

CRITIQUES, REPLICAS AND PROPOSALS FOR THE NEW URBANISM VISION

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Abstract. The new urbanism (NU) is a vision of planning and urban design emerged in 1993, which finds its basis in the design of traditional communities. This trend has had various criticisms and replicas, which were reviewed in relation to urban sprawl, transportation, re-densifying, mix of uses of land, design, gentrification, pedestrianization and safety, which were analyzed in the neighborhood of Santa Barbara in Toluca, Mexico. This area was chosen for being traditional and forming part of the historical center of the city, which even though it was not designed under the guidelines of the NU, it has the quality of traditional, from which the NU would theoretically have taken its essence. The objective of this analysis is to establish whether the NU has the essence of a traditional Mexican neighborhood, as well as to check if the criticisms of the NU are informed when applied to a space belonging to a Mexican historic center that has been abandoned by problems of insecurity and degradation. The general conclusion is that the traditional neighborhoods have provided design elements to the NU, which will refute some of the criticisms, however, proposals for NU in neighborhoods of historic centers have to be based on the community, the architecture and existing urbanism, since these elements are those that give the identity.

Key words: traditional neighborhood, consolidated neighborhoods, community development, urban design, New Urbanism.

1. Introduction

The NU arises as a design and urban planning vision in the decade of the

1990s, its main objective is to achieve accessibility within the cities, for which it based it into ten principles (walkabil-

ity, connectivity, mix-use and diversity, mixed housing, quality architecture and urban design, traditional neighborhood structure, increased density, green transportation, sustainability, and quality of life (Congress for de New Urbanism, 2001), those that stand out are sustainable mobility, mixed land use and the diversity of housing, re-densifying of cities, and the quality of the design. This view was adopted mainly in United States, but today, through the Congress for the New Urbanism (CNU) and its intervention in the Leadership in Energy & Environmental Design (LEED)[®] certifications, its principles have been adopted in various parts of the world, but by forming part of a certification, a check list is conducted, which implies a lack of integration with existing community and architecture.

This vision over forty years has had a series of criticism towards its theoretical and practical foundations, which shows a problem in its implementation and execution. To the worldwide promotion of the application of the principles of the NU, it is important to review such criticisms, for in this way have a theoretical basis to propose improvements in design and planning projects that address under this vision, mainly in consolidated neighborhoods.

The objectives of this analysis, on the one hand is to know if NU is essential of a traditional Mexican neighborhood, and another, to check if criticism of the NU are fundamented when applied to an urban space belonging to a Mexican historical centre.

2. Methodology

The methodology used, integrates three stages: the first consisted of the review of the main criticisms of the NU; second,

was the analysis of a case study, the Santa Barbara neighborhood in the city of Toluca, Mexico; and third, the results of the analysis were compared with each of the identified critiques.

In the first phase, a review of the major critics of the NU is made such as Wendell Cox, David Harvey and Peter Marcuse, these criticisms focus on the defense of urban sprawl, the absence of motives for the re-design of neighborhoods and the re-densifying and the evocation of feelings of nostalgia which the NU can promote, the process of gentrification which can result in re-designed communities.

The second consisted of the application of a survey, which results were related to time, means of transport, top destinations, and sense of security in the neighborhood. Results of the physical aspects of the neighborhood were obtained with the same instrument, such as areas that are considered by the inhabitants as edges, landmarks and danger zones, these results were the basis for choosing six streets of the neighborhood to make a photographic survey and contrast it with the physical environment.

The third stage consisted of comparing the results to the criticisms and proposals that are made to the NU on the pedestrianization, mix of land, uses design and gentrification issues, ending with discussion and conclusions.

3. History and location of the case study

The District of Santa Barbara is one of the first neighborhoods that were consolidated into the city of Toluca, formed part of one of the seven known headquarters in Toluca; today it forms part of the historical centre of the city (Fig. 1). Within their territory lies the "Templo del Car-

men”, “Templo Carmelita” which was opened and blessed in 1711 (H. Town Hall of Toluca, 2013), first it was the “Templo del Convento de las Carmelitas Descalzas”, and currently, in addition to serving its religious function, is home to the Museum of fine arts, and is also a symbol within the city, and also, we have the Church of Santa Barbara of the 20th century, but its Chapel dates from the 16th century - 17TH (Diocese of Toluca), both temples are landmarks of the neighborhood and the city.

At the present, the district has a total of 2,480 inhabitants (INEGI, 2010), however, unlike the rest of the city and municipality, the rate of population growth in the last 10 years is negative (Fig. 2), the largest decrease was presented in the 2000-2005 period, with the decrease of 16.5% of the total population, slowing down in the next period 2005-2010, with 1.7% of population decrease. This indicates that the neighborhood is driving out population, and therefore decreasing its density.

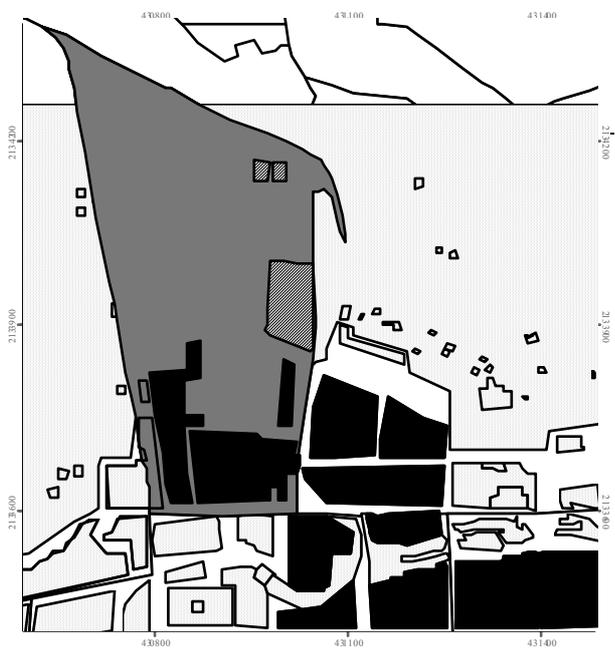


Fig. 1. Human settlements in the District of Santa Barbara (1834). Source: Based on map of the Municipal historical archive of Toluca, 19th century.

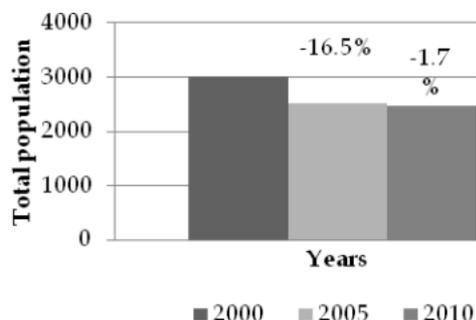


Fig. 2. Rate of population growth in the District of Santa Barbara (2000-2010). Source: INEGI 2000, 2005 and 2010.

4. Urban sprawl and transport

The first of the criticisms of the NU is related to transportation, according to Cox (2007): “The antisprawl movement believes that suburbanization has resulted in an inappropriate amount of automobiles and highway construction and does not promote public transit and walking as alternatives... suggests that these policies would improve quality of life while reducing traffic congestion and air pollution... But the antisprawl diagnosis is flawed” (p. 10).

The production of energy in the world from oil in 2010 was destined more than 60% for transport, with which there was an increase of 30% over a period of thirty years, coinciding with the second wave of the edge cities (Garreau, 1994). Due to the increasing urban sprawl, the population has to travel greater distances, road construction programs were carried out to communicate the different suburbs, and such programs began to spin more and more out of control (Norquist, 2007).

Wendell Cox (2010) advocates for the increased use of automobiles resulting from urban sprawl, since he considers that the amount of contaminants released into the environment are decreasing and less harmful.

According to data from the International Energy Agency (IEA, 2012), in 2010-2011, there was an increase of 3.2% in CO₂ emissions, where China is the country that has most contributed to this increase, being this Asian country that has most increased its urban population in a period of forty years, it is clear that the emission of toxic gases such as CO₂ are not only due to transport, but as mentioned, is that more oil resources are intended for. The problem of having a large vehicle fleet not only is pollution, but also congestion, parking problems and the population transfer times.

In addition to the problem of transport is urban sprawl, which Cox (Duany and Cox, 2003) defends by saying that if people want to live in density, then allow them to live in density; and if they want to live in the dispersion, allow them too. Gordon and Richardson (1997) defend this position from the point of view of the occupied grounds, since actually only 5% of American soil is occupied, and if so, then really there is no problem of urban land depleting natural areas.

The United States began to present a problem of abandonment of historic centers and the consequent expansion of the city, starting from the time of postwar (Garreau, 1994). In the case study, the process of urbanization also arises from the decade of the 40's, Arteaga (2005) says that Toluca has experimented an accelerated process of urbanization, especially in the South (Fig. 3), but unlike the United States, this phenomenon arises due to the industrialization of the area, with the consolidation of the Toluca-Lerma industrial corridor (Zamudio & Arana 2000).

Urban sprawl in the metropolitan area of the city of Toluca is exponential, in the decade of the forties; the growth of the

city rises 315% in a period of seventeen years, to subsequently have an increase of 55% from 1964 to 1982. If we contrast this data with data from population growth in the case study in comparison with those of the municipality, it can be seen (Fig. 4) that the percentage of the city's growth is positive in all three periods, while in the case of study it is negative, which implies on the one hand, the abandonment of the district and on the other the expansion of the city.

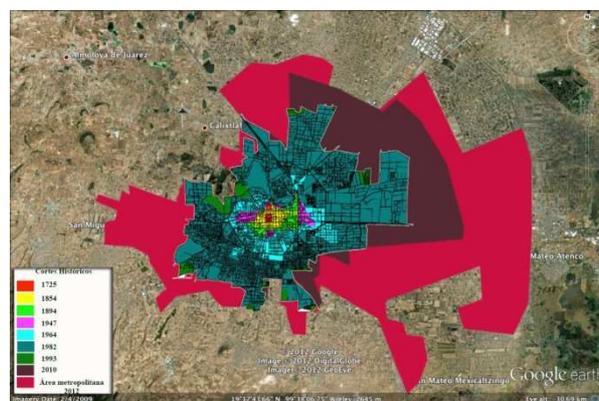


Fig. 3. Growth of the metropolitan area of the city of Toluca in the last 250 years. Source: INEGI (2011) and Google Earth 2012

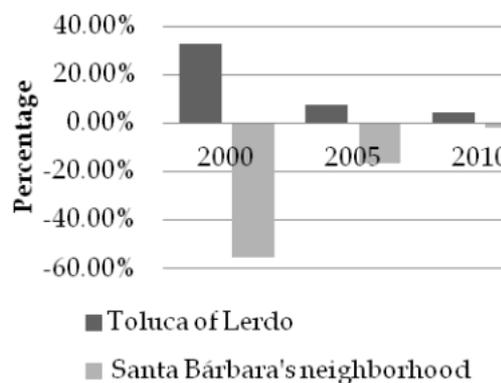


Fig. 4. Percentages of population growth in the city of Toluca de Lerdo and the area of Santa Barbara. Source: INEGI 2000, 2005 and 2010.

In the case of developed countries like United States, for the year 2050 (Fig. 5), if the density of the soil decrease by 1%, it would have double the urban land which was in the year 2000 and if it decrease 2% it would multiply twice and half this area.

For developing countries, the situation is more drastic, if the density decreases by 1% would have four times more urban area than in the year 2000, and if it decreases by 2% would have seven times more. At the global level it would extend three times urban land if urban density decreases the 1% and about five times if it decreases 2% (Angel *et al.*, 2010).

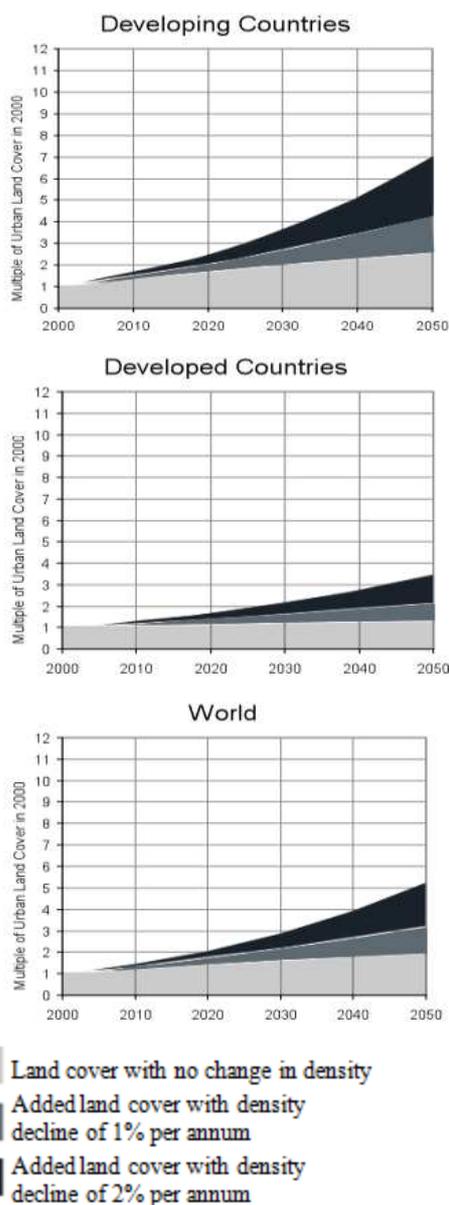


Fig. 5. Projections of urban land coverage for the regions of the world, 2000-2050. Source: Angel *et al.* (2010, p. 67)

According to the above, if the growth of urban population increases, and the pop-

ulation density remains the same, the change trend of land use into the urban land use will grow dramatically, especially in developing countries, in the same way as consumption and energy production for the mobilization of motor vehicles, road construction, provision of infrastructure, among others, which has as a result, loss of crops, forests, grasslands, and generally everything that involves the natural soil with their biotic and abiotic resources so the arguments against the cities re-densifying are depleted before this data.

The NU has proposed a series of urban design strategies that encourage the reduction of the use of the automobile by changes in land use and re-densifying, however, there is criticism by Cerveró and Gorham (1995) in which they argue that with the creation of isolated cities, even with the NU design, these can't be segregated from the rest, and again they fall into the pattern of edge cities. It is in this sense where it is reconsidered if NU proposals are viable for the generation of new communities or whether it is better to re-structure the city centers and peripheries already existing to a greater articulation within the metropolis or megalopolis.

In addition to the foregoing, Marcuse (2000) says that there is a contradiction between the relationship of the urban sprawl and the objectives of the NU, since with the re-densifying of suburbs, although if their edges can be reduced, at the same time, it makes it more attractive, which increases its growth to the periphery of the central city or beyond it. It is clear that the growth of cities will not stop, and hardly the NU or any other proposal of design and urban planning will succeed, however, it is not utopian to think that the current trend of urban sprawl can stop, in addition to the NU

favors the infill development, the new urbanists do not have the power to stop the growth on the edges or to force the recentralization_ (Deitrick & Ellis, 2004, Congress for the New Urbanism, 2001).

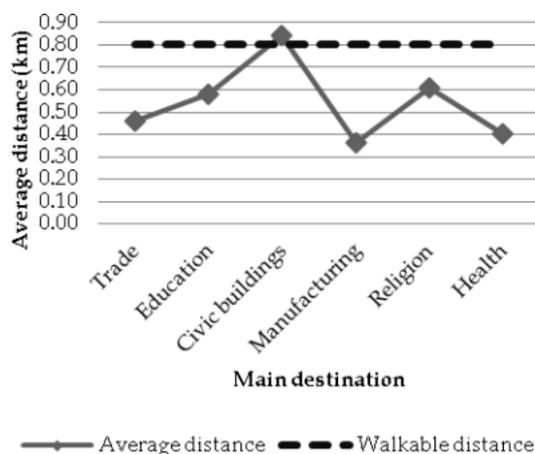


Fig. 6. Average distances of the centroids of the blocks to the main destinations in the neighborhood. Source: Based on data from the DENUE (INEGI, 2009).

In the case study an analysis of transportation was conducted, first were obtained destinations of its inhabitants as follows; 32% are directed to schools, work 23%, 21% to make purchases and 20% target destinations for recreational purposes. In the Congress of new urbanism (CNU) it is proposed that the maximum walking distance of should be 800 meters (1/2 mile), Fig. 6 shows the results of the distances of each of the centroids of each block of the district towards each one of the main destinations, with the exception of public buildings, all services are within this distance. The means of transports used in the case study were: walking with 65% of frequency, the journey on foot to go to the store and school was the most widely used; the private automobile with 18%, the car was used on most of the trips to recreational activities and work related; the use of taxis had a frequency of use of 7%, this was used more for recreational activities; the bus with 6% mainly used to

go to work; and finally the bicycle with 4%, the latter mainly it used as a recreational means.

The Santa Barbara district complies with the principle of pedestrianisation of the NU, and in this case, it was found that an urban downtown area featuring close to housing services causes less car usage and more walking. However the use of the bicycle, which according to the NU would also need to have a high rate of use, in the case study is not relevant.

The combination of density (which as a minimum should be of 12 units per acre) with mix of land uses, they have an important role in the promotion of walking (CNU, 2001), this coincidence, was found in the study of the District of Santa Barbara since there are a lot of services along the streets of the neighborhood, such as schools, clinics and offices, temples, parking lots, museums, workshops with various activities, and retail; in sum, the intensity of the walk is high.

Cox (2007) says that there is not a practical way for low-density urban areas to be redesigned to significantly increase public transport and the pedestrianization, however in the case study density has been drastically reduced in recent years, it has a high rate of pedestrianisation, but if it is re-densified and other design strategies are implemented, this index could increase. Macuse (2000) says the same, redensify is not the solution to housing problems, but rather it should be considered aspects such as: rules of occupation, costs per unit, accessibility to the work and location of services. If these elements are combined, then it could be a practical solution to the abandonment of the centers of cities and growth toward the periphery.

5. Urban space design

One of the main principles of the NU is the reinforcement of community life through the construction and care of public space and the orientation towards people, making friendlier pedestrian spaces (DeWolf, 2007). Chavan *et al.* (2007) mention that the design and construction of streets and roads simply do not have the same weight as other aspects of planning, such as historic preservation or the commercial revitalization, being that in this lies the intersection of architecture and planning, urban design involves coordination between the details of macro and micro scale to create desirable and functional spaces and attractive environments in which people can work, live and have fun. One of the major forces in the practice of design in urban space is the movement of the NU, which seeks the comprehensive reform of urban planning and development, with emphasis on the creation of districts compact and walkable, within a system of street networks with mixed land use and mixed housing, sharing goals with the Smart Growth movement (Chavan *et al.*, 2007).

One of the big criticisms to the NU is exposed by David Harvey (2007) who says that what concerned him of this proposal is to repeat the same fallacy presented in architecture and styles of planning of cities, which are observed from the spatial planning, and that this is or it may be that fuses a new moral and aesthetic order. The author adds that the NU seeks to change traditional structures, but not the concept of spatial planning, what falls into the same problem of the modern movement, which favored the spatial forms of social processes, it is through the connection between the spatial forms and the social process where the architectural design and the ideology of the community may be linked.

In the case study the analysis proposed by Harvey was made. On the one hand, a sample of neighborhood inhabitants were asked which areas were identified as landmarks, as well as the edges (Fig. 7); and on the other, the areas that are considered most dangerous. Once these results were obtained three physical elements of these streets were analyzed: the relationship between vain and solids; the width of sidewalks; and width of the sections of the street,—such elements in the NU are related with security, the beginning of the walk and the mixed use of soil.



Fig. 7. Landmarks, edges and dangerous streets identified by local residents

5.1 Relationship between vain and solids

In percentage, the relationship between vain and solids, is in equal parts (Fig. 8), however, this is not present in the distribution on the streets, since this relationship is occurring only in two and a half streets, since the prevalence of the solid over the vain is total in the street Tolotzin and North Benito Juarez, while the vain predominates strongly over the streets of North and South Pedro Cortez Nicolas Bravo and Santos Degollado. In the North Federico Hardy Street predominates the solid, but to the South dominates the vain.

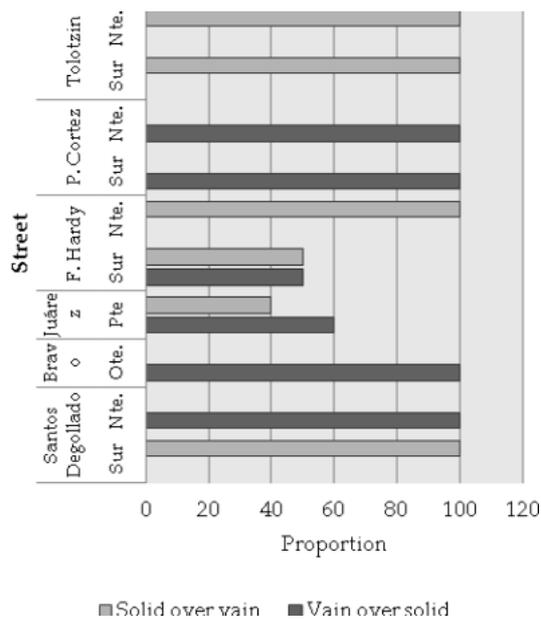


Fig. 8. Proportion of the distribution of vain over solid and solid over vain.

It can be seen, that there is a direct relationship in the feeling of danger that people have about Nicolas Bravo Street with the relationship between vain and solids, in the case of this neighborhood this physical element is not related with the principle of NU.

5.2 Width of sidewalks and sections

The minimum standard established for the width of sidewalks in local avenues was 1.20 meters, and 25% of these avenues met the criteria; 25% exceeded it; and the remaining 50% had dimensions less than 1.20 meters. In these streets would have to establish if it is feasible to increase the width of the sidewalk, which depends on the section that the street has and the activities carried out it.

In relation to avenues, the width of sidewalks, was settled on 2.40 to 3.00 m range, of which only 25% meet this criteria, which causes problems with public transportation, lack of safety for pedestrians and cyclists, as well as road congestion, in particular in peak hours, going to

or from schools and jobs, since apart from the fact that they do not meet the minimum criteria of dimensioning, sidewalks are occupied by urban furniture and decentralizing. Fig. 9 shows some of the streets in which this problem occurs.



Fig. 9. Road and pedestrian problems in collecting avenues.

In relation to local avenues, it has been established a minimum parameter of 12 meters wide. The avenue with biggest problem is Nicolas Bravo, since no part of its trajectory complies with the minimum section, causing road and pedestrian problems due to its sidewalk does not have the required minimum width of 2.40 meters.

In the case of width of sidewalks and sections of streets, the proposal made by the NU, could help to improve the dynamics of the neighborhood, given that in peak hours, these elements are not sufficient, making the streets dangerous to pedestrians, with almost zero accessibility for people with disabilities.

But the issue of security is still pending; Cozens (2008) criticizes the proposal for the permeability of the streets, since this implies access to all citizens, including criminals, which increases the opportunities for crime. Cozens proposes to restrict the access of the spaces of housing areas and, before making proposals for planning and development, it is important to consider the criminological evidence on urban design, as well as a systematic re-

view of the evidence related to crime and permeability. Cozens proposes the adoption of Crime Prevention Through Environmental Design (CPTED) tool which "involves using planning and design to promote territoriality and a sense of ownership", to maximize opportunities for surveillance, control access, support, maintain and manage the built environment and to harden targets via security/technology (Cozens, 2008, pp. 436-437).

Fig. 10 shows the alleys that exist in the neighborhood, which not permit permeability mainly in the North. This area is where the population identified it as more insecure in the neighborhood, and specifically mentioned that the alleys have become a security issue. With this, the criticism made by Cozens of the proposal of permeability is refuted for this case study.

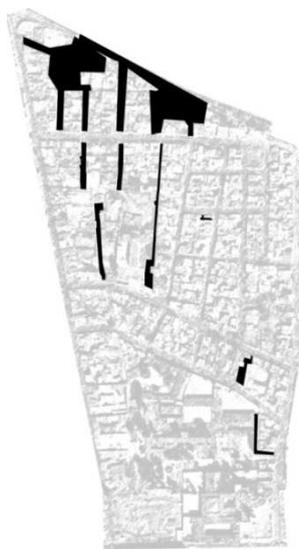


Fig. 10. Alleys in the neighborhood

5.3 "Nostalgic" Design

To talk about design in the public space it is not only refer to the streets, parks and gardens, but also of the facades and those that are in them (what could lead to mixed land use). The design that has been used in the NU has been strongly criti-

cized, because it has been considered making an appeal to the nostalgia of the population, seeking to transform the large and crowded cities into something that apparently has control, within a series of interconnections of "urban villages", where this is credible (Harvey, 2007), "critics claim that New Urbanists want to return to a fantasy of small-town life", a false past purge of all its unpleasant elements and patterns of domination and exclusion, an illusory world of the imagination" (Cliff, 2002, p. 267), they consider that it is an overflow of nostalgia for the idealized life of a small town and rural way of life that never existed (Harvey, 2007).

According to Marcuse (2000) NU is nothing new, since the principles are focused to create a "feeling of a traditional community" for residents, where the only thing new is the most jealous Gospel ideology that has been promoted, beginning with the formal creation of the CNU in 1993 and the adoption of a formal letter in 1996. Harvey (2007), mentions what they really want is to evoke a past that never existed, in which the sentiment is promoted and a past image of a small village is idealized, where the anti-democracy is strengthened and certainly an anti-urban content, with the image of a small town homogeneous by race, income and family size. Here there is no diversity associated with urban life, there is no mixture of races, they are very poor, they are not very rich, many elderly and unmarried, none with discrepancies of sexual preferences. The new urbanism assembled much of this rhetoric and political power through the appeal to nostalgia for the 'Community' as a panacea for our society and economy.

To this criticism, it can be argued what Baum (1999) said that the community

planning process must balance respect for the past, not as a burlesque copy from it, but as part of a real assessment of what might be possible for a future. Within the principles of the NU is social diversity, and does not seek to segregate or discriminate.

The new urbanist should not only take a serious consideration of the historical character, but also of community participation, which takes a role of utmost importance, as it is the community that live in the spaces, not the Planner. Because of his field of particular expertise, the New Urbanists will tend to make a better functioning physical form of the development of the community that has made use of the tool of the charrete, which gather various actors of the urban space with social process, which is necessary for the long-term success (Jacobsen, 2006).

The construction of the physical environment is only part of the equation; this may depend on the social, economic or cultural variables. But this does not mean that a connection between urban design and community feelings do not exist (Cliff, 2002). According to Rofé, this is the topic in which the New Urbanists fail, as they observe a community in an independent way, not in terms of the urban whole, he adds that "neighborhoods are important because they provide one of you gateways to the social life of cities" (Rofé, 1995, p. 120). Spatial proximity and civilization jointly make public space to help weave the making of a fragmented society.

To address this criticism, it must be first considered that the traditional varies depending on the space which it is talking about. For example, the case study is an area that is considered traditional by the inhabitants of the city, its origins date

back to the 16th century, and however, when architecture was tested it was observed that there is a mixture of traditional and modern, although if there is influence from the first to the second, mainly in colors, dominated by hues (Fig. 11). This occurs in the oldest neighborhood buildings, although the color is not in the entirety of the district, this does not lose its status as traditional in the collective imagination of the city and the same neighborhood.

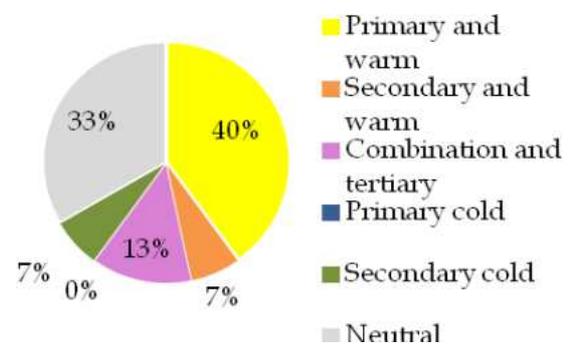


Fig. 11. Predominant colors on facades



Fig. 12. Traditional architecture vs modern architecture in the neighborhood

Fig. 12 shows the influence of the traditional with modern style, as it can be seen there is a similarity between the colors,

but now a days there is a mixture of both architectures, although the traditional has very poor maintenance and structural safety due to its abandonment.

At this point it is important to consider whether to create traditional neighborhoods according to the design of what already exists as traditional patterns, or return to the most representative architectural elements or to remove the traditional.

Deitrick *et al.* (2004) say that the New Urbanists base the design process on community participation and design with the knowledge of numerous financial, social and architectural requirements. They are able to adjust the patterns of traditional design to a content of modern technologies that may be appropriate for people of different ages, goals and family structures, as long as the community participates, as it is they that know what they need. This is a correct antidote to the modernist physical determinism as the NU, i.e. not to abandon the dialogue with citizens and understand urbanization as a fluid process in a dialectic relation of spatial forms (Harvey, 2007).

6. Gentrification

There have already been mentioned some of the design strategies proposed by the NU and criticisms to each of them, but all the "package of tools", as Marcuse (2000) calls them, finally lead to a spatial enhancement which, in turn, increases economic activity in the area, this can lead to the process of gentrification, latest critique of the NU which will be addressed.

The process of gentrification is born from the recovery of historic districts that are generated after the publication of the book "Death and Life of Great Cities" by Jane Jacobs. By refurbishing the centers that had been abandoned after the post-war,

they began to fill with new residents, who turned them into urban spaces of high economic level. NU critics argue, that by seeking regeneration of already existing urban centers can lead urban space to gentrification, which can eject people originally from the neighborhood.

The NU, said Marcuse (2000), builds new communities on marginal areas, but this is not necessarily true, because NU proposes strategies for revitalization in aged spaces and infill development within cities, however it is argued that the New Urbanists may not build in these areas, and instead focus on stopping all new suburban construction, which would probably be unproductive, because the New Urbanists do not have the power to stop the growth on the fringes or forcing a recentralization of investments within the cities (Cliff, 2002). Jacobsen (2006) considers that this process does not correspond to the NU, because the government and other institutions have the capacity of decision in matters of management, permits, and changes in land use.

The analysis of diversity of income in the area (Fig. 13), shows that by the year 2000, the area with greater diversity of income, from two to six times the minimum wage (SAT, 2010), is located in a northeast area, and the population with the highest income is concentrated in the Northwest. In terms of minimum wages, it can be seen that there is diversity, the range is from two up to seven wages, but in general is that it is an area of low economic level and middle-low. It is in this sense that it is understood the lack of investment within the zone and the expulsion of people towards other spaces of the city.

If it is raised the economic level in the neighborhood, necessarily presents the gentrification process? Norquist (2007)

clarifies that it commonly includes a variety of housing types that may be arranged in low-cost units stationed in the same building or in the same block with more expensive housing, in addition to the above-mentioned proposal of urban infill, rehabilitation of housing and public space, offering at least the possibility of people with diverse incomes living near these areas. In the District of Santa Barbara the process of expulsion has already taken place, as well as the increase in crime, poverty and the degradation of the urban space, the same author says that if these problems are given in gentrification, this would be ultimately better for the low-income population, as if they are in metropolitan areas that have compact and economically healthy urban centers, rather than in areas of urban sprawl, they have more opportunity for development.

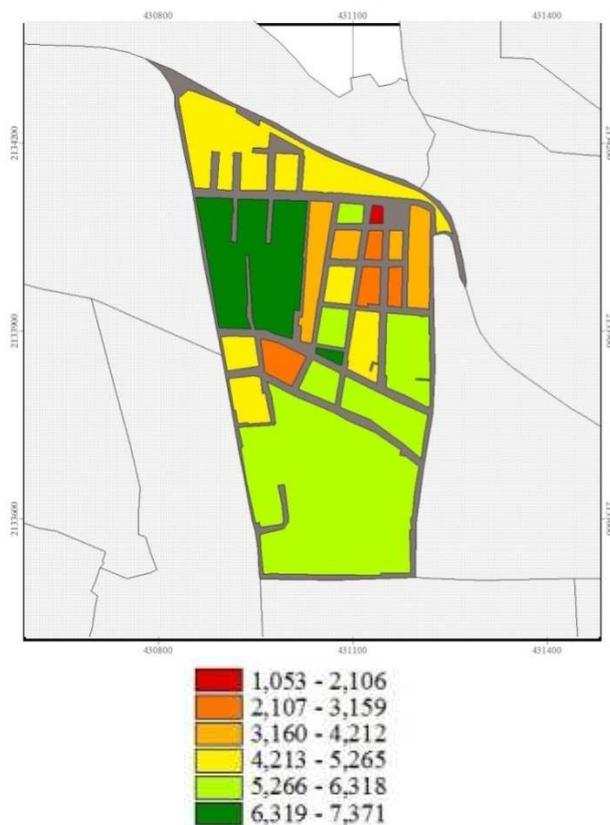


Fig. 13. Level of income in the year 2000. Source: based on the Census of population and housing of INEGI 2000 and data from the services of tax administration (SAT), 2010.

Supporting the previous argument, Flint (2007) says that when the middle class sees alternatives to increase the added value of infrastructure, there are those who only find gentrification, which is not necessarily true, but that if this process were to present itself, can be solved through reform in zoning and policies for new development. In addition, comparing the amount of urban sprawl and the number of neighborhoods or projects of NU that exist, and whether there might be more than these, and if smart growth could be as ubiquitous as the dispersion, laws for supplies and demands would begin to operate, and these could not be so expensive.

In the survey that was done to residents of the neighborhood, 73% of the population said that they considered their neighborhood more secure in the past, before the expulsion of the original population, and of the integration of foreign residents. In this case the process of gentrification has given in reverse order, poverty has driven out the original population, then discredit the improvement of the neighborhood as this phenomenon is not viable to occur, so this criticism, for this case study, is not appropriate.

7. Discussion

The first of the criticisms of the NU is focused on urban sprawl, the redensifying and transport for developing countries as Mexico, it is no longer possible to continue with urban sprawl, as shown in the case study. Cities have grown exponentially, metropolitan areas will continue growing quickly, while urban centers are falling in the abandonment causing social, economic and urban, degradation, not to mention the environmental damage generated by urban expansion (Table 1).

While the case study was not designed under the guidelines of the NU, this area

as a part of the historic centre of the city of Toluca, has a type of traditional design, similar to NU principles, which shows that the pedestrianisation and the diversity of land uses are an essential part in the everyday life of this type of urban spaces, despite the low density of the neighborhood. So criticism of Cox to the infeasibility to redensify in consolidated urban spaces is refuted, on the contrary, if neighborhoods as the case study, shows have already community life skills, despite the insecurity, abandonment and low density, to return the community life of yesteryear, which older residents yearn for, is feasible with the improvement of these elements.

Security, tranquility and identity towards urban spaces, are key themes for the inhabitants of these areas. This in terms of the roots, but the architecture and urban design are also an important part. The study case has an eclectic style, and although traditional architecture is located in a high level of degradation, is still somehow a parameter for the current architecture, is not to go back to a "village", is to resume the fundamental aspects that characterize the districts and that villagers are already identified, for a starting point to make new proposals, and this does not lead to gentrification.

One of the proposals of the NU is to have "eyes on the street", which refers to that there is a predominance of the vain over solids on the street to have a greater sense of security, this proposal is not necessarily true, because in the neighborhood with this feature is where there is more crime. This type of design should be linked with other elements such as the type of land use, the schedules of activity in those land uses, as well

as municipal and neighborhood safety programs.

The issue of security is one of the most important for the inhabitants of the district; the NU has been criticized for promoting the generation of permeability in the streets, for all kinds of people, including criminals. For the case study it was observed the alleys have become the most dangerous spaces, either by its design, dimensions, lighting or location. In this sense, the northern part of the District of Santa Barbara, is the area more inaccessible and dangerous.

The process of gentrification that critics say that generates the NU, has to be analyzed under the perspective of the original inhabitants of the area, rather than the current ones, since they are the first that have a tradition in this space and those that have been snatched from them over time. Secondly, are (according to what is mentioned by the inhabitants of the neighborhood) those which have generated crime and degradation of the space. Then, by putting on a scale if it is left the space as it is, would continue the degradation, abandonment of its oldest inhabitants and crime, but if current residents are kept, or it is performed a restructure in land use, urban and architectural design, and increase the density, this could return its original inhabitants, or at least increase the added value of land and generate jobs, giving better opportunities to people living in and near the district.

8. Conclusions

Based on the points of view of the community it was obtained a more objective analysis of space and to conclude about the feasibility of applying the principles of land densifying, transportation, mixed land uses and design.

Table 1. Comparison of the results to the criticisms and proposals that are made to the NU

| CRITICISM | REPLICA AND/OR PROPOSAL | RESULTS OF THE CASE STUDY |
|---|--|--|
| Urban sprawl and transport | | |
| Urban sprawl is not the cause of the increase in cars and construction of roads (Cox 2007). | From the 1970s to 2010 there was an oil consumption increase of 30% destined only to transportation (IEA, 2012), phase which coincides with the second wave of the <i>edge cities</i> (Garreau 1994). | The increase of urban sprawl in the city of Toluca was due to the creation of sources of employment outside of the city, which caused the abandonment the historic center, which increased dramatically the edge of the city and the construction of infrastructure for access to jobs and services that are offered in this area. |
| There is no practical way for the low density urban areas to be redesigned to significantly increase public transportation and the walk ability (Cox 2007). | Higher densities allow higher travels on foot and by bicycle (Chen et al. 2008). | Despite that density in the district has dropped due to its abandonment, its inhabitants have as primary means of transportation, walking, because the neighborhood of Santa Barbara has a wide variety of services at a distance in average of less than 800 metres. |
| Islands of new urban planning communities causes major vehicle problems, there are no urban interconnections (Cervero and Gorham 1995), and they attract greater traffic congestion and air pollution (Cox 2007). | It should be considered the urban whole, not only by fragmented communities (Rofe 1995), to raise not only urban design, but also the design of the territory. | The neighborhood has particular elements that make it unique, and people distinguish them both from its urban characteristics and its people. However this is strongly related to the neighborhoods that surround it, which causes a strong social dynamic between them, a situation which does not pass to the center of the city, since despite forming part of it, is segregated. |
| NU encourages urban sprawl (Marcuse 2000). | The NU is in favor of infilling development, it does not have the power to stop the growth on the fringes or force a recentralization of investments within the cities (Deitrick and Ellis 2004; CNU 2001). | In the neighborhood there are lots of vacant lots that can be used to generate public spaces or diversity of housing, according to the study which would increase community life and/or density. |
| Urban space design | | |
| NU is based on physical determinism (Harvey 2007). | Taking into account the social processes and social actors, linking the architectural design and the ideology of the community. Not to abandon the dialogue with the city and understand urbanization as a group of fluent processes in a dialectic relation of spatial forms (Harvey 2007). | For the analysis of the district we followed the proposal of Harvey, who gave as a result the identification of dangerous areas and landmarks, edges, media and transport times. The population of the district has not been taken into account in their neighborhood and even less by the city planning processes, which causes the problems identified by the settlers. |
| The permeability of cities and the land mixed uses make the neighborhoods of the new urbanism more dangerous (Cozens 2008). | There are many communities that are close, but not by the sense of belonging, but rather by a sense of security, or lack of it, being here where the political aspect should intervene (Harvey 2007). Deploy the tool CPTED (Cozens, 2008). Consider the intervention of the social actors (Duany and Cox 2003). | The alleys that are isolated from the neighborhood, were identified as the most dangerous areas, so it is shown that permeability is an important element to generate a sense of safety, although this not only gives the design, because it is a jointly task with the community and the Government. |

| CRITICISM | REPLICA AND/OR PROPOSAL | RESULTS OF THE CASE STUDY |
|--|---|--|
| Design that is sold as "urban villas" (Harvey 2007; Marcuse 2000). | If a historic centre is re-designed, it is not possible to leave the history and culture aside, but it should not proposed, designs of urban villages from other countries, because it is important to balance respect for the past, not as a burlesque copy of it, but as part of a real assessment of what might be possible for a future (Baum 1999). There has to be a connection between urban design and community feelings (Cliff 2002). Promote the proximity between community actors and urban space (Rofe 1995; Harvey 2007). | Fieldwork showed that there is indeed a feeling of long tradition in the neighborhood, more focused on the feeling of security and community life. In terms of design, it was proved that there is influence of traditional architecture to the modern. These two elements have to be taken into account in the preparation of proposals, since they are part of the identity of the neighborhood. |
| Gentrification | | |
| It is elitist and promotes segregation, leading to gentrification (Harvey 2007; Marcuse 2000). | <p>If this process is presented it can be solved through reform in zoning and the policies for new development (Flint 2007). NU offers diversity of housing within the same development, which gives more accessibility to different social classes (CNU 2001).</p> <p>If NU developments are as ubiquitous as the dispersion, the costs of design and construction may decrease (Flint 2007; Norquist 2007).</p> <p>The NU promotes the urban infill, the rehabilitation of housing and public space, offering at least the possibility that several different income people to live near compact and economically healthy urban centers. (Norquist, 2007).</p> <p>If it is revitalized a neighborhood, land and housing costs would increase, which could be the original owners of dwellings to return or at least to benefit them economically.</p> | The District of Santa Barbara has suffered the abandonment of its inhabitants for reasons of insecurity and degradation of the urban space, which has led to get new people which has aggravated the problem. Improving the quality of urban, architectural and planning would not cause gentrification, would improve the quality of life of current residents, the possible return of those who left it and the entry of new population. |

In terms of NU principles, it is concluded that its essence lies in the traditional district, as it was observed in mixed land uses and the proximity of services to housing lead to walking, although the infrastructure does not encourage the use of bicycles. Which refers to the principle of densifying, showed that encouragement, is important since the centres of cities are vacating leaving urban life without spaces, while the peripheries grow uncontrollably. It is important to clarify that not all principles are applicable to neighborhoods of historic centers, so do an in-depth study of the socio-

cultural dynamics, as well as the built space, it is essential to make decisions of design and planning.

Regarding criticisms, it is concluded that not all have rationale, such as criticism of the densifying and the promotion of walking, since it was found that they are necessary for the best performance of neighborhood life. Criticisms that have to be taken into account to avoid affecting the district and its community are the gentrification and "nostalgic" design. In the first, it is important to consider when the actors involved and the problems of

the urban space; the second based on the mentioned analysis, make proposals that generate roots and identity in the district.

In terms of the results of the case study, it is concluded that the streets and its quality are an important element for the life of the neighborhood, and as shown in the study, considering design elements proposed by the NU would help to improve their quality and use, such as the width of sidewalks, the maintenance of the most ancient constructions, infill development and reuse of abandoned trade and housing.

The district currently has high rates of crime, according to its inhabitants that has been associated with the abandonment of housing, trade and the arrival of foreign inhabitants. To increase the standard of living in the neighborhood, could lead people who have caused the degradation of the space out and lead to the return of the original inhabitants or the arrival of new residents that encourage the development of the district, which residents as visitors and the city would benefit both in general.

NU is not a panacea for the cities or suburbs, they are principles that support the generation of healthy urban spaces, but prior to the decision-making process of design and planning have to know the opinion of the inhabitants, as well as their socio demographic characteristics and the study of the characteristics of the built space.

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