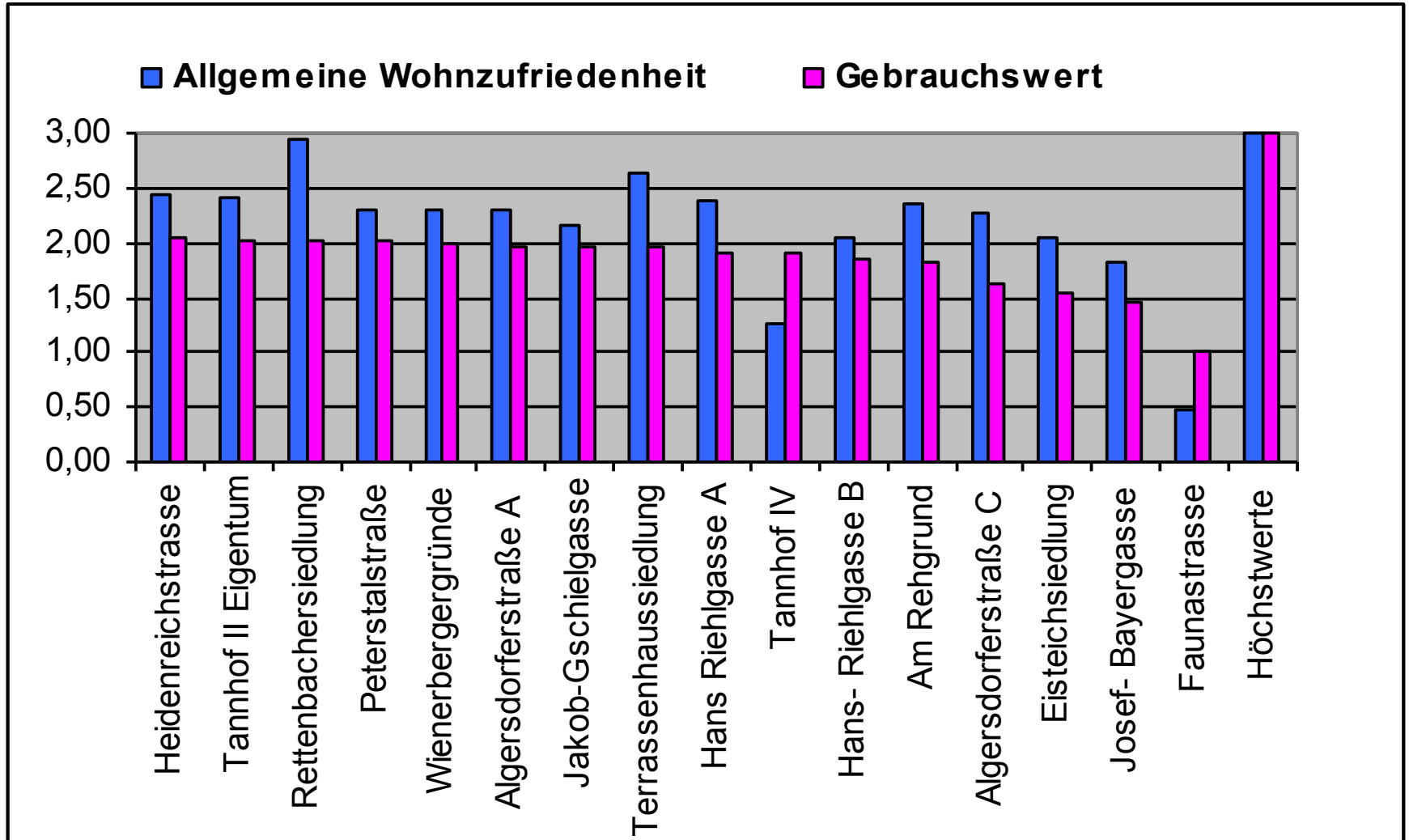
The Result for Housing Satisfaction in the Sociologic Study

■ Allgemeine Wohnzufriedenheit



Wohnbauten mit Architektenplanung

Wohnbauten ohne Architektenplanung



The Comparison of the Housing Satisfaction with the Utility Value of the Evaluation System