

Quality of Life and Gender, in an ifu's Course.

A new Methodology applied to three Cities

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Within the ifu's² Project Area "City and Gender", I developed the teaching on the topic "*City and Sustainability*". The base of both, theoretical lessons and research project, was centred on two main topics: Urban Sustainability and Quality of Life in Cities.

The lectures made constant reference to the case of Santiago de Chile, which was one of the four cities analysed in the course (see Fadda, 2001 in press). The Research Project was denominated "*Are Cities Sustainable? Inequities in Quality of Life in Cities: International Comparison*". This Project was designed according to a research on Quality of Life (QOL) in low income housing, carried out in Santiago³, and applying its methodology (see methodology in Fadda and Jirón, 1999; Fadda, Jirón and Allen, 2000).

The ifu's project aimed to analyse, through case studies of different countries, the relationship between "*environment- quality of life- gender*" in urban poor neighbourhoods. Also to detect critical situations or inequities, as well as positive situations, and to propose forms of improvement of that relationship. It also, intended to establish comparison between different national cases. There is an agreement amongst authors that indicators of quality of life must take into account qualitative as well as quantitative aspects.

For this reason, the participants were asked to bring or obtain from their countries objective data (i.e. figures, statistics, maps, photos, films, plans, policies, strategies, etc.) and subjective evaluations and perceptions (via workshops, surveys, etc. with inhabitants) of a chosen neighbourhood. For an example of a survey see the Mumbai's questionnaire in Appendix 1.-

Twelve participants⁴ were registered in the project. They formed three working groups of four persons each. The selected case studies were the poor neighbourhoods of: *Panjarapol* in Mumbai City (India), *Planetario* in Porto Alegre (Brazil) and *Novos Alagados* in Salvador de Bahia (Brazil). See Maps in Fig. 1. This paper contains a short theoretical framework and the main results of these three practical examples.

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³ Research Projects N° 1980865-98 and 1000414-00 (with FONDECYT funds) by G. Fadda & P. Jirón.

⁴ The participants were from the following countries: Bolivia, Brazil, Cuba, India, Indonesia, Kyrgystan, Malaysia, Mongolia, Nigeria, Philippines, Tanzania,

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Bhimnagar slum in Panjarapol in Mumbai City, India is one of the largest slum areas in the southern suburb of Mumbai (see photos in Fig. 2). In 1970, when *Navi (New) Mumbai* started developing and the wholesale trade shifted from *Mumbai* to *Navi Mumbai*, south to east transport assumed priority. It was then that a road was proposed to be constructed to ease vehicular traffic and avoid traffic jams, and this slum area is one of the slums, which will be affected if the proposed road is constructed. The problems in this area include lack of water provision, poor toilet facilities and poor housing conditions. This case study was developed by Cholpon Kokumova, Swati Banerjee, Tsedendamba Tungalag and Fong Lin Teng (Fadda, Gehlen et al., 2000).

Planetario in Porto Alegre, Brazil came into existence in 1960 and it is considered as a Special Area of Social Interest⁵. Initially, it was extremely poor, without good living conditions and without any basic infrastructure. During the regularization process it was decided that all people who were living there must remain; so the Municipality, in agreement with the community, reconstructed all the damaged houses and urbanized the area (see photos in Fig 3). This case study was carried out by Leticia Marques Osorio, Claudia Aranibar Miranda, Obehi Momodu and Sri Maryati (Fadda, Gehlen, et al., 2000).

Novos Alagados in Salvador, Brazil is a result of the ongoing urbanization process of Salvador City (see photos in Fig 4). Its beginning could be traced back to 1948-1949 and it continues to expand to this day. *Novos Alagados* is an emblem of all the challenges of the informal town: pollution and environmental degradation problems, together with a high-risk social and epidemiological situation. This study was done by Abigail Alcantara Silva, Beatrice Mushi, Rosa Oliveras and Stephanie Faculo (Fadda, Gehlen, et al., 2000).

The study focuses on the complex issues of environmental degradation and the lack of availability of resources in the three slums and how it effects the quality of life of people living there.

Quality of life is the measurement and evaluation of people's well-being, satisfaction, and happiness and thus, a very subjective matter. So, the perception of human beings towards their problems usually differs from one to others. This means that a certain environment may imply meanings, images, perceptions that vary for different people depending on their gender, age, culture, ethnicity and religion, etc. Because of the nature of quality of life, the research intends to take into account the possible different perception between men and women. In other words, the research used gender perceptions to evaluate the quality of life.

Quality of life used as an indicator differs from traditional social indicators. The methodology used aims to look beyond the mere objective observable facts,

⁵ The Areas Special of Social Interest are those destined to the production and the maintenance of Habitation of Social Interest, with specific destination, proper norms of use and occupation of the ground.

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considering the subjective evaluation of life. Then, in the case studies both indicators were used: objective and subjective. The former refers to quantitative aspects (environmental conditions) and the latter refers to qualitative aspects (environmental quality).

Starting from the theoretical framework and applying the pre-established methodology and working plan, each group proposed its research objectives and generated its hypothesis. Then each one processed and analysed their own objective and subjective data, arriving to some conclusions about the relationship of "environment-QOL-gender". Based on the obtained gendered indicators of QOL, they proposed some policies and strategies.

The synoptic chart shown in Table 1 is the synthesis of the proposed methodology and describes the main topics of investigation. The first column corresponds to the environmental elements proposed as most significant to analyse at the neighbourhood level. Columns two and three correspond, respectively, to the environmental conditions and quality of each case study. Information should be gathered for each of them, using objective and subjective methods of measurement. In the latter column, the perceptions of women and men are disaggregated.

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TABLE 1. ENVIRONMENTAL ELEMENTS AND INDICATORS OF QUALITY OF LIFE

(Source: Fadda and Jirón, 1999 based on Milbrath, 1978)

1. ENVIRONMENTAL ELEMENTS OF QUALITY OF LIFE	2. OBJECTIVE INDICATORS (COUNTING, MEASURING, ILLUSTRATIONS AND REPORTS ENVIRONMENTAL CONDITIONS AND FACTS)	3. SUBJECTIVE INDICATORS (OBSERVATION, QUESTIONNAIRES AND DISCUSSIONS)	
		Women	Men
I. - PHYSICAL ENVIRONMENT			
TOPOGRAPHY			
AIR CLEANLINESS			
WATER CLEANLINESS			
NOISE LEVELS			
SOILS			
II. - BUILT ENVIRONMENT			
ROADS			
VEHICLES			
PUBLIC TRANSPORT			
HOUSING			
CONSTRUCTION QUALITY			
COMFORT			
PRIVACY			
SECURITY			
SPACIOUSNESS			
NOISE LEVELS			
LOCATION			
III. - ACTIVITY ENVIRONMENTS			
SCHOOLS			
RECREATION SITES			
SHOPPING SITES			
IV. OVERALL COMMUNITARY ENVIRONMENT			
HEALTH SERVICES			
SECURITY SYSTEMS			
RECREATIONAL SYSTEMS			
GREEN AREAS			
COMMUNICATION SYSTEMS			
UTILITIES			
ELECTRICITY			
GAS			
WATER			
SEWAGE			
SOLID WASTE MANAGEMENT			
FRIENDLINESS			
SENSE OF IDENTITY AND BELONGING			
PHYSICAL BARRIERS			
LEVELS OF ENVIRONMENTAL PROTECTION			

In the analysis of the gathered information, four kinds of indices or fields were distinguished: natural, human, physical and socio-cultural (see Table 2, second column). These fields should be used as a way of organising data in sub-indices (third column) and variables (fourth column). The method would allow making a qualitative analysis of the perceptions inquired in a survey

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TABLE 2. – QOL FIELDS, INDICES AND VARIABLES (Source: Fadda, Jirón and Allen, 2000)

	Fields	Sub-indices	Variables
Quality of Life	Natural Field	Quality of Neighbourhood	Aspect of neighbourhood, noise level, quality of air, flooding soils.
		Quality of Housing	Temperature, noise levels
		Quality of Environmental Hygiene	Are there problems with plagues, river pollution
	Human Field	Social problems affecting the community	Do social problems affect you? Drug addiction, alcoholism, teenage pregnancy,
		Quality of sports and health services	Health services, sports centres, emergency services, recreation, sports
		Recreation and Leisure	Leisure, time to reach parks
		Time spent to reach schools	Time to school and childcare centres
		Time spent to reach health services	Time to health services
		Quality and capacity of schools	Perception of quality of schools and child care centres
	Physical Field	Quality of Housing	Aspect of housing, state of construction, size, privacy
		Improvements made to the housing	Improvements to your housing
		Sense of improvement compared to previous housing	Comparison to previous housing
		Quality of Services	Gas, electricity, water, rubbish, sewerage, rain collection
		Sense of improvement compared to previous neighbourhood	Comparison to previous neighbourhood
		Access to the city and district	Access to activities outside and inside the district
	Socio-cultural Field	Access to recreation	Access to sports, green areas, centres of worship
		Desire to move or change neighbourhood	Desire to change neighbourhood, are you thinking of moving neighbourhoods
		Perception of neighbours	Friendliness, solidarity, respect, dangerous.
		Citizen Security	Perception of police protection, street security
		Participation and sense of isolation	Do you know and do you participate in mother centres, parents associations, students associations, sporting clubs, political parties, etc.; installation of gates
		Empowerment	Degree of influence in the decisions making; pride of living in neighbourhood; perception of municipality (is it concerned, interested in community, does it offer solutions, does it inform)
Perception of disaster prevention capacity		Perception of fire fighters, disaster prevention	
Sense of isolation from the city		Do you feel isolated from the rest of the city	

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According to the interviewees' responses, these indices were categorised in four levels: very bad (1), bad (2), good (3) or very good (4). The main results for each case study are illustrated in the Spheres of Figures 5, 6 and 7 called "Synthesis of Quality of Life Indicators". The respective spheres represent the QOL indicators for each case study in the four pre-mentioned fields. This figure allows us to globally visualise, in one illustration, the distribution of the perceptions, indicators and of the indexes of quality of life perceived by men and women, according to each field. The four concentric ring areas represent their evaluation, transferred into indexes and ranging in the four levels from very bad to very good.

Some Preliminary Conclusions

Once the specific analysis of each case study was done, the course constituted in an international team to extract some general conclusions and to compare the results of the three cases. In the following lines that discussion is transcribed (source: Fadda, Gehlen, et al., 2000).

Based on the results of the three case studies, it was concluded that men and women have different perceptions on certain aspects of quality of life.

As in the case of *Mumbai*, although women and men rated the Physical Field as the worst field among the four fields of quality of life in their slum area, they have different priorities in some aspects of the field. Women rated water services as the worst aspect while men think that toilet facilities are the worst. This may be explained that women felt the burden of collecting water more than men, as they are the ones responsible to collect water everyday. Women gave poorer ratings than men in all aspects except in the case of access to recreational facilities and the friendliness of neighbours. As women are occupied more with daily household affairs, they do not find time to look for recreational facilities and may not be familiar with the quality of recreational facilities as compared to men. The perception from women that neighbours are more friendly than men could be due to the fact that women have more time to interact with their neighbours and found their neighbours helpful especially in collecting water from the public taps.

In the case of *Planetario*, total index is not very different for men and women, especially for human and natural field, but women usually evaluate their living conditions as being worse than men. The human field was rated the best for both men and women because the neighbourhood is located near the city centre, where the public facilities are concentrated. Because of this, both men and women are satisfied with the small time they spent to reach public facilities, like hospitals, parks, schools, etc. The natural field received the lowest index, because of the existence of plagues. However, there are some variables, which are evaluated differently by men and women. For example, the women rated the improvement of neighbourhood the

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lowest index. The improvement that the inhabitants want to make is more related to social issues, such as security and drug trafficking prevention. For men, the improvement made to the houses received the worst index.

However in the case of *Novos Alagados* the human field was rated the worst for both men and women while the socio-cultural field was rated as best. Unlike women who spend most of their time at home, men seem to be more affected by the poor quality of air, as well as noise pollution, because they are more exposed to the outside. The favourable rate given by women for the socio-cultural field is explained by the women's preference for interaction with one another as a form of survival strategy. Women complain about less access to recreation facilities, which are, actually limited to small pubs, board and card games. Incidentally these are more convenient for men. For instance, a soccer field exists but this is a facility for a male sport. Both men and women expressed a general feeling of insecurity and dissatisfaction with the community services as well as poor access to basic facilities such as health centres and schools.

A few Tables with a schematic comparison between the three cases were done (see Tables 3, 4/a, and 4/b).

TABLE 3. - COMPARISON OF FIELDS (Source: Fadda, Gehlen, et al., 2000)

Cases	MUMBAI	PLANETARIO	NOVOS ALAGADOS
Fields			
HUMAN		Best	Worst
SOCIO-CULTURAL	Best		Best
NATURAL		Worst	
PHYSICAL	Worst		

TABLE 4/a. - COMPARISON OF INDICATORS (Source: Fadda, Gehlen, et al., 2000)

Best Indicators	Mumbai	Planetario	Novos Alagados
Women	Friendly Neighbours	Time spent to reach public facilities	Housing facilities; Interaction within neighbourhood
Men	Friendly Neighbours	Time spent to reach public facilities	Interaction within neighbourhood, housing facilities

TABLE 4/b. - COMPARISON OF INDICATORS (Source: Fadda, Gehlen, et al., 2000)

Worst Indicators	Mumbai	Planetario	Novos Alagados
Women	Water	Plagues, neighbourhood improvement	Leisure
Men	Toilet	Plagues, improvements to the houses	Feeling of Security

Finally, this academic exercise, in which an evaluation of QOL was done in different countries, demonstrates that the applied methodology is useful for different realities and situations. Consequently, it confirms its validity either for research or for pedagogic purposes. In general terms, it could be said that applying common

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indicators and indexes, it could be verified that the evaluation of the fields resulted differently for each case. This is especially true for the worst fields: physical for Mumbai, natural for Porto Alegre and human for Salvador. Gender discrimination, is also usually more evident for the worst indicators.

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APPENDIX 1. - QUESTIONNAIRE of MOMBAI's CASE STUDY (in Fadda, Gehlen et al. 2000)
RELATION BETWEEN ENVIRONMENT, QUALITY OF LIFE AND GENDER IN SLUMS IN INDIA

(Source: Case Study of Mumbai)

(With Special reference to Bhimnagar, Panjarapol slum in Mumbai City, India)

Name:

Sex: () male () female

Monthly income of the family:

() less than Rs 2000 (DM91)

() between Rs 2000 (DM91) and Rs 5000 (DM227)

() Rs 5000 (DM227) and above

No. of people working in the family:

() one person working () 2 persons working () more than 2 working

I. QUALITY OF HOUSING

1. How is the physical aspect/surrounding of your neighbourhood?

() very good () good () bad () very bad

2. How is the state of construction of the houses?

() very good () good () bad () very bad

3. How do you consider the size of your house (in comparison with the size of your family)?

() big () adequate () small

4. What kind of land property rights do you have?

() you are the owner – with a legal document

() you pay a rent - to? () private owners () do not pay rent

5. Duration of stay in the neighbourhood:

() less than 2 years () between 2 and 20 years () more than 20years

6. What do you think about your house now, in comparison with the previous one?

() it's better () it's worse () it's the same

7. Have you made any changes or improvements in your house in the last 5 years?

() added a room () added a storey () internal repairs () any other

8. Would you like to improve your house?

() yes () no

If yes, what improvement needs to be done?

II. ENVIRONMENTAL QUALITY

1. In your neighbourhood, the noise level made by the traffic (cars, buses, other vehicles) and the activity of the people is: () low () normal () high () very high

2. And how about the quality of the air?

() very good () good () bad () very bad

3. How is the situation in rainy season?

() heavy water logging near the house () rarely water logged

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III. QUALITY OF THE SERVICES AND HYGIENE

1. How serious do you find the problem of diseases in your neighbourhood?
() good () normal () serious () very serious
2. Specify the common diseases:
3. How about the quality of these services:
 - Fuel - () very good () good () bad () very bad
 - Water () very good () good () bad () very bad
 - Sewerage () very good () good () bad () very bad
 - Toilet Facility () very good () good () bad () very bad
 - Garbage disposal () very good () good () bad () very bad
4. How much time do you spend for getting water everyday?
() less than 30 min () between 30 min. to 1 hour () more than 1 hour
5. Do you think your neighbourhood need improvements in terms of services and hygiene?
() yes () no If yes, specify what improvements are needed:

IV. QUALITY OF PUBLIC AMENITIES

1. How about the quality/access of these services?
 - Hospitals/health services - () very good () good () bad () very bad
 - Recreation/sport/leisure centres/ green areas () very good () good () bad () very bad
 - Schools () very good () good () bad () very bad
2. Time spent to reach hospital/health services
() less than 30 min () between 30 min. to 1 hour () more than 1 hour
3. Time spent to reach recreation/sport/public spaces/green areas
() less than 30 min () between 30 min. to 1 hour () more than 1 hour
4. Time spent to reach school
() less than 30 min () between 30 min. to 1 hour () more than 1 hour

V. PERCEPTION OF NEIGHBOURHOODS

1. How do you find your neighbours inside your neighbourhood?
() friendly & cooperating () lukewarm response () not so friendly and cooperating () very unfriendly

VI. PERCEPTION OF SOCIAL PROBLEMS AND SECURITY

1. Which social problems affect you?
() drug addiction () alcoholism () teenage pregnancy () domestic violence () theft
Which of these social problems affect you?
2. How do you feel about the security at your neighbourhood?
() very good () good () bad () very bad

VII. PARTICIPATION/INFLUENCE IN DECISIONS MAKING PROCESS

1. How do you find participation in:
 - Community Centre ()very active () active () inactive () not a member
 - Political Party ()very active () active () inactive () not a member
 - Mahila Mandal/ (Women's Group) ()very active () active () inactive () not a member

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- Youth Mandal/ (Youth Group) ()very active () active () inactive () not a member
2. Do you believe you can influence the government decisions making on actions and investments? () yes () no () I do not know
If positive, how?