The quality of the urban landscape: how to measure it and how to identify the elements that devalue it

Abstract

The quality of the urban landscape is a complex concept which is difficult to define and synthetize. Traditionally, the approach for improving this quality is based on land planning and territory management. However the tri-dimensional characteristics of this quality - aesthetic, cultural, and functional features - cannot only be improved through this approach. In order to ensure that some key elements are contemplated (such as harmony, equilibrium, coherence, diversity, complexity, management and the sustainability of the urban landscape), a deeper analysis is made of those aspects of the urban environment and public space which devalue the quality of the urban landscape, which is a new approach that needs to be adopted in order to consider all of these aspects. The methodology adopted is based on the development of a set of criteria, indicators and indexes which not only enables the creation of a ranking of the quality of the urban landscape, but also permits an insight into those aspects that need to be specifically addressed in policies and actions, making it possible to map out Lisbon's best and worst urban landscapes, thus establishing a basis for comparison.

Keywords: urban landscape, quality, indicators and indexes.

1. INTRODUCTION

The quality of the urban landscape has both objective and subjective components. On one hand, the first are related to physical characteristics, the quality of the materials that constitute the public space, urban design, urban furnishings, air quality, and noise levels. On the other hand, the subjective components refer to aesthetics, pleasure, experience and individual preferences (even smell).

A direct relation between the objective and subjective components of quality do not always exist and, in fact, an objective assessment of quality does not necessarily imply an identical subjective assessment. Most times the positive assessment of quality is made more according to the subjective component, rather than the objective one. The perception of quality, and the way that it is assessed, is reflected by self-experience and by the appropriation of space, and also by the way that one reviews the urban landscape. Apparently, some areas have a lot of quality but are not appreciated. It is common to hear the statement "I do not like it, but I recognize that there it has quality", which is the same as saying that there is no correlation between quality and the individual subjective assessment of what is quality. This reaction to the urban landscape also has to do with how the space is appropriated for its function, which is not always as suitable as was imagined. Two spaces with similar characteristics and design may have different ratings, depending on how much they are enjoyed. If two equal spaces in terms of design and materials are considered, one of which is central and accessible, and is full of life, whilst the other, although similar, has an eccentric location or difficult access conditions and is empty, then the assessment of the quality of each of these two spaces is carried out differently, albeit from the point of view of design and material it is strictly the same. The sum of the quality of urban elements, which range from the artificial to the natural, from buildings to the public space and includes the satisfaction of basic socio-environmental needs, a clean

environment and access to water supply, socio-economic and cultural needs - in short a qualified urban landscape, inevitably all translate into an improved quality of life. The quality of the urban landscape is the result of combining and weighing up of all the visible and invisible factors, objectives and subjective aesthetics and also the appropriation of space. Despite relying on the criteria of the observer, the intrinsic values of each user, individual patterns and time and the type of requirement and function that aimed for, there are factors and features which together can be identified, in order to create a standard for the quality of the urban landscape.

2. METHODS

2.1. Interviews with a Panel of Experts

This study being the evaluation of the quality of the urban landscape, which is a complex theme for which no instruments exists that are capable of presenting unique and credible answers, it was decided to sound out the opinion of experts on urbanism on the topic of the urban landscape, through interviews with a panel of experts made up of 22 well-recognized scholars and decision-makers, in order to synthesize information from a variety of sources and present a set of views to arrive at generalized conclusions. The experts, who were all connected to universities, public authorities and research laboratories, contributed with their experience and knowledge in providing a value judgment on the topic proposed. The interviews, which lasted about an hour and a half, where on the theme of the urban landscape, focusing on four specific questions: "what do you consider defines the quality of the urban landscape?"; "what do you consider devalues it?"; "which urban landscapes in Lisbon have more and less quality, and why?; where do you to place the quality value of all areas on a scale of 0 to 10 (10 being the highest value of quality)?"

From the experts' answers, an analysis of the content of the interviews was made of the number of occurrences, extracting the most important aspects, which allowed for establishing common denominators for the vectors of "Quality" and "Elements of devaluation of the urban landscape", and "Ranking of Lisbon urban landscapes of greater and lesser quality". The experts' opinion was decisive for designing a proposal for a consistent assessment and criticism about the various realities surveyed.

3. RESULTS AND DISCUSSION

3.1. Quality Criteria

The search for standards of the quality of the urban landscape, traverses paths that lead to a comprehensive definition for the identification of basic criteria which must be met to assure quality. The panel of 22 experts identified and grouped EIGHT criteria of the greatest relevance and presented their respective justifications. These were: harmony (balance and coherence), the presence of natural elements, complexity/diversity, management and maintenance, panoramic views, the quality of the elements, security/safety, and accessibility. The theoretical definition of the quality of the urban landscape and public spaces, as reported by the opinion of experts, provided a general analysis that defined the aspects of quality which permitted the construction of a set of indicators for measuring the quality of the urban landscape, which is needed to provide technical and political decision-makers with

the tools for introducing improvements in the urban landscape. HARMONY, balance, coherence, aesthetics, beauty, represent from the point of view of the experts interviewed the main qualities of the urban landscape. Those are essentials properties of the fair, such as perfection and order of all elements. These aspects are reflected by the conjunction of several elements of the urban landscape: by its resilience and the way it manages to maintain balance over time, consolidating a good heritage of various eras. For when a society manages to preserve its heritage, its history ensures the permanence in time of this heritage, by articulating the old and the new and by integrating temporal, architectural "ruptures" smoothly. Examples include: the balance of the urban grid without any abrupt changes of levels of service or capacity through the flow of automobile traffic routes, by harmonizing speeds depending on the density of buildings; the equitable balance between natural and artificial elements, which respect the minimum needs for green spaces based on urban population densities; the harmonization of the uses and functions of both buildings and roads, between each other and with human use, especially for the most sensitive populations, such as the elderly and children. Harmony is also reached through the demographic balance (age, ethnicity and social class), landscape integration and the adaptation of the terrain, in short; by the way the elements are inserted in the urban landscape. The logical link of these elements which, although they may be different, contributes to a uniform framework. Incoherence comes from unbalanced elements, architectural mistakes and temporal or volumetric aberrations. The harmony in terms of volumes, facade materials, alignments, colours and of architectural styles, are all factors which provide coherence, and consequently, quality. The absence of harmony is a reflection of other realities and of other social dimensions and territorial dysfunction. A very important aspect regarding the quality of the urban landscape is the existence of NATURAL ELEMENTS, such as vegetation, trees, flowers, gardens, lawns, and water courses, all of which provide the urban landscape with nature, giving it freshness, colour and shade, providing spaces for leisure and reflection. The less pleasant details of the urban landscape are forgotten due to the beauty of the natural elements. The city gains from diversity, but loses with monotony. The COMPLEXITY/diversity of "scenarios" provides movement and dynamism and the diversity of facades, width of streets, squares, arches, number of floors and the variety in the use of ground floors all provoke emotion and appeal to the senses. It is like a game, like a discovery, with pleasurable sensations of surprise, mystery or glamour. The multiplicity of uses and the possibility of creating several "combinations" of housing, services, commerce, recreation, and social facilities are synonymous of quality and of value. Complexity and diversity are also provided by the social mix of a population with differing social strata, genres, economic levels and social integration, which brings the space alive. The occupation of space by just one group of the population, or of the same ethnic group, or of the same socio-economic extract (high or low), may lead to the exit of other population groups and to the stigmatization of space. Good MANAGEMENT, which maintains the urban heritage of buildings and public space, is represented by how well the urban landscape is cared for and maintained, which transmits a perception of quality. The degradation of buildings (including the rear of buildings), the lack of maintenance and preservation of heritage and of the natural elements, together with being dirty and the disorder of the elements of the urban landscape reveals a lack of control and bad management. The public space has to have an owner and cannot be "a son without a father", with

regards to maintenance and the assignment of responsibilities as well. Under functioning spaces, the excessive use of private cars, green areas that use excessive water (mainly in Mediterranean countries), are all aspects which indicate inefficient management and the unsustainable systems, and therefore a space with little quality. The possibility of observing the urban landscape from panoramic VIEWS is provided by the terrain and by the topography, at specific points and from viewpoints and slopes, is a factor which gives quality to urban landscape. Flat landscapes, without hills or viewpoints for observing the urban landscape, give rise to the need to resort to the construction of viewpoints of excellence, high buildings, monuments, bridges and observation towers, for observing and contemplating the urban landscape. The use of good materials on the facades, quality urban furniture, high quality of the air and reasonable noise levels, are several of the elements which contribute to the quality of the urban landscape. The sum of the QUALITY of MATERIALS, air and noise levels, all contribute to the quality of the urban landscape. The "richer" are the materials used for the facades of buildings and the material for public buildings, pavements, streets and street furniture all contribute to the quality of the urban landscape. The quality of materials has always leaded to the embellishment of public spaces and monuments, from the most distant of times. An unsafe space is a space without quality and places with no feeling of SAFETY - even though they are appealing to the eye and are aesthetically pleasing and attractive landscaped - are revealed as being urban landscapes that are stigmatized, without demand. This can occur by the occupation by certain types of population (ethnic groups, the homeless or gangs), as the presence of a particular population may prevent others from appreciating the physical elements of the landscape, whether by lack of street lighting or poor access, which reduce the possibilities for enjoying the use of spaces. Security is transmitted by various players and users of spaces, more than by the inherent characteristics of the location itself. There is a need to eliminate the fear of traffic and to protect pedestrians and cyclists, so that they can walk and ride with complete safety in the streets, without fear of being hit by a motor vehicle. Good access which ensures the ability to use and experience the appropriation of space is a quality factor for the urban landscape. ACCESSIBILITY can be viewed from the mobility and the privatization of the city. The first point refers to the need for urban paths, pavements and pathways, as bad pavement materials can negatively impact pedestrians and road traffic. Dead-end streets, interrupted street sequences and large, separated social facilities that do not fit the urban alignments and which oblige inhabitants to travel great distances using bypasses, causes urban discontinuity and a loss of quality. The lack of free access to spaces, the privatization of space by the creation of ghettos, condominiums and private places, lead to the presence of homogeneous resident populations which restrict and make incompatible the use of the city by other types of population, or can stigmatize spaces for certain type of population (which allows the creation of areas prone to delinquency) and leads to spaces that are only accessed by those who live there, and prevents free ownership of space. To ensure good accessibility to space, location is also very important. Access difficult conveys a negative image of the space, and the eventual quality of the urban landscape may be perceived as not being accessible for public use.

3.2. Devaluation of the landscape elements

The results of the interviews of the panel of experts identified some general characteristics that cause the disqualification of the urban landscape, and also the most relevant aspects of the Elements of Devaluation, which are largely associated with the negative elements which provide quality, giving rise to the EIGHT most important criteria. The presence of DISCORDANT ELEMENTS are amongst the factors which most devalue the urban landscape, and these include different volumes, architectural types, colours, degradation and the poor integration with the surroundings and the mismanagement of public spaces. Certain architectural mistakes, or the excessive use of architectural elements that have nothing to do with the location (an example being the excessive use in contemporary architecture of glass, which is not typical of the traditional Mediterranean architecture), or the presence of various architectural styles, with volumetric disparity, colours, finishes, imbalance and the abrupt variation of heights, the misalignment of facades, scale, and the pre-existing alignment of changes, which introduce "noise" and are disturbing. Harsh elements that were added, and that were not provided for in the original plan, and which are introduced "retrospectively" (e.g.: erecting marquees and antennas) are all elements which alter the consistency of the urban body, and the clarity of image. The ABSENCE of URBAN DESIGN and PLANNING, or of an integrated thinking of the programming and combination of the visible elements of the urban landscape, all cause chaos and conflict between the natural landscape and the constructed landscape. The absence of structural elements, narrow pavements and the lack of space for pedestrians are some of the aspects that limit movement, dynamism, space enjoyment, as well as bad ground occupation (such as the occupation of flood areas and unstable slopes that can cause floods and landslides, leading to subsequent human and material losses), the absence of stability, location (e.g.; when people are transferred from one local to another, without the correct appropriation of space, neither integration). Other examples are the construction of ghettos, the stigmatizing of places and population, disregard for landscape and the historical importance of the site, the destruction of heritage and local memory, the lack of public space, the promiscuity of use (e.g.; the location of housing, factories and workshops, on the same site), the location of habitation near industrial facilities, the absence of relationships between activities, the presence of impersonal buildings that are unrelated to the site, the lack of a human relationship and the absence of surrounding protection for freeways and insecurity for pedestrians in the face of cars, as well as the absence of the integration of a correct integration of urban planning, and overlapping urban narratives are all aspects which devaluate urban landscape. Excessive advertising, information, signage, "billboards", electronic screens, urban furniture styles, colours and materials are all examples of VISUAL POLLUTION, as are the lack of cleaning, DIRTY pavements and sewers, bins overflowing with rubbish, graffiti, posters pasted on façades, outdated information placards, propaganda posters glued to lampposts, all reveal disrespect, mismanagement, and a lack of affection for the urban landscape. The LACK of QUALITY of the MATERIALS, devalues the urban landscape. The quality of materials was always an aspiration for the embellishment of public spaces and monuments, from the most distant times. Streets full of cars, parked or in movement, lead to stress, environmental and visual pollution, and to the introduction of noise, in short, AUTOMOBILE CONGESTION and CHAOTIC PARKING is a devaluing element for the urban landscape. Cars parked on pavements

restrict pedestrian circulation and access; squares full of cars are signs of a lack of planning and land use planning and of the bad management of public space. NOISE is an element which causes discomfort, prevents the enjoyment of the urban landscape, and which causes estrangement. The degradation of the urban landscape by a single TYPE of POPULATION, whether it be ethnic, or social, limits the enjoyment of thy urban landscape by the remaining population, whether by a feeling of insecurity or through social disintegration, and it devaluates the urban landscape.

3.3. Indicators

An indicator is a way of "measuring" a particular fact or occurrence. It can help to identify a symptom, to highlight certain signs, and to visually show the condition of a system and its evolution representing something that emphasizes or to reveals. An indicator is quantified through selected parameters and is considered separately or in combination with another, whose greatness can be measured with precision, or assessed qualitatively and quantitatively. Depending on the level of aggregation, an index can be weighted and/or aggregated arithmetically, in conjunction with other indicators. To be selected, an indicator and/or index (such as when it is using a statistical parameter) have to gain in clarity and functionality, which gets lost in the detail of the information. Indicators and indexes are designed to simplify information about complex phenomena, in order to improve communication. Thus, and in accordance with the results obtained from the information collected from the panel of experts for the definition of the criteria for Quality, which have been previously referred to as the criteria of Elements of Devaluation, a set of indicators was defined to allow the assessment of these characteristics and to permit a ranking of the quality of the urban landscape. These indicators are intended to help to identify the problems, thus enabling the finding of solutions, which motivate the technical and civic intervention, driving up the shares when the effort is necessary, serving to support the strategic planning and the overall evaluation of national and local urban policies. In this context, the main motivation for the definition of this type of indicator is to allow regional authorities to assess the quality and the degree of devaluation of the urban landscape, and to assess the need for and the possibility to implement policies for improving the existing situation. The impact of the policies of each municipality, and the way that these contribute to territorial convergence with regards to the quality of the urban landscape, will be assessed through these indicators. The scorecard can help, through a quick and easy read, to support an assessment of the importance of landscaped municipal values. Through it, civil society can easily measure the evolution of the quality of the urban landscape, with its different hierarchical territorial units, and can evaluate their evolution over time. The results provided will analyze municipal asymmetries and will assess the need for the transfer of resources (funds) and will support the analysis of the territorial public policies. Each municipality will be characterized by its performance vis-à-vis the various indicators for the quality of the urban landscape, and by how it contributes to assessing the national convergence of parameters related to the quality of the urban landscape. The methodology for the development and collection of data for the calculation of the indicator should be carried out in three phases: phase 1 corresponds to information gathering, street by street, of the data necessary for the calculation of indicators; phase 2 is the calculation of indexes (the arithmetic average of the indicators), and phase 3 is the aggregation (arithmetic mean) of the

contents, according to the geographical area of the study, the set of streets analyzed, the neighborhood or the municipality. The eight criteria of Quality and the eight criteria of Elements of Devaluation allow the creation of 37 indicators (corresponding to 8 indexes), and 17 indicators (corresponding to 6 indexes) of elements of Devaluation (Figure 1 and Figure 2). In the case of quality criterion of "Harmony", one of the indicators that has been included for the construction of this index was the presence of natural elements (HE4), notwithstanding that it exists independent of the quality criterion of "presence of natural elements" with the necessary detail and is mirrored by the respective indicators (e.g.: the presence of trees, flowers and water courses). The indicator "Safety" also stands out. Given that this criterion of quality is also linked with issues of management and the maintenance of the space – the lack of security is more internalized, as the space is well kept and preserved – the aspect "maintenance" was included in the Safety criterion (S6), which corresponds to the index value of the criterion "management/maintenance", which includes both the maintenance of constructed and public space. Although the assessment of Quality is made according to each criterion, an overall assessment for the establishment of a ranking may take into account the set of all criteria.

CRITERIA AND QUALITY INDEXES		INDICATORS
	HE 1	Sedimentation of various eras
	HE2	Ruptures in building
	HE3	Incompatibility of uses
	HE4	Natural elements
	HE5	Demographic balance
SUB-INDEX HARMONY/EQUILIBRIUM	HE6 HE HC1	Morphological framework HE1 +HE2 +HE3+ HE4 + HE5 +HE6)/6 Volumetric disparity
	HC2	Alignment of Heights
	HC3	Alignment of facades
	HC4	Colours
SUB-INDEX HARMONY/COHERENCE	HC5 HC6 HC	Architectural styles Use of unsuitable materials (HC1 + HC2+ HC3 +HC4+ HC5 + HC6) /6
INDEX HARMONY	HEC	(HE + HC)/2
(EQUILIBRIUM/ COHERENCE)	NF1	Trees on streets and squares
	NF2	Water plans
	NE3	Flower beds with flowers on streets and squares
NATURAL ELEMENTS	EN	(EN1 +EN2+ EN3)/3
	D1	Variety of urban Elements
	D2	Variety of activities
	D3	Variety of commercials units and the ground floor
	D4	Number of visible breaks
DIVERSITY/COMPLEXITY	(D)	(D1 + D2 + D3 + D4)/4
	M1	Maintenance of public space
	M2	Recovery of private facades
	M3	Heritage facades and municipal recovery
	M4	Maintenance of natural elements
MANAGEMENT	M	(M1 + M2 + M3 + M4)/4
VIEWS	V	V1
QUALITY OF THE ELEMENTS	QE1 QE2	Quality of the materials of the buildings Quality of materials of public space

	QE3 QE4 QE S1 S2	Air quality Quality of noise levels (Q1 + Q2 + Q3 + Q4)/4 Lighting Policing
	S3	Presence of passers-by
	S4	Presence of specific social groups
	S5 S6	Number of elements that contribute to the protection of pedestrians INDEX MANAGEMENT
SAFETY	S	(S1 + S2 + S3 + S4 + S5 + S6)/6
	A1	Continuity of the urban fabric
	A2	Presence of access barriers
	А3	Comprehension of structural elements
ACCESSIBILITY	Α	(A1 + A2 + A3)/3

Figure 1 - Criteria and indices of Quality

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CRITERIA AND INDICES OF ELEMENTS OF DEVALUATION		INDICATORS
	AD1	Bad ground occupation
	AD2	Variable-width lanes
	AD3	Number of street sections without sidewalks
ABSENCE OF URBAN DESIGN AND PLANNING	AD4	Streets with reduced sidewalks (AD1 +AD2 +AD3 +AD4)/4
	AC1	Parking on the public highway
	AC2	Parking lot in squares
	AC3	Parking on pavements
AUTOMOBILE CONGESTION	AC4	Congestion in rush hours
AND CHAOTIC PARKING		(AC1 +AC2 + AC3 + AC4)/4
		Sources of noise
NOISE	N1	N1
	VP1	Posters pasted on the facades
VISUAL POLLUTION	VP2	Advertising boxes
	VP3	Electronic screens
	VP4	Billboards advertising
		(VP1 +VP2 +VP3 +VP4 +)/4
USE BY A PARTICULAR TYPE OF POPULATION	UPTP1	Presence of specific social groups
	D1 D2	Cleaning of public space Litter bins
DIRT	D3	Number of buildings with graffiti's (D1 + D2 + D3)/3

Figure 2 - Criteria and indices of elements of devaluation

3.4. Lisbon's mapping of the most and least quality urban landscapes

Street data was collected for each of the four geographical areas (GA1, GA2, GA3 and GA4), however for the global study of a major geographical area (district), it would be necessary to make a comprehensive survey of the entire area, i.e. the set of all the streets and squares. With regard to the indicators of Quality, and on a scale of the comparison between geographical areas, "the higher the value, the greater the quality" is applicable, i.e. "bigger is better". However, it should be noted that the value of the indicator by itself does not reveal any quantitative assessment of quality, but it only makes it possible to evaluate its variation, i.e. whether the indicator in a given geographical area varies, which

means that the quality varied, and if it increases, then the quality also increases. This mode allows one to compare geographic areas (Table 3), their relative quality, and the variation over different periods.

	H.	N.E.	D/C	M	V	Q.E.	S	A.
GA1	90	45	20	100	100	100	76	89
GA2	78	0	56	50	50	100	59	96
GA3	73	0	48	50	0	75	42	44
GA4	72	1	36	17	50	50	12	40

Table 3 - Indicators and indexes of quality of geographical areas that have an urban landscape of greater and lesser quality (H - Harmony; NE - Natural Elements; D/C - Diversity/Complexity; M - Management; V - Views; QE - Quality of the Elements; S - Safety; A - Accessibility)

The analysis of the results leads to the conclusion that there is similarity between them and those of the panel of experts (which has previously identified geographical areas). All the quality criteria indicated that both the GA1 and GA2 represent geographical areas that have a better quality of the urban landscape, whilst GA3 and GA4 present are areas with less quality (as the panel of experts had also identified). GA1 presents better results for almost all the quality criteria, except for Diversity and Accessibility. In these criteria, GA2 occupies first place. In the case of Quality being measured according to a set of criteria and respective indexes, in total, the results obtained (Table 5) shows that GA1 occupies first place, followed by GA2. GA3 and GA4 represent the last places. Regarding indicators of Elements of Devaluation, the absolute value does not reveal any "quantification" of Elements, but permits an evaluation between the other geographical areas. Moving to indicators of Elements of Devaluation, on a scale of comparison between geographical areas, "the higher the value the greater the number of devaluation elements", i.e. "bigger is worse". In a particular GA, the variation of the indicator and the increase or decrease means a variation in the presence of the Elements of Devaluation in two different periods. Table 4 shows the values for the indicators of Elements of Devaluation for the four geographical areas. GA1 is that which reveals the least amount of Elements of Devaluation, whilst GA3 reveals a greater quantity of Automobile Congestion and Chaotic Parking. GA4 shows greater Absence of urban design, Use by a Particular Type of Population, and greater Dirt.

	AD	ACCP	N	VP	UPTP	D
GA1	0	17	0	0	0	33
GA2	0	33	50	0	0	50
GA3	25	50	100	0	0	53
GA4	83	25	50	0	100	57

Table 4 - Indicators and indexes for the "Elements of Devaluation" of geographical areas with urban landscapes of greater and lesser quality (AD - Absence of urban Design; ACCP –Automobile Congestion and Chaotic Parking; N- Noise; VP - Visual Pollution; UPTP - Use by a Particular Type of Population; D - Dirt)

Table 5 shows the values for the indicators and indexes of the criteria of Elements of Devaluation for the four geographical areas studied, indicating that the results confirm those of the opinion of the panel of experts.

	QUALITY CRITERIA INDICATORS/INDEXES TOTAL	CRITERIA ELEMENTS OF DEVALUATION INDICATORS/INDEXES TOTAL
GA1	620	50
GA2	489	133
GA3	332	228
GA4	278	315

Table 5 - Total of the indexes/indicators of the criteria of Quality and "Elements of Devaluation" of the urban landscape.

4. CONCLUSIONS

The main objective of this study was to determine the quality criteria of the urban landscape and to identify the elements that devalue it. To achieve this objective, one fundamental instrument has been the major contributor - the interview with the panel of 22 experts in the subject concerned. This method of interviews was very relevant, as it enabled the determining of both the criteria of Quality and those of Elements of Devaluation, which led to the construction of indicators and indexes (as well as determining the geographical areas of the greatest and least quality in Lisbon). For the case of Lisbon, indicators and indexes were calculated for four geographical areas, two with greater, and two with lesser quality of the urban landscape, which had been identified at the outset by the panel of experts. The determination of indicators and the respective indexes confirmed the opinion of the experts with regards to Lisbon's areas of most and least quality, and, despite the fact that the value of the index does not have any absolute value, it allowed the establishment of a ranking between the four areas studied, whose Quality indexes were: GA1 (620), GA2 (489), GA4 (332) and GA3 (278). The indexes of the Elements of Devaluation were GA4 (315), GA3 (228), GA2 (133) and GA1 (50). According to the criteria identified, GA4 has less Quality, and more Elements of Devaluation than any other area, which was mainly a result of the contribution of the criteria Absence of urban design and the Use by a Particular Type of Population; GA1 has and less Elements of Devaluation and more Quality, except in Diversity and Accessibility criteria, which means that, in this case, (despite differences in the criteria and indicators), there is a direct correlation between Quality and the amount of Elements of Devaluation.

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