USA–Mexico Border Cities:
a Clash of Two Cultures

LAWRENCE A. HERZOG
San Diego State University, California, USA

In the second half of the 20th Century, one of the most rapidly urbanising regions of the World has been the 2000 mile-long international boundary zone shared by Mexico and the USA (Fig. 1). During the period 1950–1970, cities on the US side of the border grew by 75%, while Mexico's border towns increased by 197% (Dillman, 1983). From 1970 to 1990, border settlements continued to expand: along the US side, urban centres grew at an average rate of nearly 4% annually, well above the mean national growth rate of 1%; Mexico's border cities grew at average rates of between 5% and 6%, nearly twice the national average of 3.3% annual growth (Herzog, 1990). By 1990 at least three Mexican border metropolitan areas — Tijuana, Ciudad Juarez and Mexicali — had populations estimated to be one million or higher, and another seven had between 100,000 and 400,000 inhabitants. North of the boundary, the San Diego urbanised region's population exceeded 2 million in 1990, and at least five other US metropolitan areas along the border registered between 100,000 and 500,000 inhabitants.

Early in the next century, some 10 million US and Mexican citizens will live in cities along the border corridor. This dramatic demographic transformation has produced a unique settlement pattern: the formation of functional metropolitan areas that physically transcend international borders. Such circumstances have also generated serious questions about the management of cities in a boundary zone shared by two distinct national cultures, one developing and the other developed. Clearly, in a zone that houses first- and second-order metropolitan centres, serious land use and environmental planning problems arise. Problems, ranging from air pollution and sewage spills to traffic management, are not merely confined to a city in a single nation, but spill across an international boundary. The result is that the management of urban problems can only be achieved through a combination of city planning and international diplomacy.

Thus, town planning along the Mexico–USA boundary has a distinct transnational dimension. Few places in the World face the problem of resolving city-level problems through foreign policy channels. There is considerable uncertainty along the US–Mexico border as to how serious environmental and land-use planning problems can be resolved (Herzog, 1986). Some scholars feel that planning can be achieved by creating cooperative planning agreements through international treaties, as is done along Western European borders (Hansen, 1983). Others are less optimistic that such an approach can work along the Mexico–US border because of the vast economic disparities that separate the neighbouring nations (Friedmann and Morales, 1984).

What does seem clear is that in order to understand city planning in this complex bi-national urbanised zone, it is necessary to understand the nature of urban structure in each nation. This article examines the built environment and
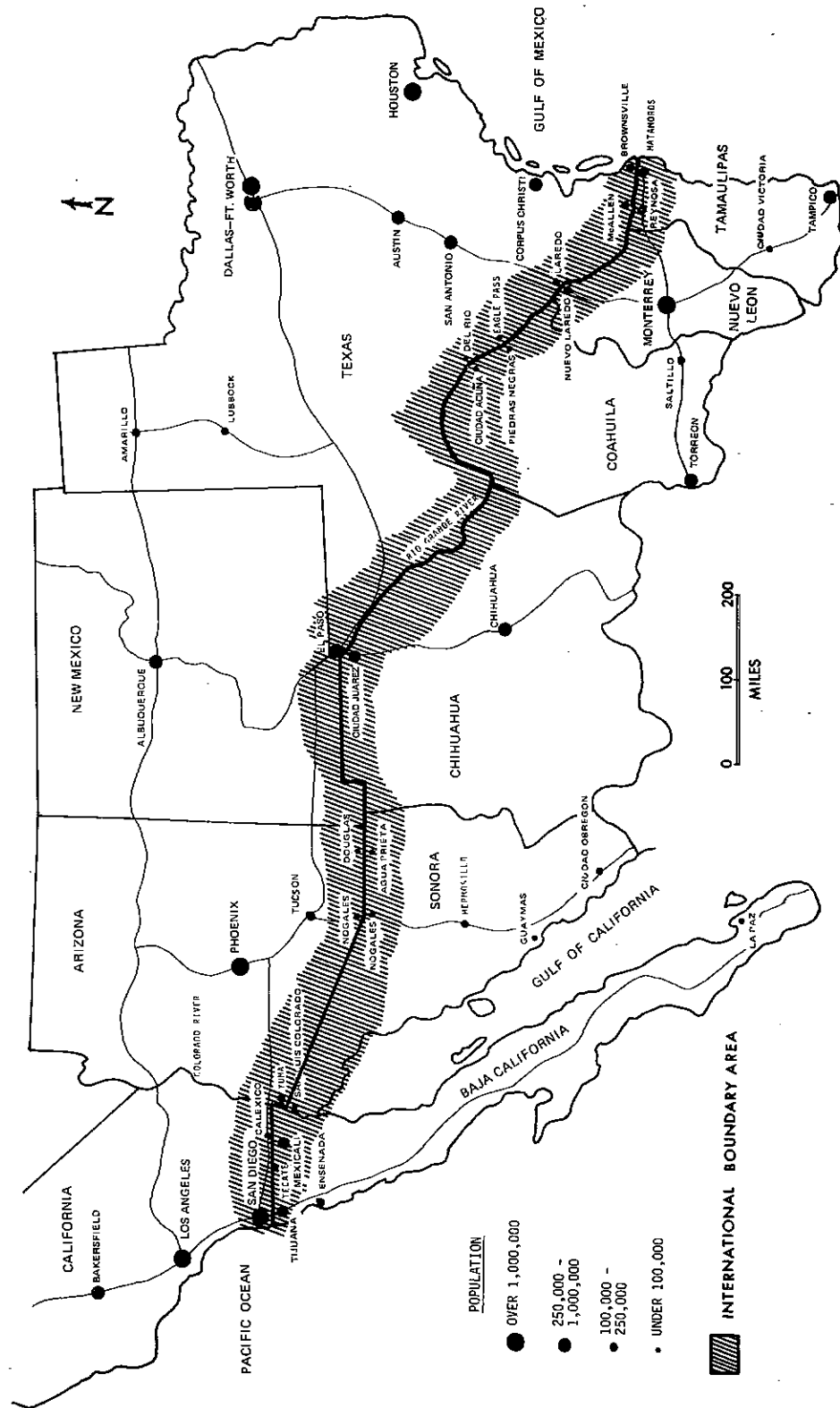
Fig. 1. The US–Mexico border region.

structure of US and Mexican cities as a way of understanding the forces that come together in the unique settlement configuration of this international boundary region.

Today, the international boundary is gaining prominence on the US—Mexico foreign policy agenda, partly because it is the main locale for foreign policy problems such as immigration and narcotics smuggling (see Bilateral Commission on the Future of US—Mexican Relations, 1989). At the same time, economic growth and population expansion make the border a subject of increasing attention in the realm of public policy, from economic development — trade, tourism and assembly plant (*maquiladora*) location — to environmental management.

US—Mexico border urbanisation has become the subject of increasing scholarly attention over the last decade and a half. One body of work has been concerned with historic patterns of urban growth and change along the border (Martinez, 1978; Garcia, 1981; Pinera, 1985). Others have focused on immigration and its impact on the border region (Cornelius *et al.*, 1982; Jones, 1984). Scholars have also looked at the nature of the border region economy (Fernandez, 1977; Hansen, 1981; Tamayo and Fernandez, 1983), or the border's more general regional attributes, including social, economic and policy dynamics (Ross, 1978; House, 1982). Still another area of concern has been the development of assembly plants (*maquiladoras*), and their socio-economic and political implications (Fernandez Kelly, 1983; Suarez Villa, 1985; Sklair, 1989).

Relatively few studies have looked at border urbanisation as a cross-cultural phenomenon. Prices's (1973) monograph on Tijuana and Garreau's (1983) essay on "MexAmerica" characterised the border region as a zone of cultural overlap, in which a third culture, a blend of US and Mexican influences, was created. This essay takes exception to the view of the border corridor as a zone characterised by cultural interdependence. By focusing on the built environment and structure of border cities, it seeks to examine boundary urban growth as a clash of contrasting cultures.

THE URBAN BUILT ENVIRONMENT IN CROSS-CULTURAL PERSPECTIVE: MEXICO AND THE USA

Culture has long been recognised as a central force in ordering the human use of space (environment). Hall's (1969) classic study of proxemics and space demonstrated how national cultures, ranging from German, French and English to Japanese and Arab, held widely divergent notions of public and private space and the design of cities. Tuan (1977) showed that the use of space serves two cultural functions: it clarifies social roles and relationships, and it represents the cosmic and social order. In any culture, people construct a built environment that is a reflection of a set of shared socio-cultural priorities.

Rapoport (1969) first demonstrated this logic in his cross-cultural study of housing types. Over time, decisions made by builders and designers filtered through common values and traditions, and through local geographic constraints (climate, land forms, *etc.*), produce distinct built environments for different cultures. These are most conspicuous in cities, where Rapoport (1984) coined the term "urban order" to refer to the ways that different cultures produce unique urban structures. For example, cultures attach specific meanings to public and private space, and to particular kinds of urban designs and architectural forms. Some have questioned whether cities continue to display distinct cultural landscapes and designs in an era of globalisation and homogenisation of culture. Writing about European cities, Claval (1984) has noted that the urban built environment can be divided into two elements:

popular landscapes (vernacular) and elite landscapes (high architecture). Yet, despite the proliferation of elite landscapes in modern cities, an urban order still remains. Cities continue to reflect both the forces of popular and elite architecture. In fact, the two reinforce each other. This becomes evident when one observes the wide array of culturally distinct urban places and built environments, many of which have been carefully studied by scholars, in such diverse settings as Morocco (Abu Lughod, 1980), Japan (Allinson, 1979), South Africa (Western, 1979) and the Soviet Union (Bater, 1976).

The US–Mexico border region offers the possibility of measuring the relationship between culture and urban space in a trans-frontier setting. Cities from two different national cultures lie side-by-side along the length of the 2000-mile international boundary. Despite many decades in which cultural influence spilled north and south across the border, this essay will argue that the national cultural forces that shape US and Mexican cities have not been eclipsed by the porous national border: US and Mexican border cities continue to remain distinct.

Mexico's urban design heritage is Latin American. Perhaps the most distinguishing characteristic of the use of space in Mexican and Latin American cities is the emphasis on the traditional physical centre, or downtown. Mexican culture attaches great social value to the historic city centre. This tradition can be traced to the colonial era of town planning, when the Spanish monarchy coordinated plans for the design of most of Mexico's major cities through the Laws of the Indies. Some scholars believe these plans borrowed from the ideas of Greek and Roman urban architects (Stanislawski, 1947).

Mexico's cities were designed with a 'grid-pattern' configuration (Stanislawski, 1946). The central plaza served as the nucleus, around which a rectangular grid street system accommodated traffic circulation. The physical structure of these colonial cities resembled Sjoberg's 'pre-industrial city' (Sjoberg, 1960), in which elite social classes tended to cluster around the town's central square. In Mexico, the plaza served as both the religious and civic fulcrum of the city. It symbolised the powerful role of both the state and the church in Spanish colonial society. Around it were arrayed the dominant social institutions: the church, the office of municipal government (*cabildo*), and the governor's palace. Nearby, other important facilities of the colonial period — the public granary, customs house, Royal tobacco monopoly, Royal treasury, and town market — were sited (Swann, 1982).

The formation of the colonial city in Latin America reflected the embodiment of the socio-economic views of the Spanish Royal family. The physical city established the symbolic and functional presence of the crown at the locational heart of the city — in and around the main plaza. Not only would the key town activities and land uses emanate from the centre, but the central city zone was only accessible to the elite social classes. The exclusion of native indigenous peoples from the Spanish new towns was made clear in the instructions given to colonial builders by the crown in Madrid, with statements like:

> "All settlers, with greatest possible haste, are to erect jointly some kind of palisade, or dig a ditch around the main plaza so that the Indians cannot do harm." (Nuttall, 1922, p. 252).

In the pre-industrial city, distance from the centre of town was directly proportionate to social class. As the location of one's place of residence increased in distance from the centre, social status and income declined. The upper classes tended to cluster near the centre for reasons of military security and social status. Such was the pattern of life in colonial Mexico.

This discussion leads into a second important feature of Mexican cities: the segregation of high and low status groups in the city. In Mexico today, the

wealthy classes either live in neighbourhoods near the centre of the city, or in exclusive elite sub-divisions. The poor principally occupy land near the edge of the city. Scholars have long argued that in Third World countries, like Mexico, the elite control both the physical direction of development in the city (Portes and Walton, 1976), as well as large amounts of urban land (Griffin and Ford, 1980). Elite residential neighbourhoods have tended to dominate properties arrayed along the commercial corridors that inevitably accompany the exodus of development away from the traditional downtown, and toward new peripheral commercial centres. Griffin and Ford have termed these areas "elite spines" (Griffin and Ford, 1980).

It is of course true that Mexican and other Latin American cities have experienced some of the same decentralisation of upper and middle income residents as in North America. Researchers studying cities like Merida (Leonard, 1948), Mexico City (Hayner, 1945) or Oaxaca (Hayner, 1944) recorded a clear breakdown in the traditional pattern of elite residential concentration near the downtown as early as the 1920s and 1930s. Clearly, fashionable suburbs did evolve on the edges of cities. At the same time, the fabric of most Mexican cities remained centralised. In contemporary Mexico, culturally speaking, the urban centre (downtown) still dominates. While elite suburban growth has occurred, it is of a different character than in the USA. This is perhaps best illustrated in a study of Guadalajara in which it is shown that wealthy classes migrated to the outskirts of the city because of inner city congestion, rising land costs, and the convenience of automobiles and telephones in the new suburban developments. But, unlike North American cities, these elite enclaves did not evolve into independent suburban towns. Elite families still maintained an intimate connection with downtown life. It is conjectured that wealthy Mexicans in Guadalajara still viewed the urban life as 'the good life', as opposed to the "crude, dull, somewhat dangerous life of the countryside" (Dotson and Dotson, 1954).

If Mexico values the central zones of its cities, then what has become of space at the edge of the city? In Mexico, as in Latin America, one finds that the use of suburban territory has been dominated by 'marginal' settlements or shanty towns. As more jobless migrants from rural states arrived in cities over the past three decades, new rings of impoverished settlers formed farther and farther from the centre of town. Typically, residents will 'squat' on land, illegally occupying it with the hope of eventually gaining title to the land. At the same time, they are usually able to live on the land without paying the rents that would be charged on property closer to the city. 'Squatter settlements' — sprawling concentrations of modest shacks and dwellings constructed with the simplest materials (including cardboard, scrap wood and corrugated metal) — are one of the most prominent elements of the contemporary built landscape of Mexican cities. Basic services — such as piped water, sewerage, paved streets, and even electricity — are often lacking, although older squatter communities are eventually able to bring in water and electricity. Land tenancy is the biggest concern to residents. Pezzoli (1990) has recently shown that in places like Mexico City, squatter residents in 'irregular settlements' on the urban fringe are often forced to defend themselves against government policies that seek to relocate them under the guise of rational planning objectives such as ecological management.

Urquidi (1975) postulated two reasons for the appearance of these marginal communities. First, rural areas grew through natural increase, but were unable to attain a level of economic development capable of supporting the inhabitants. This therefore drove massive numbers of peasants toward the cities. Secondly, as a result of cityward migration of such high magnitudes, urban centres have been unable to absorb the incoming populations into the productive formal

labour force, particularly in industry, leaving a large underemployed sector and, consequently, an enormous population of urban dwellers without sufficient capital to afford the minimum levels of housing and neighbourhood quality. Latin Americanist urban scholars have several additional explanations for this phenomenon: lack of sufficient land near the central city; mass land supplies at the edge of urban areas; cheap intra-urban transport; and the possibility of acquiring urban services at the periphery (Gilbert and Ward, 1985).

Marginal settlements can actually be subdivided into several prototypical settlement-types. Portes and Walton (1976) suggest three categories:

(1) spontaneous settlements, formed illegally on unoccupied land, and then subjected to gradual slow growth;

(2) land invasions, established by the deliberate decisions of large numbers of homeless families; and

(3) clandestine subdivisions, established by landowners who sell cheap parcels of land to poor families — low land prices are achieved by land speculators failing to meet the minimal government regulations covering land sub-division and provision of infrastructure.

Cornelius (1975) distinguished between squatter settlements and low income subdivisions in Mexico City. Squatter settlements (*colonias proletarias* in Mexico) involve illegal invasions and occupation of land, while low-income sub-divisions (*fraccionamientos*) are settlements created legally by private land companies or individuals. More recently, Gilbert and Ward found several distinct forms of occupance on irregular land: illegal sub-divisions, *ejidal* sub-divisions (Mexico), and invasions. These forms are dependent upon the local land-holding pattern, the price of land on the urban periphery, and the dominant political mood of the particular Latin American nations, and of regions within those nations (Gilbert and Ward, 1985).

Squatter communities along the Mexican border physically occupy peripheral urban territory because these areas are typically either undesirable or offer the least resistance to invasions by homeless families. Land invasions almost always take place on exurban public land that is useless for sale or development because of its distance from the city centre or because of disamenities such as marshlands, steep river embankments, mountain slopes or other irregular topography, poor soil conditions, and proximity to noxious facilities such as polluting industries, rail lines or airports.

Let us now consider the nature of urban structure in the USA. One very important initial influence on the structure of US cities was the British tradition of the country estate, which emerged as a result of English preference for the countryside over the city. This was translated to the USA during the first important period of urban expansion in the 18th Century. Given that the prevailing source of economic growth during this period was agriculture, it is not surprising that an anti-urban philosophy evolved among prominent leaders of the colonial period. Thomas Jefferson, for example, is said to have written: "I view large cities as pestilential to the morals, the health, and the liberties of man" (Jackson, 1985, p. 68). Thus, in the colonial USA, it was the countryside, not the city, that was celebrated.

If North American cities were shunned in the 18th Century, their place in US culture in the 19th Century became even more problematic. As industrialisation generated booming and ever more congested urban centres, troublesome problems such as pollution, noise and overcrowding prevailed. Public health and crime became synonymous with high density cities. The fast pace of 19th Century industrial and commercial capitalism caused traditional cities to overcrowd immigrants, factories, warehouses, and office buildings into the downtown. As soon as horse-drawn streetcars and trolleys made suburban expansion possible, those who could afford to travel sought refuge away from downtown.

At the same time, the economic revolution interrupted traditional family life in the US; by the late 19th Century, the private home had become the symbol of family life (Jackson, 1985). Amidst the rapid pace of industrial growth and the chaos of urban overcrowding, the private home became the preferred refuge from city life. The late 19th Century saw new developments among US city residents to create protected zones buffered from the urban industrial centres. For one, citizens generally were disenchanted with the fact that state governments held jurisdiction over city planning. Many citizens began organising themselves to wrest control over their political futures from the bureaucrats in state capitals. Most city services, for example, were administered through state governments (including water, schools, *etc.*) and citizens wanted control passed back to the local level. Thus evolved the 'home rule' movement, which eventually passed jurisdictional powers to the cities. As urban areas expanded, mainly through streetcar lines opening up new linear developments on the edge of the city, elite neighbourhoods were created. By the turn of the century many of these neighbourhoods, which had grown large enough to become separate communities, had also lobbied and won control over their governance. Therefore, a second important anti-urban movement took shape — the movement toward incorporation and the creation of independent suburban governments in US cities (Markusen, 1976).

The development of the suburban realm has become the central force that characterises the use of space in North American cities. From the middle of the 19th Century to the present, its genesis has taken shape. As downtown areas were transformed into overcrowded tenement districts, aspirations for a suburban lifestyle predominated. The late 19th and early 20th Centuries were periods of centrifugal growth, led by land speculation and mass transit technology (Reps, 1965). 20th Century cities have largely seen their structure redefined by the automobile, but the changes echo the earlier pattern of decentralisation. The US Federal Government supported these developments through massive investment in highway construction and funding for suburban home-ownership for the middle classes in the post-World War II period. Suburban developments were low density and of a fairly consistent, homogenous architectural style — the so-called 'tract home'.

The 20th Century has seen North American urban areas evolve into the most decentralised and suburban metropolitan structures in the World. The passion for suburban life is largely a recreation of the rural country estate within the city — extravagantly spaced houses with green grass and trees in the backyard: the rural ideal transposed onto the North American urban landscape.

Mexican and US culture have each produced a prototypical urban form that reflects the underlying values and priorities attached to city space north and south of the border. Rapoport (1969, p. 70) noted an important distinction between 'Mediterranean/Latin' towns and 'Anglo-American' ones. In the former, the town is the main settlement space, and the dwelling merely a private enclosed sub-area within the larger, more vital living realm; in the latter, the dwelling is regarded as the main setting for life, and the settlement is merely "connective tissue, almost 'waste space', to be traversed and secondary in nature". Rapoport cites the case of Los Angeles in the USA, as an extreme example of a settlement where the private residence becomes the totality of life, and the sprawling freeway metropolis merely a 'pass-through' zone with little daily meaning to the US urban dweller.

In Mexico, cities remain more spatially compact than in the USA, where urban places have become extravagantly spread out. In general, most US cities are less densely populated than Mexican cities with similar populations. That is not to say that Mexican cities have not become decentralised; certainly Mexico City has evolved into a giant urban agglomeration spreading over hundreds of

square miles in the Valley of Mexico. Yet, in general, Mexico's cities still display some of the tendencies typical of the 'pedestrian city' of the USA a century earlier. Besides the importance of downtown, a second contributing factor has been low private automobile ownership rates which limited road access for the majority of residents. This pattern has changed in the last decade. Still, it will take some time before Mexican cities are reshaped to accommodate the car.

US cities have become excessively automobile-dependent. Their form in the late 20th Century is built around extensive, growing freeway networks. Their physical structure has tended to shed much of its connection to the past two centuries, as modern technology and politics reshaped old cities into sprawling metropolitan regions. Social status is highest on the periphery, rather than near the downtown. One finds the poorest urban dwellers near the city centre. Indeed, most urban ghettos lie adjacent to the downtown business district of North American cities.

The use of suburban land in the two countries can be contrasted. The 'suburbs' of Mexican border cities are inundated with chaotic and unplanned squatter settlements. Mexico's urban periphery has tended to grow spontaneously — until recently, little formal public planning took place in what were considered low status locations. In many cases, land tenure has remained uncertain, and often squatter communities are not recognised by the government. Areas of spontaneous urbanisation, for example, appear as blank spaces on the planning maps of government agencies in border cities such as Mexicali, Tijuana and Ciudad Juarez.

In the USA, suburban areas are planned; they represent high status locations for residents seeking privacy, open space and protection from the congestion of high density, inner city urban living. Suburban areas almost always have larger fiscal resource bases than central city areas (Cox, 1973). Suburban expansion in the USA represents the government's solution to rapid urban growth; the development of the periphery in Mexico has been an unplanned response to hyper-urbanisation. Much exurban growth was spontaneous, and only recently has the government become more involved and committed to addressing the needs of the peripheral irregular settlements.

One can also contrast the location of social classes in US and Mexical cities. Scholars have long conceived of 'urban social ecologies' as reflections of the meanings different cultures attach to urban space. Higher income residents in the city typically find the most prized locations, filtered within the locational tastes of their culture. Other income groups are sorted into neighbourhoods on the basis of their socio-economic and demographic levels. That these sorting processes occur, within a framework rationally tied to the larger city organisation, gives rise to the use of the term 'ecology' to describe the social geography of urban areas.

In Mexico, as mentioned, one usually finds that higher income families locate in neighbourhoods near downtown or in discrete wedges on the periphery. Wealthy communities typically have privately funded facilities and enjoy all public services (water, electricity, sewerage, paved streets, *etc.*). Middle and working class families tend to cluster in neighbourhoods adjacent to the wealthy zones, but slightly farther from the downtown. The poorest residents are concentrated in squatter communities located farthest from the downtown, just beyond the middle class neighbourhoods. These communities consistently lack basic services.

US cities, of course, display a different social structure. The downtown does not determine the location of socially prestigious neighbourhoods; suburban location, or proximity to high amenity features (parks, beaches, *etc.*) does. While a typical Mexican 'suburb' is likely to be marked by unpaved roads, unlit streets, low levels of water service, and inferior public schools and health clinics,

a typical North American suburb is just as likely to have the city's highest quality household services and neighbourhood facilities.

In the US housing market, value is equated with privacy and exclusivity; social status tends to favour peripheral locations. In Mexico, privacy is valued and elite residential areas are exclusive and well guarded, but the city is more compact. The Mexican elite remains integrated within the physical space of the inner city, not only through work locations, but through social networks and the use of downtown facilities, and most of all, through the continued perception that the central city is vital to urban life.

AN EMPIRICAL EXAMPLE OF URBAN SPACE: TIJUANA–SAN DIEGO

These assertions about the differential impacts of culture on urban structure can be illustrated along the US–Mexican border. Perhaps the most convincing example is the westernmost transborder urbanised region of Tijuana–San Diego (Fig. 2). Tijuana's evolution has been inextricably tied to southern California, from its early 20th Century role as an outlet for North American recreational consumption and tourism (Pinera, 1985), to its late 20th Century function as an important economic partner with southern California in trade and the assembly of manufactured goods (Sklair, 1989). One might guess that the built environment and structure of Tijuana would reflect its century-old linkages with California. In fact, Tijuana clearly reflects the design influences of Mexican cities, while its counterpart, San Diego, displays all of the features of a decentralised North American freeway metropolis.

In 1950, Tijuana was a town of about 65,000 inhabitants, concentrated within an area that spread, at most, 2.5 miles from the central business district (CBD). In that sense it resembled what is often referred to as the 'pedestrian city' or walking city of North America that existed in the 19th Century (Jackson, 1985). Its compact form could be traced to three elements: the importance of downtown areas in Mexican cities; the greater availability of services near the centre; and the absence of automobiles as a form of intra-urban movement. Like other
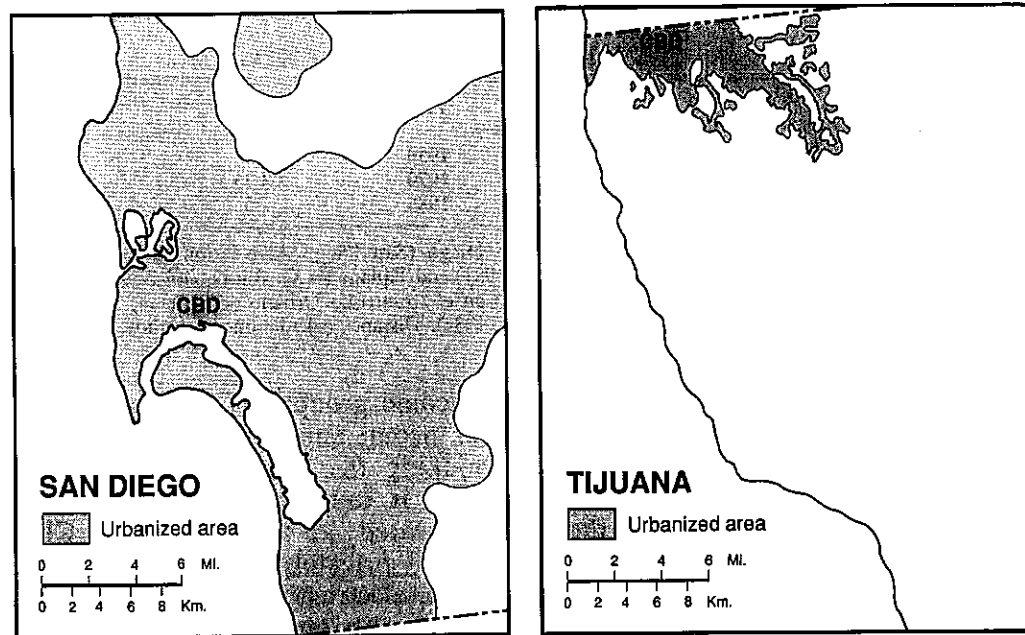

Fig. 2. Urban growth pattern, 1980, City of San Diego and Municipality of Tijuana.

Mexican cities, Tijuana was a town whose activities largely revolved around the CBD. The main commercial activities, banks and government office buildings were concentrated there. At one time there had been several main squares (plazas) in the downtown, but these gradually disappeared as the city's orientation shifted toward the tourism street, *Calle Revolucion*. When Tijuana expanded, in the first half of the 20th Century, residential services like electricity, sewerage and running water were mainly accessible in and around the downtown. Thus the city remained spatially compact. Even in the post-World War II period, the low *per capita* automobile ownership rates made it difficult for the city to expand centrifugally.

Between 1950 and 1980, Tijuana's economic base modernised and expanded in both the industrial and service sectors. In three decades, the population increased by more than 1000%. By 1980, there were officially over 700,000 residents, and the outer edge of the urbanised area reached some 7.5 miles out from CBD, mainly toward the southeast. Despite continued growth in the period 1980–1990, relative to North American cities, Tijuana remains a geographically compact metropolitan zone.

San Diego, on the other hand, is a diffuse freeway metropolis. Its physical area, since 1950, has remained nearly three times as large as Tijuana (see Table 1). In 1950, the San Diego region had some 556,000 inhabitants living in an urbanised space whose outer edge measured an average of 8 miles from downtown San Diego (compared with Tijuana's 1950 edge which was only 2.5 average miles from the CBD). By 1970, San Diego had grown to house 1.3 million residents in a space that grew to an average distance of 12 miles from the CBD (as opposed to Tijuana's 3.75 mile outer edge). Between 1970 and 1985, the San Diego region continued to spread outward, with the outer limits reaching an average of 24 miles from the CBD. In Tijuana expansion would be noticeably less centrifugal, to an average of 7.5 miles away from the centre. San Diego's growth was suburban and exurban, toward rural towns and *ranchos* — isolated, exclusive communities distant from the old city centre. San Diego was able to develop its periphery first, because of its extensive streetcar infrastructure in the first decades of the 20th Century, and, later, as a result of post-1950 freeway construction which opened up suburban locations in the north, east and south.

Table 1. Border metropolitan area growth patterns, Tijuana and San Diego

	Year	Tijuana	San Diego
Average distance from Central Business District to	1950	2.5	8.0
edge of urbanised territory (miles)	1970	3.75	12.0
	1985	7.5	24.0

Source: base maps of population expansion in San Diego (San Diego Association of Governments, *Comprehensive Plan for the San Diego Region*, Vol. 10, 1981) and Tijuana (A.G. Ranfla and G. Alvarez de la Torre, "Expansion Fisica, Formas Urbanas y Migracion en el Desarrollo Urbano de Tijuana, 1900–1984", *Ciencias Sociales*, Serie 3, Cuaderno 2, UABC, Tijuana, 1984). Distance calculations by author.

One can also compare the location of income groups in Tijuana and San Diego. In Tijuana the pattern is clear. Higher income families generally live near downtown, principally in the hills overlooking the river zone. A second important concentration of wealthy residents is found along the coast. On average, high income neighbourhoods are located 2.3 miles from the CBD (Table 2). Wealthy residential zones are typically privately funded sub-divisions with all major urban services (water, sewerage, electricity, paved streets, *etc.*). The poorest residents live in the irregular settlements farthest from downtown. They average nearly three times the distance from the CBD as wealthy neighbourhoods, or about 6.5 miles (Table 2).

Table 2. Location of income groups in US and Mexican border cities (1980)

		Tijuana	San Diego
Average distance (miles) from Central Business District (CBD), 1980	High income areas	2.3	10.6
	Low income areas	6.5	3.1

Source: US Bureau of the Census, *1980 Census of Population and Housing, Census Tracts, San Diego, California*; and A. Mungaray and P. Moctezuma, *Distribucion del Ingreso en el Area Urbana de Tijuana*, UABC, 1985. Income data base maps and distances calculated by author. For San Diego, high income was US$40,000 and above; low income below US$12,999. For Tijuana, high and low income based on socio-economic variables identified in Mungaray and Moctezuma (1985).

San Diego's social ecology is distinct. The downtown is not a magnet for elite residential location; the important influences on residential location are the coast, the rural spaces to the north, and environmental amenities such as canyons, hills, parks, open space and view corridors. For high income groups, wealthy pockets are found either along San Diego Bay and nearby Mission Bay, near parks like Balboa Park, or in the open lands to the north and east. Suburban and rural privacy dominate the residential location decisions of wealthy families and on average these upper income neighbourhoods are 10.6 miles from the CBD (Table 2).

Poor neighbourhoods, on the other hand, tend to cluster in traditionally less desirable locations, either in older, high density areas near downtown, or near old industrial districts, also adjacent to the CBD. In San Diego, the main low income wedges run from the CBD to south of downtown, and also from the CBD toward the east. The average distance of poor neighbourhoods from the downtown is 3.1 miles (Table 2).

Thus, for Tijuana–San Diego we find that the location patterns for rich and poor residents contrast sharply. In Tijuana, the rich live closer to downtown (average 2.3 miles), while in San Diego they live farther away (average 10.6 miles). In Tijuana, it is the poor who live far from the CBD (average 6.5 miles), while in San Diego the poor tend to live closer to the CBD (average 3.1 miles).

CONCLUSION

The Mexico–USA border zone presents a unique pattern of human settlement, where the urbanisation process from Third World and First World nations meet at an international boundary. In such zones, town planning is elevated to the level of trans-national discourse and foreign policy. The first step in achieving cooperation in policy-making along this international border is for both nations to better understand the cultural differences in the nature of their cities as physical artifacts and reflections of national values. This article has attempted to begin this discourse.

As urbanisation continues along the border, its impacts — in the areas of environmental policy, trade, trans-border industrial development, housing and transportation — will become part of the US–Mexico foreign policy agenda. There will be a greater urgency to incorporate a cross-cultural approach to border urbanisation into the bi-lateral dialogue, in the areas of both scholarship and policy. Until this dialogue is translated into policy, US–Mexico border cities will remain as a special example of First World–Third World tension between two cultures and two polarised political economic systems imbedded in a common geographical setting.

REFERENCES

Abu Lughod, J., *Rabat: Apartheid in Morocco*. Princeton University Press, Princeton, 1980.

Allinson, G.D., *Suburban Tokyo*. University of California Press, Berkeley, 1979.

Bater, J., *St Petersburg: Industrialisation and Change*. Edward Arnold, London, 1976.

Bilateral Commission on the Future of US–Mexico Relations, *The Challenge of Interdependence: Mexico and the United States*. University Press of America, New York, 1989.

Claval, P., "Reflections on the Cultural Geography of the European City", in *The City in Cultural Context*, Agnew, J., Mercer, J. and Sopher, D. (Editors), pp. 31–49. Allen and Unwin, London, 1984.

Cornelius, W., *Politics and the Migrant Poor in Mexico City*. Stanford University Press, Stanford, 1975.

Cornelius, W., Chavez, L. and Castro, J., *Mexican Immigrants and Southern California: A Summary of Current Knowledge*. Center for US–Mexican Studies, UCSD, La Jolla, 1982.

Cox, K., *Conflict, Power and Politics in the City*. McGraw-Hill, New York, 1973.

Dillman, C.D., "Urban Growth Along Mexico's Northern Border and the Mexican National Border Program", *J. Developing Areas* **4**, 487–507, 1970.

Dillman, C.D., "Border Urbanisation", in *Borderlands Sourcebook*, Stoddard E., Nostrand, R. and West, J. (Editors), pp. 237–244. University of Oklahoma Press, 1983.

Dotson, E. and Dotson, L., "Ecological Trends in the City of Guadalajara, Mexico", *Social Forces* **32**, 367–374, 1954.

Fernandez, R., *The US–Mexico Border: a Politico-Economic Profile*. University of Notre Dame Press, Notre Dame, 1977.

Fernandez Kelly, P., *For We Are Sold: I and My People*. SUNY Press, Albany, 1983.

Friedman, J. and Morales, R. "Transborder Planning: a Case of Sophisticated Provocation?", Paper presented at Conference on Borderland Studies, Tijuana, Mexico, 1984.

Garcia, M., *Desert Immigrants: The Mexicans of El Paso, 1880–1920*. Yale University Press, New Haven, 1981.

Garreau, J., "MexAmerica", in *The Nine Nations of North America*. Avon Books, New York, 1983.

Gilbert, A. and Ward, P., *Housing, the State, and the Poor*. Cambridge University Press, Cambridge, 1985.

Griffin, E. and Ford, L., "A Model of Latin American City Structure." *Geographical Rev.* **70**, 397–422, 1980.

Hall, E.T., *The Hidden Dimension*. Anchor Books, New York, 1969.

Hansen, N., *The Border Economy*. University of Texas Press, Austin, 1981.

Hansen, N., "European Trans-boundary Cooperation and Its Relevance to the US–Mexico Border", *J. American Institute of Planners* **49**, 336–343, 1983.

Hayner, N., "Oaxaca: City of Old Mexico", *Sociology and Social Research* **29**, 87–95, 1944.

Hayner, N., "Mexico City: its Growth and Configuration", *American J. Sociology* **50**, 295–304, 1945.

Herzog, L.A. (Editor), *Planning the International Border Metropolis*. La Jolla, Center for US–Mexican Studies, 1986.

Herzog, L.A., *Where North Meets South*. CMAS/University of Texas Press, Austin, 1990.

House, J., *Frontier on the Rio Grande*. Oxford University Press, New York, 1982.

Jackson, K., *Crabgrass Frontier*. Oxford University Press, 1985.

Jones, R. (Editor), *Patterns of Undocumented Migration*. Rowman & Allanheld, Totowa, 1984.

Leonard, O., "La Paz, Bolivia: its Population and Growth", *American Journal of Sociology* **13**, 448–454, 1948.

Markusen, A., "Class and Urban Social Expenditures: A Local Theory of the State", *Kapitalistate, Working Papers on the Capitalist State* **4** (Summer), 50–65, 1976.

Martinez, O.J., *Border Boom Town: Ciudad Juarez Since 1848*. University of Texas Press, Austin, 1978.

Nuttall, Z., "Royal Ordinances Concerning the Laying Out of New Towns", *Hispanic American Historical Rev.* **5**, 249–254, 1922.

Pezzoli, K., "Land Use Conflicts at Mexico City's Ecological Frontier: the Case of Ajusco", Paper presented at the *Western Political Science Association Meetings*, Newport Beach, California, 1990.

Pinera, D. (Editor), *Historia de Tijuana*. Centro de Investigaciones Historicas UNAM–UABC, Tijuana, 1985.

Portes, A. and Walton, J., *Urban Latin America: the Political Condition From Above and Below*. University of Texas Press, Austin, 1976.

Price, J., *Tijuana: Urbanisation in a Border Culture*. University of Notre Dame Press, Notre Dame, 1973.

Rapoport, A., *House Form and Culture*. Prentice Hall, Englewood Cliffs, 1969.

Rapoport, A., "Culture and the Urban Order", in *The City in Cultural Context*, Agnew, J. *et al.* (Editors), pp. 50–75. Allen and Unwin, London, 1984.

Reps, J., *The Making of Urban America*. Princeton University Press, Princeton, 1965.

Ross, S. (Editor), *Views Across the Border*. University of New Mexico Press, 1978.

Sjoberg, G., *The Pre-Industrial City: Past and Present*. Free Press, New York, 1960.

Sklair, L., *Assembling for Development.* Unwin and Hyman, London, 1989.

Stanislawski, D., "The Origin and Spread of the Grid Pattern Town", *Geographical Rev.* **36**, 105–120, 1946.

Stanislawski, D., "Early Spanish Town Planning in the New World", *Geographical Rev.* **37**, 94–105, 1947.

Suarez Villa, L., "Urban Growth and Manufacturing Change in the US–Mexico Borderlands", *Ann. Regional Sci.* **19**, 54–108, 1985.

Swann, M., *Tierra Adentro.* Westview Press, Boulder, 1982.

Tamayo, J. and Fernandez, J.L., *Zonas Fronterizas (Mexico–Estados Unidos).* CIDE, Mexico, D.F., 1983.

Tuan, Y., *Space and Place.* University of Minnesota Press, Minneapolis, 1977.

Urquidi, V., "The Underdeveloped City", in *Urbanization in Latin America*, Hardoy, J. (Editor), pp. 339–366. Anchor Books, New York, 1975.

Western, J., *Outcast Capetown.* Allen and Unwin, London, 1979.