Let's make places

Placemaking @ Somerset
Bridlewood station

Theme @ Victo...

Closed kiosk @ Whiteh...

Park 'n Ride @ Somerset /
Bridlewood station

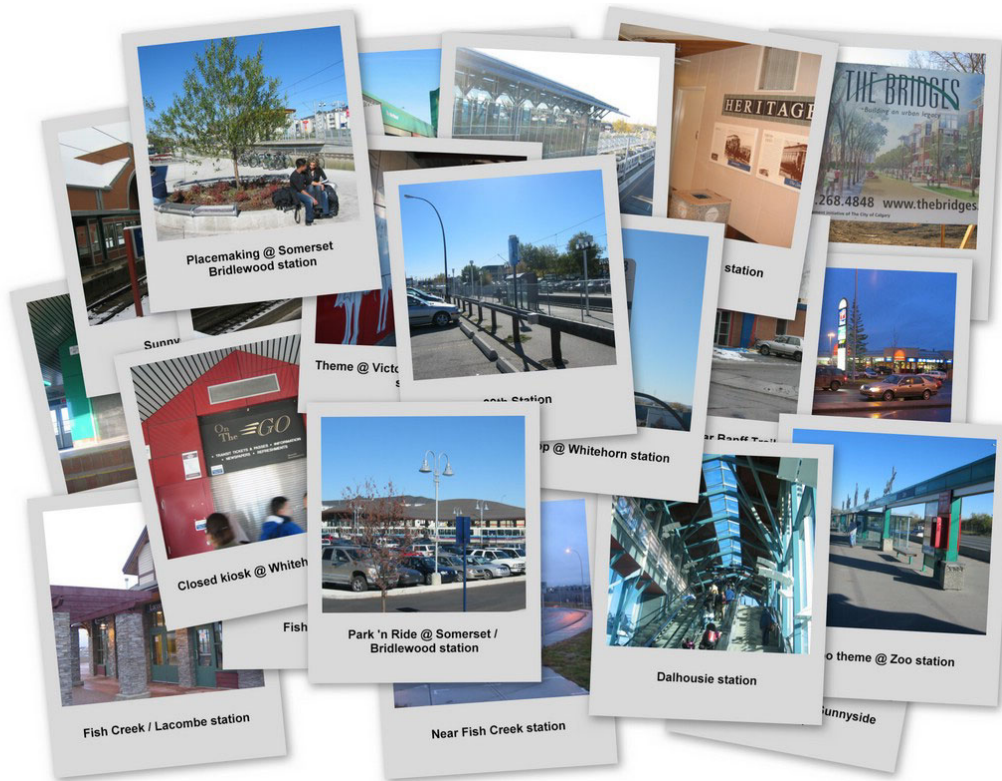Fish Creek / Lacombe station

Near Fish Creek station

Dalhousie station

A cultural geographical evaluation of the concept of place in the development of transit oriented LRT station areas in Calgary

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Abstract

Calgary is the fifth largest city in Canada in population, but it is Canada's second largest city in land use. This city of around 1 million inhabitants is growing and sprawling at a fast rate. Although many people chose to live suburban, the ills of a sprawling urban form are more and more recognized because sprawl has negative outcomes on economic, environmental and societal affairs.

The introduction of streetcar railway in Calgary led to a first wave of suburbanization in the early 20th century. In contrast to diverted automobile oriented sprawl, this suburbanization was mainly corridor-like and oriented around the streetcar railway. In an attempt to fight many of the illnesses of urban sprawl, the City of Calgary has recently introduced its Transit Oriented Development (TOD) policy guidelines. Just as the streetcar almost one 100 years ago, it is centred on creating a walkable, mixed-use form of development focused with a close (typically 600 metres) radius of a transit station.

Having high quality rail is a first necessity for successful Transit Oriented Development. However, having station areas made places also contributes to the success of TOD. This thesis has explored the roots of TOD in Calgary to find out why the concept of place is focused on in TOD. Secondly, Calgary's policy on place making has been evaluated from a cultural geographical perspective to offer a needed state-of-the-art review on if, and how LRT station areas in Calgary can be made successful places

Being a type of New Urbanism, TOD can be described as a reactionary movement. Whereas in orthodox modern planning place was seen as a just segment of space, place can better be viewed as time-thickened or social space in the (Jacobs' inspired) New Urbanism movement. Transit Oriented Development in Calgary focuses on transforming transit nodes into unique, vibrant and mixed-use places. It is expected by the City of Calgary that this fosters distinctive, attractive communities with a strong sense of place.

Place is an elusive concept that is under pressure and is subject to much debate in the field of geography; especially as time-space compresses. Two major schools of thought that have proven to be influential in conceptualizing place; the phenomenological movement and ideas of network urbanists have been introduced. Both perspectives have shown that place remains a highly relevant concept, as both social connections and human consciousness have a geographical ramification. Making station areas places can therefore contribute to the success of transit oriented LRT station areas.

Agnew's tripartite definition of place, constituted of the components location, locale and sense of place has proven to be a helpful tool to work with the concept of place.

Combined with theories on the Information Age, a state-of-the-art-review of making station areas place was given. Firstly, it was found that planning in the current timeframe should encompass social and environmental perspectives try to create meaningful places and be non-defensive in its type. This fits Calgary's TOD policy quite accurately. A more in-depth review showed that the two sub policies of making station areas places, make each transit station a landmark and emphasizing sightlines and views even answers Castells' call for symbolic nodality.

A discussion on threats and opportunities for station areas helped summarizing and characterizing what a successful TOD station area, as seen from the concept of place, should be like in the years to come. Shortly summarised, LRT stations have the qualities to become real places and gateways for diverse communities, although it should not be forgotten that planners and architects only have a facilitating role in the process of place making. The dangers of enforcing sense of place and mimicking place, as is often the case in New Urbanism, have been clarified.

The discussion on mobility environments explained that LRT stations have to become central nodes in local webs, as this will attract many people and businesses to the station areas. Dennett's plea for urban encounter, Whyte's view on density and Massey's routed view on place, all added to the concept of *centre* being vital for making LRT stations areas vibrant and mixed use places.

The discussion on threats and opportunities of making TOD station areas into places gave a theoretical foundation for the review of two case studies. Analyzing the station areas at the Bridges and the future Southeast Centre as places showed some strengths and weaknesses of current transit oriented developments in Calgary. The Southeast Area Structure Plan gave a progressive, well rationalized view on place making and the role of LRT station areas in this new centre. Nevertheless, the proposed surface parking and the uncertainties on when the LRT line will be opened are issues of major concern.

The LRT station at the Bridgeland-Riverside community suffers from a peripheral location and a low connectivity. Together with a backward looking view on locale in the Area Redevelopment Plan, these issues form a barrier for the station area to become a place for many people.

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List of Abbreviations

ARP	Area Redevelopment Plan
BRT	Bus Rapid Transit
CBD	Central Business District
CMA	Census Metropolitan Area
C-Train	Calgary Train (Calgary's Light Rail Transit)
LRT	Light Rail Transit
SEC	Southeast Centre
TBL	Triple Bottom Line (policy)
TND	Traditional Neighbourhood Design
TOD	Transit Oriented Development
U of C	University of Calgary
USP	Urban Structure Plan

Introduction

For we are neighbours of the world
A shining city we Call Calgary
For we are neighbours of the world
A place for you a place for me
(Neighbours of the world, written by Loney & Bowman)

The official song of Calgary describes how this city is a place for you and a place for me. However, from the perspective of cultural geography this fact can be disputed as the city suffers from urban sprawl, a phenomenon which is said to lead to placelessness. Of course, the term placelessness is to be taken metaphorically, as it only suggests a soullessness of places. Smart Growth, New Urbanism and Transit Oriented Development (TOD) are some of the now popular urban design and planning movements in North America which, challenge this soullessness of places. Their philosophies are based on improving long term social, economical and ecological health of cities and towns.

The City of Calgary recently published its Transit Oriented Development Policy Guidelines. These guidelines provide policy directions for the development of areas near transit stations. Calgary expects these transit oriented developments to be beneficial in both economic and environmental terms and help foster a diverse and vibrant community for local residents and visitors. An important factor in achieving these goals is that each transit oriented station area is to be made 'a place'.

In the field of geography, place is an elusive, contested and much theorized concept. Theories developed in the last decade emphasize the pressures on place due to the speeding up of social and economical processes. While some scholars highlight the opportunity to have nodes in networks made places, others stress the dangers of superficial place making and call for a more flexible understanding of place. This thesis, therefore, provides a needed state of the art insight on if, and how station areas in Calgary can be made successful places.

This research focuses on Calgary's policy of place making of LRT station areas and explores the context which it is made in. The first goal of this thesis is to put Calgary's TOD policy in its geographical and historical background. This will answer the question why the City of Calgary wants to turn transit stations into places and positions this into its broader context. The second goal of this thesis is to evaluate Calgary's policy on place making from a cultural geographical perspective. This will answer the question to what extent Calgary's place making policy is in accordance with new insights on the concept place. Weaknesses, strengths, opportunities and threats of Calgary's policy on place making will be discussed.

The first chapter of this thesis introduces the city of Calgary and gives a short history of the city and its urban form. Furthermore, it will be discussed that Calgary suffers from sprawl and placelessness. The chapter concludes with discussing a theory that argues for TOD-like planning to overcome these 'illnesses'. In the following chapter, more information on the specific planning paradigms that plea for place making will be issued. This chapter will clarify this web of terms and schools, and focuses on Calgary's practices in this respective subject.

From the third chapter onwards, the specific place making policy in Calgary will be elaborated upon. The third chapter discusses the concept of place and argues that this concept should be worked with in a progressive way as our society is changing. The following chapter will further elaborate on this and it will also characterize what a successful TOD station area, as seen from the concept of place, should be like in the years to come. Chapter five will discuss two case studies of TOD-like developments in Calgary. The vision of place making that is outlined in chapter three and four will form the theoretical foundation for the review of these cases. The final conclusion follows the chapter on the case-studies.

In addition to the main text, this thesis also contains footnotes and boxes. The boxes highlight practical aspects and give a Calgarian view on the discussed topics.
Whereas the boxes zoom-in on a discussed topic, the footnotes zoom out. Most footnotes connect the discussed 21st century topics to the debate on modern city planning in the 1960's, as remarkable parallels can be drawn.
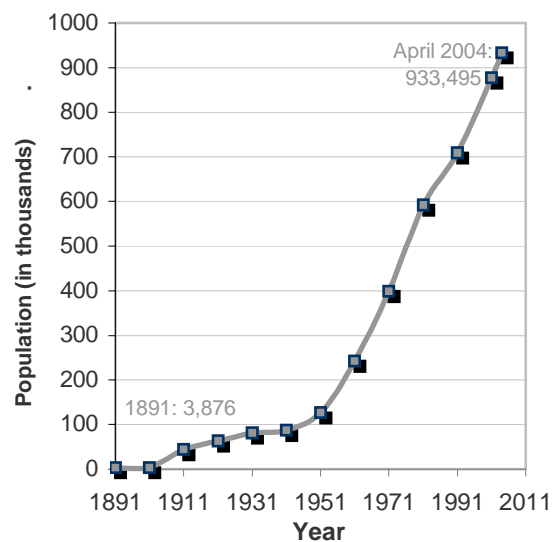
1. Calgary

1.1. | The City of Calgary

In its only short history, Calgary has experienced consequent cycles of boom and bust which were all related to rail and oil. In 1883, the first train from the Canadian Pacific Railway reached the village of Calgary, which still had less than one thousand inhabitants. During the following decades, Calgary became the most important distributing centre in southern Alberta. Due to the intensive immigration campaign during the beginning of the twentieth century, the city grew to more than 40,000 inhabitants in 1911.

In 1914, oil was discovered near Turner Valley, this only led to a short boom because of the outbreak of World War I. The entry of the oil and gas industry into Calgary's commercial life led to a new boom after 1947. New petroleum fields were discovered in Alberta, and the national economy was flourishing. Calgary became the Canadian headquarters of the oil and gas industry, and the city began to stand separately from its hinterland (Foran, 1978, p.157). The international oil crisis during the mid-seventies led to yet another boom in Calgary. As the population chart (Figure 1.A) shows, Calgary's population went up with almost 200,000 people in the years from 1971 to 1981. In

Figure 1-A: The population of Calgary

Data from: http://www.calgary.ca

the early nineteen eighties, the city suffered from the worldwide oil bust, and the year 1983 became the first year in history of Calgary to record a population decrease (The City of Calgary, 2004a). During these years, politicians and businessmen diversified the city's economy in an effort to minimise the impact of the fluctuation of oil prices. This policy was meant to build a stronger economic base for the future.

During the last decade of the twentieth century, some of Canada's largest corporations moved their head offices from the more traditional business centres of Montreal and Toronto to Calgary. In 1996, Canadian Pacific Railway Ltd. Moved from Montreal to Calgary, creating around 1400 jobs. Recently, Imperial Oil, one of Canada's largest producers of crude oil moved its corporate headquarters from Toronto to Calgary (Ebner, 2004).

Nowadays, the city of Calgary has become the 'Headquarters Capital of Western Canada´ and the prospects for the city's future are very bright. The city is currently one of the fastest growing cities in North America. With a growth rated of 15, 8% between 1996 and 2001, Calgary has led Canada in terms of population growth across key urban centres. The city of Calgary had a population of about 922,000 inhabitants in April 2004 and it is projected to pass the one million mark in 2007 (Tobert, 2003).

The arrival of the Canadian Pacific Railway made the growth of Calgary possible during the last quarter of the 19th century. Since then, the discovery of oilfields highly contributed to the prosperous growth of this prairie metropolis that currently is the headquarters Capital of Western Canada. Apart from oil and rail being external factors that contributed to Calgary's growth, rail and (oil-based) car transportation have also been determinative in shaping Calgary's urban form. Therefore, next paragraph will handle the different types of transportation that have shaped this city to this day.

1.2. | Transportation in Calgary

During the beginning of the twentieth century, when Calgary started to develop to a medium sized city, the streetcar was introduced in this city. Almost one hundred years ago, in 1909, the Calgary Street Railway was founded and had two streetcars operative. The street railway was an instant success and by July of 1910 the 11 cars, operating on 22 miles, served 14,210 passengers per day (Gilkes & Symons, 1975, p. 392). The streetcar network kept growing, and by 1912 it almost covered 60 miles of track (Foran, 1978, p. 90). As almost no people had access to private motorized vehicles in those days, the introduction of this new, rapid and affordable type of transportation made a great impact on the shape of the city. The introduction of this means of transport, even led to the first wave of a suburbanization in Calgary. David Ames (1995, p. 97) argues, that it was the streetcar that created the modern metropolitan area as a settlement form: an urban region made up of a high-density central city surrounded by lower-density suburbs whose residents commute daily to jobs in the central city. This is clearly the case for Calgary's urban form. By the early 1910's, the city sprawled more than 10 miles from the city centre. As Foran (1978, p. 90) states: "*the prime mover in this phenomenal suburban growth was the streetcar*".

The introduction of the streetcar railway made commercial enterprises feasible beyond the city centre, and the places were streetcars converged became a centre of activity. Nevertheless, the downtown core stayed dominant in the local economy. In 1944, when the automobile began to become the dominant form of transportation, still 67,000 passengers (one-way) used the streetcars daily and commercial activity was hardly diverted throughout the city (Foran, 1978, p. 132).

By December 1950, the streetcars were completely replaced by trolley coaches and motor buses (Gilkes & Symons, 1975, p. 395); this was mainly done because of their

cheap operation costs and flexibility. By the time that the buses had taken over the streetcar, public transport was no longer the dominant form of transportation in the city. Whereas the first wave of suburbanisation was mainly corridor-like and oriented around the streetcar railway, the automobile made a more diverted suburbanisation possible. After World War II, automobile ownership was widespread, so people could afford to live in any low-density area relatively far from the city-centre.

By the end of the fifties, Calgary had rings of new suburban neighbourhoods, like Cambrian Heights, Chinook Park and Thorncliffe. This second wave of suburbanisation was predicated on the car: it made expanses of low density housing possible and sprawling subdivisions made the car necessary (Glenbow Museum, 2004). Unlike during the first wave of suburbanisation, the downtown area did not longer stay solely dominant in the city's economic system. Its importance as a retailing and service area began to decline, because the 'neighbourhood planning principle' was introduced during the 1960's and this development led to self-contained neighbourhoods (Foran, 1978, p. 165). This neighbourhood planning principle can be regarded as one of the city's first design solutions to the onslaught of the automobile. These newly planned neighbourhoods were bypassed by trough traffic and had an internal street system of varied layout (Ames, 1995, p. 98). Like small villages, the self-contained neighbourhoods had their own services like a church and an elementary school. A new development was that a group of neighbourhoods would often share a shopping mall. In the early 1960´s, some shopping malls were already built in Calgary.

In 1963, two shopping centres were being named as points of interest in the *Calgary visitor's guide* (Calgary Tourist and Convention Association, 1963). These malls were the Calgary Shopping centre on 16th avenue and the then brand-new Chinook shopping centre. With dozens of stores and shops and parking for 3,000 cars, the Calgary Shopping centre was described as a complete one-stop shopping centre: *Plenty of parking for cars (3500 spots) makes Chinook centre a pleasant and easy location for shopping enjoyment (p. 45).* By that time, Calgary was shaped around the use of the automobile. In a sprawling city, with new big shopping malls, people had to take the car to get around. In the earlier mentioned visitor's guide (Calgary Tourist and Convention Association, 1963), the city was promoted as an active and motorised city. "*Calgary holds a unique position in today's world of rapid transportation. Only one city in the world (Los Angeles) has more automobiles per capita than Calgary*" (p. 50). In the metropolitan era there was an ownership of 118,352 motor vehicles, on a population of 279,062 (Calgary Tourist and Convention Association, 1963, p. 9).

In the years following 1963, automobile ownership per capita only raised further. In the fast growing city of Calgary, the inner area of the city stayed almost stable at almost 200,000 people, while the outer urban area grew with 731% during the years from 1961 till 1991 (Raad, 1998, p. 104). Even now, the City of Calgary (2004b) still expects that the vast majority of Calgary's net population growth will go to the new developing communities. Since 1999, these communities accommodated about 113,000

people, representing 109% of total net population growth. This sprawling growth is seen as a dangerous development by more and more people nowadays. The next paragraph will focus on the negative impacts of (sub) urban sprawl in Calgary.

1.3. | Urban Sprawl in Calgary

On Wednesday, November 12 in the year 2003, an article in the Calgary Herald headed "Group attacks city's 'sprawl' - Sierra Club says Calgary's woes have one cause" (Semmens, 2003). This article describes a campaign by the Sierra Club, a well-known environmental organization. Using the theme "Sprawl hurts all", the Sierra Club campaigned against urban sprawl in Calgary.

Table 1.A: Costs and benefits of sprawl

	Alleged Costs	Rating*	Alleged Benefits	Rating*
Public Services	Higher infrastructure costs	High	Lower public operating costs	Medium
	Higher public operating costs	Medium	Efficient long-term growth	Low
Transportation costs	Increased vehicle use	High	Shorter commute times	Low
	Increased travel times	Low	Less congestion	Uncertain
	Higher household transportation spending	Uncertain	Lower government transportation costs	Low
	Less efficient transit/ fewer travel choices	High		
	Higher transport social costs	Medium		
Environmental	Loss of agricultural land	High	Increased access to open space	Low
	Loss of greenspace, habitat	High		
	Increased energy use	Medium		
	Increased air pollution	Uncertain		
Quality of life	Aesthetically displeasing	Low	Lower crime rate	Low
	Reduced sense of community	Medium	Cheaper retail goods	Medium
	Less historic preservation	Medium	Fosters economic well-being	Medium
Social issues	Fosters segregation/exclusion	Uncertain	Fosters local land-use decisions	Medium
	Worsens inner-city Deterioration	Medium	Enhances municipal diversity and choice	Medium
	Fosters spatial mismatch	Medium		Medium
Economic	Reduced agglomeration efficiencies	High		

* Ratings indicate whether there is agreement this condition exists and is linked to sprawl.
Source: Litman, 2000

It are not only environmental organizations that warn against urban sprawl. Byron Miller, director of the University of Calgary's Urban Studies program calls the ongoing sprawl in Calgary '*A fiscal time bomb*' (Sankey, 2004). This is because a sprawling land-use pattern requires extra expenses in building and maintaining infrastructure. Beverly Sandalack, director of the U of C's Urban Design program, says that current development in Calgary is not sustainable. Both Miller and Sandalack plea for a focus on redevelopment of inner city areas instead of building more single-use suburbs (Sankey, 2004). In a recent report about the Edmonton-Calgary Corridor written by the TD Bank Financial Group, six challenges are being addressed for Main Street Alberta (the urban-

axis from Calgary in the south to Edmonton in the north). One of these challenges is the growing problem of urban sprawl (TD Economics, 2003).

Calgary is a highly auto dependent city (Kenworthy, Laube & Newman, 1999). The source and outcome of this dependency is the city's sprawling urban form. This city of almost one million inhabitants is Canada's fifth biggest city in population, but Canada's second largest city in land use. Calgary extends to a total of 720 square kilometres. Car travel is the default mode of access to go to work, do shopping and get around in the city. From this point of view, Calgary is an archetypical North-American city as it has a low density and a high car use.

Because transportation joins up the places where people go to lead their lives and to meet their obligations (Stradling, 2003), this has resulted in many of these locations being distant from home in sprawling Calgary. Table 1.A (see previous page) gives an overview of the costs and benefits of urban sprawl. Sprawl is not an intrinsically ´evil´ development. Many people are attracted to the suburban lifestyle and the benefits that living in a suburb brings. This is explained in box 1.A.

Scholars have expressed negative economic, social and environmental impacts of urban sprawl. In this paragraph it is explained that urban sprawl is a challenge for Calgary as well. The city of Calgary is currently focusing on Smart Growth and sustainable transportation as a means reduce the sprawling of Calgary. As can be seen in figure 1.C, Calgary has not declared war on this development. Most growth of the city in the coming decades is predicted to be in new suburbs. As many people like to life in a suburb, this is not

Box 1.A: Urban sprawl

Figure 1-B: A suburban house in Calgary

Source: http://www.welist.com/pics/15044.jpg

The suburbanization of Calgary can probably best be described as a success story. Calgary is sprawling at a high-rate because many people prefer to live suburban and have the benefits like an affordable home with a garden and a big parking lot. Suburbs are commonly seen as safe and calm areas and therefore the ideal environment for raising kids. Adding to this that residential development on greenfield locations has significant advantages upon redeveloping brownfield areas, makes it not surprising that new residential development in Calgary during the coming decades is mainly expected in the new suburbs.

Figure 2-C: Residential development trends
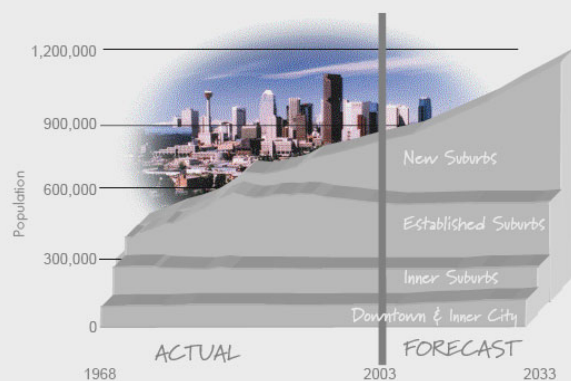
Source: The City of Calgary, 2004d, p. 15.

remarkable. Nevertheless, a focus on transit oriented developments will hopefully offer Calgarians an attractive extra choice: one of living in a ´European style´ mixed-use and transit oriented community.

In accordance with Byron Miller who regards the sprawl in Calgary a fiscal time-bomb, the results of a study for the World Bank in 1996 show that cities with significant sustainable transportations systems are least costly in terms of a range of quantifiable parameters including fuel-efficiency, air pollution, traffic accidents and in overall terms the percentage of city wealth that goes into transportation (Newman, 2001). Non-quantifiable social and environmental components can be added to this direct economical advantage of sustainable transportation as well. These components include the concern that planning for the car has created urban areas which are more dispersed, anonymous and dangerous and less child-friendly (Adams 1999, as cited by Strandling, 2003). This makes clear that Calgary's new focus on Smart Growth is beneficial in different facets.

1.4. | Density near transit stations

As stated in the previous paragraph, transportation joins up the places where people go to lead their lives and to meet their obligations. If people's lives and obligations could be more centered or could take place around areas of public transit, one would expect that high automobile dependence (and all its negative impacts) could be tackled. But it is not clear if people's lives and obligations can join up transportation and land-use, or if this force only works the other way around.

According to Kenworthy, Laube & Newman (1999, p. 586), cities tend to respond in reasonably predictable ways to changes in their environment. One of the outcomes of their worldwide research in 46 cities is that as densities increase, all the indicators describing auto dependence decline in a strong and systematic way. The authors also conclude that it is only in cities with good rail systems, that automobile dependency is reduced (*ibid,* p. 586). It is therefore that Kenworthy, Laube and Newman (*ibid,* pp. 155-165) and Newman (1992) argue for three matching policy orientations that lead to a decline of automobile dependence and ascertain progress in sustainability. The first policy is that of a rail-based transit. Only cities with a high quality rail (having a complete network, integration with the bus services etc.) can compete with cars. The second policy is that of Traffic Calming. The streets should be humanized and the city's planning and sustainability agenda must also incorporate walking and biking. The third and final policy is a plea for Urban Villages. These villages should occur near transit stations and are mixed use areas designed to minimize car use. Urban villages also need to emphasize the quality of public spaces and a more community-based approach to design. A recent quantitative analysis by Kuby, Barranda & Ubchurch (2004) backs the cited scholar; their study on LRT station in the USA showed the importance of land use and accessibility in determining light-rail ridership.

The first challenge for Calgary is of course to create a high quality rail system. The C-train serves a big part of city and its network is still extending, more information on the C-train is given in Box 1.B. There are a lot of complaints about the trains being packed, and the main issue at the moment is the capacity of the C-train. In the coming years, the city of Calgary will buy more than thirty cars to accommodate current capacity issues and to make future growth possible. The second and third challenges for Calgary, according to this study, are to implement Traffic Calming and create Urban Villages or Transit Oriented Development.

Box 1.B: Calgary's C-Train

In total, the Calgary Light Rail Transit Line, also named the C-train, consists of 36 stations and operates on 42 kilometres of track. Operations began with one line in 1981, and currently the system is comprised of two lines. The 201 line operates from Somerset/Bridlewood in the South to Dalhousie in the North. The 202 line starts at Whitehorn in the north-eastern part of Calgary and ends at 10 St. S.W. in downtown Calgary. The downtown area in Calgary is a free-fare zone. The adult cash fare for outside this area is $ 2.00 and it is possible to buy a ticket book or different type of passes at a reduced rate. The LRT service has a 5 minute frequency during rush hour, this is usually from 7 to 9:30 am and from 4:30 to 7 pm. During the off peak time, the service is reduced to a 15 minute service (Calgary Transit, 2005).

Calgary Transit transports over 200,000 riders every weekday on the C-train. Attachment A provides, among others, ridership statistics of the C-train stations. Ridership in Calgary is growing and its LRT network is still expanding. Since 2001, four new stations have been opened on the South line. For the near future there are plans to expand the current lines. In the long term it is planned to open new lines, including a North line connecting with the airport, a West line and a Southeast line which should run to the McKenzie Towne community (C-train article in *Wikipedia*, 2005).

Figure 1-D: LRT map of Calgary
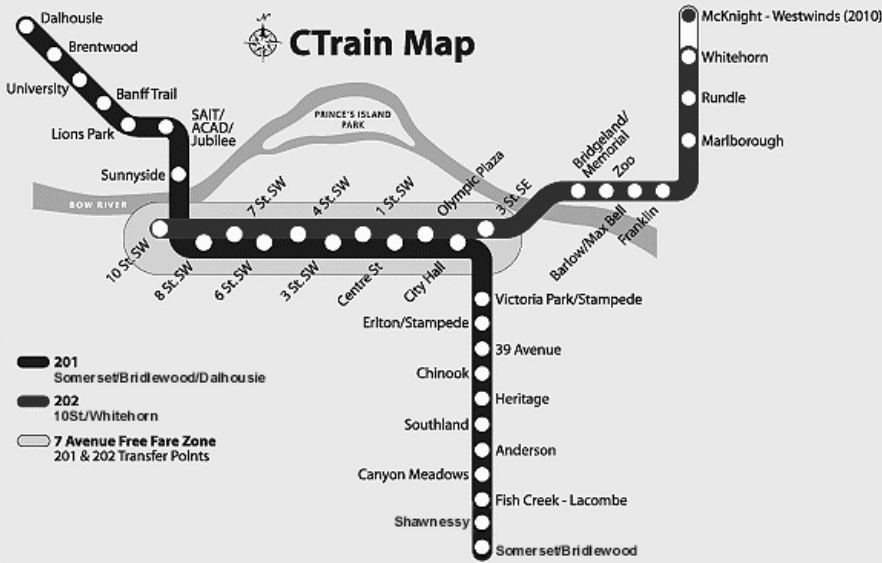
Source: http://www.calgarytransit.com/Routes/ct_train_map.gif

Concluding this chapter, we see that the arrival the Canadian Pacific Railway was a first key force in the development of Calgary. The streetcar railway line had a major impact on the morphology of the city in the first half of the twentieth century. The discovery of large oilfields in Alberta acted as a catalyst for the development of Calgary into a metropolis and the headquarter capital of western Canada. At the present time, the city form is oriented on automobile transportation. The city can be described as typical North-American, in that sense that Calgary is a sprawling city. Although scholars do not stand united about the precise impact and influence of sprawl[1], it is clear that the sprawling urban form (without stating if this form is a cause or an outcome) has negative effects on economic, environmental and societal affairs.

Since the 1990's, the City of Calgary has embraced sustainable urban developments to fight the ills of urban sprawl. Although the city will probably keep sprawling in the coming decades, the newly developed Transit Oriented Development policy guidelines can, as argued, be successful in reducing automobile dependence and ascertain progress in sustainability. The next chapter will focus on Transit Oriented Development and other types of sustainable urban development.

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[1] With a tinge of irony do Hasse & Lathrop (2003, p. 160) state that the literature on sprawl is broadly dispersed and multi-faceted. They conclude their article by stating that "*sprawling urban growth has significant associated social and environmental costs and represents a major challenge to land use planning and management in the coming century*" (*ibid,* p. 172-173).

2. New planning practices

2.1. | Placing sustainable urban developments

Since the 1990s, the City of Calgary has been promoting a style of planning called Smart Growth. The sustainable suburbs study from 1995 outlined ways to develop communities in a socially, economically and environmentally sustainable way. The Calgary Plan, the municipal development plan from 1998, is the City's key strategic guide to growth and development. This plan addresses many of the Smart Growth principles (The City of Calgary, 2002). In the same years as these plans were developed, McKenzie Towne was constructed following the principles of Traditional Neighbourhood Design (TND).

These examples illustrate that, like in most Canadian cities, sustainability-issues, have become of rising importance in policymaking since the 1990's. In late 2004, The City of Calgary published its Transit Oriented Development (TOD) Policy Guidelines, a new step in a sustainable-aware policy of the City of Calgary. Wheeler (1998, as cited by Sorensen, Marcotullio and Grant, 2004, p. 4) proposes a helpful definition of sustainable development: "*Sustainable development is development that improves the long-term health of human and ecological systems*", while sustainable urban development "*improves the long-term social and ecological health of cities and towns*".

These previously issued schools of planning are examples of sustainable development. The mentioned types of planning are interlinked and sometimes interchangeably used. An example of this is how Transit Oriented Development is labelled as a Smart Growth policy by the City of Calgary, while Grant (2004) labels TOD as a form of New Urbanism. The question of how to label these developments is of secondary importance[2]. Both New Urbanism and Smart Growth are seen as a way of combating sprawl and building better communities.

Smart Growth aims to channel new development into existing urban areas (brownfield development). The term was launched by the U.S. Federal Environmental Protection Agency to create an umbrella program for initiatives which have attempted to respond to the increasing degree of sprawl across the United States. The objectives of this movement focus on the long-term health of existing communities – economically, environmentally and socially. According to the American Planning Association (as cited by the Victoria Transport Policy Institute, 2005) the application of the principles of Smart Growth is "*epitomized by land reuse and compact, transit accessible, pedestrian-oriented, mixed use development patterns*". A crystal-clear definition that distinguishes Smart Growth from New Urbanism does not exist as there is much overlap between these fuzzy terms. Grant (2004, p. 154) describes Smart Growth as a catch phrase that gives

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[2] Hank Ditman, the chair of the Congress of New Urbanism is, for example, also on the Steering Committee of Smart Growth America (Gruber, 2005).

coherence to the policies that Canadian planners a applying. According to this author, Smart Growth implies a fusion of concepts from New Urbanism and sustainable developments.

One important thing that distinguishes New Urbanism from Smart Growth is its focus on design. While urban design at the neighbourhood scale is one of the central themes of the New Urbanism School of urban planning, it is mostly of secondary importance for developments that have been labelled as Smart Growth. The characteristics of both movements combined do uncover the reactionary nature of these interrelated movements. Both Smart Growth and New Urbanism can be seen as a reaction to the ills of a previous planning-paradigm, in this case modern(-ist) planning, a dominant form of planning during the 20th century. Looking at how place was conceptualised in these paradigms clarifies this. In modern planning, place was mostly seen as a bounded piece of Euclidian territory (Graham & Marvin, 2001, p. 203). Modernist city-planners and architects tried to create rational cities and places under the paradigm of the rigid separation of urban functions by zoning (functionalism). Elusive concepts like sense of place, that are hard to quantify and define, were not valued in this approach.

A well known example of modernist planning are the modern Central Business Districts (CBD's) in most Canadian cities. In the 1960's and 70's when these districts grew, the emphasis on how Canadian cities should appear and function was mainly on vertical growth and pure commercial development (Ilins, 1991). The archetypical Canadian CBD is likewise being dominated by anonymous high-rise (rationalism) and mono-functional (functionalism) office buildings. The white-collar workers who have their jobs in these areas often live in the likewise mono-functional, but low-density suburbs. In 1961, a highly influential critique on this type of modernist planning was published. This was the book "*The Death and Life of Great American Cities*" by Jane Jacobs. This book was an attack on the principles and goals which had formed modern, orthodox, urban planning. Jacobs saw diversity as the main quality of big cities. Whereas the principles of modern urban planning were based on rationalism and separation, Jacobs advocated integration of urban functions and creating *liveable* places. Her influential book became a guide for the critique on modern planning in the decades to follow and was an eye-opener to many people. Nowadays, most city planners, and New Urbanists for sure, try to create vibrant and mixed use city development, following a type of planning that has been popularized by Jane Jacobs.

Calgary sprawling urban form can be linked to modern planning. Whereas 'place' was just a particular type of quantifiable space in modern urban planning, this concept is of key-importance in the approach of Jacobs and her successors. In the utopian modus of modernist planning, the perfect city was subdivided in different mono-functional zones for working, living, recreation and a zone for traffic connecting these urban functions. Interconnected with this planning-philosophy was a changing and increasingly mobile society in the mid-twentieth century. After World War II, automobile ownership was

widespread in Canadian cities, so people could afford to live in any low-destiny area quite far from the city-centre. From a qualitative 'place' point-of view, sprawling suburbs have been described as alienating, soulless places in the famous sociological studies of Rieseman and Whyte during the late sixties (Bruegmann, 2001). The equation of suburbia and sprawl with social alienation was revived in the 1990s, for example in studies about the privatization of public spaces and also in the New Urbanism movement.

This paragraph opened with Wheeler's definition of sustainable urban development as a development that improves the long-term social and ecological health of cities and towns. Developments like New Urbanism and Smart Growth can be regarded sustainable urban developments, as they both have an integral social, economical and ecological focus. The introduction on the roots of these movements clarified some of the social focuses of these movements. Unlike in modern planning, these movements recognize place as a complex and non-quantifiable concept. The next paragraph will focus on this and the New Urbanism movement will be discussed, because Transit Oriented Development is regarded to be a New Urbanism style development by scholars (Grant, 2004).

2.2. | New Urbanism

New Urbanism became the gospel in North American planning in the 1990's (Grant, 2002, p. 73). Neal (2003, p. 8) describes New Urbanism as a movement *"about returning to a compact, close-knit community."* The Congress for the New Urbanism is the spokesperson for this movement. This congress even wrote the charter of the New Urbanism[3], this document makes clear what this movement is about: *"The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society's built heritage as one interrelated community-building challenge"* (Congress for the New Urbanism, 2000, p. 1, underline by present author). As stated in the previous paragraph, this movement promotes sustainable urban development. As New Urbanism is a movement about returning to a compact and close-knit community, it has a conservative or traditional component. Sometimes it is addressed as neotraditional town planning. This term carries the element that New Urbanism blends the old and the new. Like in archetypical North-American urban neighbourhoods in the early twentieth century: mixed land use, a grid based street structure, moderate residential densities, pedestrian circulation and transit use (Guiliano, 1995, p. 322) are elements in New Urbanism planning. The belief that

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[3] This title refers to the so called Charter of Athens. This charter, written by the CIAM (Congress for modern architecture), was the most influential document of modern (-ist) architecture and planning. Central theme in this charter was the separation of urban functions.

such a built environment can create a sense of community (Talen, 1999) is that what New Urbanism lives by.

Within New Urbanism, two major streams can be distinguished: Traditional Neighbourhood Design (TND) and Transit Oriented Development (TOD). Both concepts have their own ideals and principles within the range of thought of New Urbanism. Traditional Neighbourhood Design is developed by Andres Duany and Elizabeth Plater-Zyberk who founded the architectural firm DPZ in the early 1980s. One of their first projects was Seaside in Florida. This is the most-well known example of a TND-planned

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Box 2.A: McKenzie Towne

In the mid-1990s, McKenzie Towne was Canada's first (neo-) traditional neighbourhood. It has been designed in consultation with the guru of TND, Andres Duany. This project from building agglomeration Carma, is constructed out of different villages around a town centre. McKenzie towne is currently halfway trough development. Unfortunately, Carma moved away from some of its sustainability principles in later phases of development in an effort to recover costs and improve sales. Design concepts like apartments over stores and garages, proved too expensive to construct (Grant, 2002b).

Figure 2-A: McKenzie Towne

Source: http://www.calgaryarea.com

McKenzie Towne is located 13 miles southeast of downtown Calgary, nearby Deerfoot Trail which one of Calgary's main arteries. Unlike TOD, a transit connection is not the key-element of the McKenzie Towne Development. The area is currently only served by buses and an LRT connection is only planned in the long term. McKenzie Towne proves an interesting example of the other form of Traditional Neighbourhood Design. It is built and marketed for people who would like to live in a traditional small town setting. McKenzie Towne is promoted on its website (http://www.mckenzietowne-community.com) as follows: "*Picture an old-style neighbourhood with bustling High Street shops and classic homes featuring welcoming front porches. Add a town square with a 92-foot clock tower and Victorian bandshell. This is McKenzie Towne, Carma's neo-traditional* community". The 'towne' is criticized for only being (neo-)traditional in its architecture. The online-resource Demographia (an undertaking of Wendell Cox Consultancy – a firm that is "pro choice" with respect to urban development) puts well into words what many people criticize in TND. It labels McKenzie Towne as a suburb with a neotraditional façade: "*Beneath its traditional retro design core beats the heart of suburbia*" (Demographia, 2000).

community. McKenzie Towne in Calgary was the first TND-planned community in Canada; Box 2.A gives a short highlight of this neighbourhood in Calgary.

TND differs from TOD in its neotraditional-focus of architectural and town planning. Some keywords that describe TND are: "*small scale, mixed use, environmental sensitivity, internally consistent hierarchy of architectural, building, and street types, finite geometry with legible edges and a center, walkability, and alleys with accessory units and reliance on succinct graphic guidelines in lieu of traditional zoning codes*" (Kelbaugh, 2002, p. 355). Like McKenzie Towne in Calgary, TND is sometimes criticized for being not more than an architectural façade to suburban development. Unlike TND, transit oriented developments normally do not have strict architectural guidelines. As the name suggests, TOD is focused on transit. It creates an "*urban region structure with clusters of uses aligned in a density gradient from stations*" (Grant, 2002a, p. 74). This approach supports urban infill and redevelopment approaches, whereas TND normally is a greenfield development.

2.3. | TOD in Calgary

In the previous paragraph, the New Urbanism movement has been discussed. McKenzie Towne was an example of a TND-planned neighbourhood in Calgary. The other form of New Urbanism, Transit Oriented Development, which is actively being promoted by the City of Calgary, will be issued in this paragraph. The broader framework in which the recently published *Transit Oriented Development Policy Guidelines* (The City of Calgary, 2004e) functions will be discussed first.

The main policy for addressing issues like urban sprawl and social defragmentation in Calgary is the so called "Triple Bottom Line" (TBL). This is a framework "*for addressing economic, environmental, and social issues in an integrated fashion*" [4] (The City of Calgary, 2004b, p. 3). The following policies reflect the council's priorities.

- Economic: the council will encourage and promote economic development activities that contribute to Calgary's long-term prosperities.
- Environmental: the council will provide the leadership to conserve, protect, improve and sustain Calgary's environment.
- Social: the council will work toward a safe, inclusive community for all Calgarians, one that responds to the needs of its vulnerable and disadvantaged citizens, and where diversity is embraced and valued as a community asset.

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[4] This policy leads us back to Jane Jacobs (see previous paragraph). The disciples of modern city planning had a simplified and rationalized perception of how cities functioned. The metaphor of Le Corbusier to see the city as a machine (a collaboration of separate components) to live in, is an example of this vision. On the other hand, Jane Jacobs saw the city as an organised complexicity. The metaphor to the see the city as an organism (Jacobs, 1961, p. 438-439) fits her view. The TBL is an example of a policy in the Jacobs-style of thought in the twenty-first century.

- Smart Growth: the council will respond to Calgarians' desire for accessible, affordable, and appealing communities that have a mix of housing, jobs, shops, parks, and open spaces, connected by a well-planned, integrated transportation system.

Smart Growth integrates the other three policy themes of the TBL – namely the economic, social and environmental policy. Calgary's policies to achieve Smart Growth can be summarized in three interrelated main themes: sustainable growth, reducing automobile dependence and integrated decision making (The City of Calgary, 2004b, p. 48). As already discussed, Smart Growth is a reaction to many of the ills of a sprawling automobile-oriented development pattern. The policy of Transit Oriented Development can be regarded Calgary's crown jewels in Smart Growth or New Urbanism planning.

The City of Calgary presented the Transit Oriented Development Policy Guidelines in December 2004 (The City of Calgary, 2004e). In this publication, TOD is defined as a "*walkable, mixed-use form of development typically focused within a 600m radius of a Transit Station – a Light Rail Transit (LRT) station or Bus Rapid Transit (BRT) stop prior the arrival of LRT*" (*ibid,* p. 1). This definition encompasses both LRT and BRT. In this thesis, it has been chosen for to focus on Transit Oriented Development near LRT stations. The development of BRT lines and stations in Calgary are still in a first phase. BRT service operation began on August 30, 2004. Route 301, providing downtown bus service for north and west Calgary communities is still the only BRT line in Calgary. Furthermore, it is not clear to what extent BRT stops can be compared with LRT stations. The theory that was issued in the last chapter clearly stated that high quality *rail* is the first requirement to reduce automobile dependence.

According to this issued publication of the City of Calgary, TOD can help achieve environmental, economic and social objectives. Some of the principles that connect TOD and Smart Growth are to provide "*a variety of transportation choices, create walkable neighbourhoods, create a range of housing opportunities and choices, strengthen and direct development toward existing communities, mix land uses, encourage transit use and foster distinctive, attractive communities with a strong sense of place*" (*ibid,* p. 2). These urban qualities are currently lacking in many suburban neighbourhoods in Calgary. Figure 2.B (next page) illustrates this integrative character of TOD and Smart Growth. In its integrative character, the concept of place is been issued as well. As discussed in the previous paragraphs, this concept has long been overlooked in planning.

To achieve Transit Oriented Development, the City of Calgary has distinguished the next six key policies:
* Ensure transit-supportive land uses
* Increase density around transit stations
* Create pedestrian-oriented design
* Make each station area a `place`
* Manage parking and traffic
* Plan in context with the local communities.

As this is an integrative type of policy, all the key policies are more or less interlinked. Nevertheless, the specific policy to make each station area a 'place' is of particular interest regarding the topic of this thesis.

Figure 2-B: TOD and the Triple Bottom Line policy

- Greater mobility choice through improved travel options
- Increased housing, employment and service choices whithin existing communities
- Promoting a greater jobs/ housing balance
- Health benefits of walkable communities
- TOD as a catalyst for economic development

Social   Environmental

Economic

- Reduced greenhouse gas emissions through higher transit ridership
- Improved air quality through the provision of transportation alternatives
- Reduced energy consumption resulting from efficient land use and transportation connections
- Maximizing the use of transit infrastructure
- Reduced traffic congestion-related costs
- Redevelopment of vacant or under-utilized industrial and commercial sites
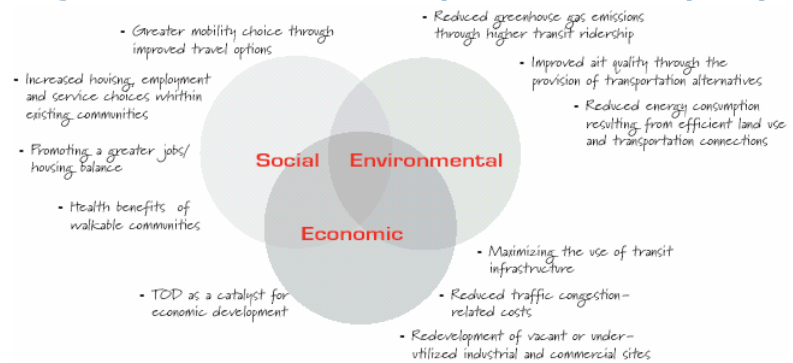
Source: The City of Calgary, 2004c, p. 5

In the previous chapter, it has been discussed that high quality rail can compete with cars and Calgary can become less car dependent. To achieve this, the city needs high quality rail, the streets should be humanized and "urban villages" need to be created. The TOD policy is an attempt to create something like urban villages. In this chapter, TOD and the New Urbanism movement have been introduced and the somewhat reactionary roots of these planning types have been clarified. The idea that place is more than just a segment of space is an important assumption in this Jacobs' inspired New Urbanism. Calgary's McKenzie Towne is an example of TND: it is designed like a traditional small town and developed to have a likewise distinctive sense of place. In TND, it is expected that these characteristics will invoke a gemeinschaft-type of community.

Transit Oriented Development, the form of New Urbanism that is issued in this thesis, does not focus as much on history and traditional community life as TND. However, the concept of place is also of key-importance in this school of thought. One of the key policies in Calgary's TOD development is to make each station area a 'place'. This is expected to foster distinctive, attractive communities with a strong sense of place. But this goal is not easily reached. Already in 1995 (Calgary Transportation Plan, as cited by Grant, 2004), the city of Calgary realized that *weaning affluent consumers to sustainable transportation options is necessary, but proves difficult.* Jill Grant (2004, p. 154) sees little evidence that Smart Growth is significantly changing overall urban land use patterns in Canada: "*the model runs head-long into a culture that fears crowding and that has failed to adopt design strategies to cope with higher-density living*".

The next chapter will focus on the concept of place and the newest academic theories on this concept. A state-of-the-art understanding of place is of key-importance to overcome the issued difficulties and help TOD become a success in Calgary.

3. **Place**

3.1. | Place as social space

In The Merriam-Webster's Online Dictionary (2004), the use and meaning of the word place is split up in twelve main categories. The first and used most widely used meaning of this word is place as a physical environment, a segment of space. This conceptualisation of place resembles the view of modernist planners as discussed in the previous chapter. In the present-day discourse of the social sciences, the word place has a complete different meaning and embodies a more complex concept. Scholars use various definitions for 'place' and have a different view on this concept. In spite of these different viewpoints, almost all definitions of this concept contain one main characteristic: the notion that 'place' is *related* to something. Crang (1998, p. 103) pointed out that spaces become places as they become 'time-thickened'. They have a past and a future that binds people together around them.

In the discourse of 19th and early 20th century geography, a place was seen as a distinct location. The world was a mosaic of fixed places. In this view, place had some kind of whole-part quality in the sense that there was a strong connection (mostly viewed as a deterministic one) between nature and people and their culture in a specific place. Nowadays, the world is more and more recognized as a globalized environment in which places can even be more or less produced (e.g. Harvey, 1989). The concept has become a social location, ´a meaningful segment of space´ and a ´container of social power´ (Coleman, 1996, as cited by Relph, 2001). In order to consider something a place, a location does not have to be a recognized geographical entity. A place can be a more informal site of intersecting social relations, meaning and collective memory as well (Johnston, Watts & Pratt, 2000). Places are part of everyday experiences; they are territories of symbols, memories, and associations.

There are two major theoretical perspectives of place that are important to know in order to grasp this concept. The first viewpoint is from a phenomenological point of view. From this perspective, it can be said that places are centers of being and belonging that connect people with the world they live in. This conceptualisation is mainly derived from the theory of Martin Heidegger, a 20th century German philosopher who stated that the human consciousness is always focused to something. Therefore, he concluded that consciousness is subjective and temporal. Place is the setting of the events of human living. It is the locus of action and intention, and present in all consciousness and perceptual experience (Berleant, 2003, p.42). Place is not simply a location, but the experience of one: it is the engagement of the conscious body with the conditions of a specific location (Berleant, *ibid,* p. 48.). From a phenomenological point of view, place is an *essential* concept, because it plays an important role in creating 'meaning' and

'essence' in people's lives. In the 1970s, humanistic geographers[5] like Relph and Tuan wrote highly influential books on the concept of place and linked this concept to human consciousness. Their phenomenological oriented writings like *Place and Placelessness* (Relph, 1976) and *Space and Place: The Perspective of Experience* (Tuan, 1977) have proven to be very important in the development of human geography and are still read. Peet (1998, as cited by Del Casino, 2004) argues that these type of works have had a strong influence on other post-positivist geographers. More recently, for example, the French sociologist Marc Augé wrote an influential book about non-places (*Non-places: introduction to an anthropology of supermodernity,* 1995). This book was not written in the exact style of the phenomenological geography, but is founded upon the heritage of these humanistic-phenomenological types of writings.

The present day relational or network-based theories about place come from a quite different school of thoughts. In these theories, there is no room left for any form of steadfast essence. These so called network theories do not describe the relationship between people and a geographical relation, but aim on the geographical relevance of connections between people. Network-urbanists suggest that "*both space and place are constituted out of 'spatialised social relations' working in practice over time*" (Allen *et al.*, 1999, as cited in Graham & Marvin, 2001, p. 203). From this perspective, place is seen as a diverse social process which is highly time dependent. This network-based type of theory about place is popular and influential since the 1990's. Well read scholars such as Harvey, Massey and Castells have written theories about place as a relational or network construct. In these theories, human relations and interactions are especially important in defining a place[6].

From both of these different viewpoints it is argued that place matters. Although space-time keeps compressing and geography seems to lose its importance to some scholars, the concept of place remains highly relevant because both social connections and the functioning of consciousness have a geographical ramification. These conclusions strengthen the vision that making place can be an important asset for a successful TOD policy. But, as we have read, the concept of place is highly contested and not something to easily work with. The next paragraph will discuss how to handle the concept of place.

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[5] Just like Jacobs' breakthrough work (see last chapter) was a reaction to the of ills modernist planning, so does humanistic geography criticize positivism and the perception of human geography being a spatial science. Both Jacobs and the humanistic geographers rejected the then prevailing geometric paradigm in which men and women are assumed to respond passively to the dictates of universal spatial structures and abstract spatial logics (Johnston, Watts and Pratt, 2000, p. 361).

6 From a broader perspective, these theories can be linked to post-modern thought. Place is seen as an active process. Unlike in modernist thinking, it is the route that is important in defining place, not its roots.

3.2. | Working with the concept of place

In the previous chapter, the New Urbanism movement was introduced. It has been clarified that the concept of place is focused on in New Urbanism, and herewith it is a reaction on modern planning in which there was no specific attention for place. Current scientific research (as discussed in the previous paragraph) identifies place as a social and conscious location. Now the question arises how this quite theoretical concept of place can be applied and analysed in the practical application of Transit Oriented Development.

It is first important to realize that handling concept of place calls for a subtle approach: *"From the decenetred vantage point of the theoretical scientist, place becomes either location or a set of generic relations and thereby loses much of its significance for human action. From the centred viewpoint of the subject, place has meaning only in relation to an individual's or group's goals and concerns. Place is best viewed from points in between"* (Entrikin, 1991, p. 5). Luckily, a method to work with this concept from such an 'in between' view exists. The earlier mentioned geographer Relph (1976) identified three basic elements that constitute the identity of places: physical setting, activities afforded by the place and meanings attributed to the place. A quite similar triple-pole model of working with place has been launched in 1987 by John Agnew in the book *Place and Politics*. His model is currently widely used in analyzing place. Agnew distinguishes three fundamental aspects of place: its locale, or social interaction; location, the place's role in geographical space; and sense of place, the subjective feelings people have about places (including the role of place in their individual and group identity). Most important, Agnew's *Place and Politics* argued that a full understanding of political behaviour requires a place-based perspective. From this viewpoint Agnew argued his multidimensional concept of place. The theory has never been fully fleshed out by the author (Pringle, 2003, p. 608.) and therefore, although originally being a political-geographical concept, it can be applied flexibly.

Agnew's theory is very useful in analysing the policy to make LRT station areas places. In a fairly recent work on place, *Place: a short introduction* (Cresswell, 2004), Agnew's theory on place is used to explain the concept of place as well. The author stresses (p. 8) that Agnew's definition certainly accounts for most examples of place. Nevertheless, some authors regard Agnew's concept to be outdated to some extent (e.g. Classics in human geography revisited in Progress in Human Geography 27, 5 (2003), p. 605-614). Since 1987, the world has rapidly globalized. The end of the cold war and the growth of global telecommunication (e.g. the rise of the Internet) have changed and are still changing our world. The sense of belonging, community and communality associated with sense of place is also less directly dependent on location than has been the case traditionally (Shelley, 2003. p. 606) and some scholars even argue that the place-centered community is now succeeded by communities of interests (Arefi, 1999). Not all of this criticism bears relevance for the place-concept of an LRT station area, however

questions are raised if the policy to make places is not outdated. Therefore, the arguable most influential post-1987 development in thinking about place: Castells' concept of the space of places and space of flows will be integrated in the concept of place in this thesis. Agnew's theory will be used as a tool to get grip on the concept of place. The three basic aspects or components of place are discussed in the next paragraphs. The relevance and use of each of the three components in the analysis of an LRT station area as a place will especially be issued.

3.2.1. | Location

Location refers to the role of place in geographical space. Each LRT-station in Calgary is in a different portion of geographical space. Being close or far from the city centre, located on top of a hill or having a high school nearby are all elements that determine the exact use of an LRT station area.

The location element is the geographical basis of any place. LRT-stations are not considered as normal places from the viewpoint of location. This is because LRT-stations are a connective-type of location. The metaphor to see places as nodes in translocal networks (Crang, 1999, as cited by Castree, 2003, p. 174) is a great help in understanding these types of locations. Bertolini & Spit (1998) have elaborated the idea of a train station as both a relative and an absolute location. They argue that a railway station, as a geographical entity, has two basic interacting, but partly contradictory identities. It is a place: a specific section of the city with a concentration of infrastructure but also with a diversified collection of buildings and open spaces. But at the same time, it is a node: a point of access to trains and other transportation networks.

Seen from Agnew's multidimensional place concept, these two elements are not contradictory: they both make up the stations character as a place. The node-dimension, regarded a relative location element of place in this model, is a contested dimension. Nodes play a central role in Castells' space of flows and the non-place theory of Augé. In these theories nodes stand for a connection point in a frictionless movement and stand for delocalisation. These types of nodes will be handled in a next paragraph, as these are a different type of node than issued here.

An LRT-station acts as a local or small-scale network; it is for example a node in the travel from home to school or work. Therewith, LRT station areas are, unlike some other types of nodes, embedded in the local. For example, people's experience of Chinook station is different than that of Washington Dulles Airport: a major hub for United Airlines. Whereas the first might be a conscious location which fits in one's mental map of Calgary and is part of one's everyday life, the latter might just be the stopover airport in flights from Calgary to Europe and its *placedness* to the traveler might only be the postcards at the kiosks. Unlike the LRT station, the airport is normally not mentally connected to its geographical surroundings. The airport is an excellent example of

placelessness and is a non-place to Augé[7]. Although an LRT station does not have this non-placed character of specific other types of nodes, it shares another characteristic which is an important asset. Stations are places of connection. As the world is becoming more and more interconnected and interdependent, a place as a node shows its connective element, an issue of major importance especially when physical space/distance becomes of less importance.

Viewed from the location-element in analysing or creating LRT station areas in Calgary, it is important to first recognize the physical location of this area, and forthcoming out of this, the node-element of the stations. All station areas carry the characteristic of being a node in the local LRT network, making it a special type of place. Some stations are nodes in other networks as well, integrating and recognizing these different functions is needed in the 'creation' of good places.

The TOD policy guidelines give crystal-clear evidence that, at the most basic level, the City of Calgary recognizes stations and station areas to be a specific type of place. It is because of the specific node-element of these places, that the City sees potential to develop station areas as "*unique environment, transforming a utilitarian transit node into a community gateway and a vibrant mixed-use of activity*" (The City of Calgary, 2004e, p. 25). This quote brings us to the next element of place: locale. The prospective of station areas as a community-gateway tells something about the desired locale of these specific places.

3.2.2. | Locale

Roughly said, locale (in this application of Agnew's theory) can be regarded as being the social dimension of place. The locale of place tells something about a place as a specific area of social interaction. This element is very important reviewing the objectives of the City of Calgary, illustrated by the quote in the last paragraph. This quote is actually a description of the TOD policy key objective to 'make each station area a place'. It is recognized that a place is more than just a location. In explaining the policy background of TOD in Calgary, it is stated that

> "*The City of Calgary has made significant public investment and long range policy commitments to optimizing the use of public transportation infrastructure, increasing mobility choices of Calgarians, and creating vibrant, diverse neighbourhoods. It is timely and appropriate to consider how increasing transit ridership and ensuring that LRT station areas are attractive to users can optimize this commitment. This will encourage sustained capital and maintenance investment in these sites and help create more integrated, diverse and liveable communities in Calgary*" (The City of Calgary, 2004e, p. 6).

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[7] Remarkable is that that Augé regards the traveller's space to be the archetype of non-place in supermodernity (1995, p. 86), while the discussed developments in Calgary at TOD stations, are conversely a reaction to placeless sprawl.

The most important objective regarding this element of place is to embed the station area in the local community. In the TOD policy guideline, the element of place as a locale is approached from a bottom-up perspective. By stating that "each station exists in a particular community context" (The City of Calgary, 2004e, p. 32), the City of Calgary acknowledges that the TOD developments mainly takes place in a specific given situation. The utopian (modernist) top-down thought that a specific locale can just be created or designed is luckily not the starting point for this policy. The policy objective to 'make each station area a place' should therefore not be interpreted literally. Nevertheless, the policy objective is clear in its ideal of altering the station areas as a place. This raises the question if a desired locale can be 'made' or altered by specific policies and development of a site.

Scholars do not agree to what extent planning and design can alter people's behaviour[8]. New Urbanism, for example, is often being criticized that it is not easy to alter people's behaviour by a specific policy, planning-style or architecture. Apart from this, some scholars see the locale element in the theory of Agnew to be outdated to some extent. Shelley (2003, p. 606) argues that "*the locus of persons with whom social integration takes place is constrained less and less by location. Rather, people increasingly identify persons to interact with on the basis of common occupations, personal or professional interests, religious beliefs, political views, languages and ethnic heritages rather than merely on the basis of geographical proximity*". Following Shelley's thoughts, one can question if the focus of TOD in Calgary of stations as community gateways is the best focus. Maybe these station areas are better suited to be another type of place in the twenty first century.

It is interesting to have a look at Agnew's reply on Shelley's critique on his theory. Agnew stated that all those assertions of the diminishing relevance of geographical proximity in social relations bear hardly any relevance to the everyday reality of most people in this world (2003, p. 610-611). With increased globalization 'located places', even become more important in people's lives: those who spend much of their days and nights doing e-mail like to run into like-minded souls at the corner coffee shop – hence the boom in urban places attached to the Internet economy. It is for sure that new technologies have a deep impact in shaping society, the way in which these are altering the locale element of place and the concept of place as a whole is a highly relevant discussion in theories on place, and therefore this will be discussed in a separate paragraph. Although the importance of geographical proximity in shaping social relations may be declining, a place still has a social component. The City of Calgary recognizes

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[8] An example of these unclear effects can be found in Brasília, the modernistic-utopian planned capital of Brazil. Its collective flat blocks did not pull of a more egalitarian society as was hoped for. Nevertheless, people living in these flats certainly agreed on living in these flats influenced their lives. They complained that living in these flats and the flats' specific design affected social contacts with their neighbours as people hardly knew their neighbours anymore (Holston, 1989). This case just illustrates that planning does influence people's behaviour, but not always to the same extent and in the same direction as planners, designers and politicians expect.

this, and one of the main goals of TOD is creating more integrated, diverse and liveable communities through this specific development of LRT station areas. Policies of TOD, like mixed use development in general or "emphasize important buildings" and "use open space creatively" have to foster this development. The character of these policies is not only related to the locale element, but to the third place-component: sense of place, as well.

3.2.3. | Sense of place

The third component of place is a subjective-qualitative component. A sense of place tells something about the emotional attachment that people have to a place. This concept is fairly complicated and explained in different ways by scholars, thus before discussing this specific place-component and the case-study in Calgary, some theory on sense of place will be discussed.

Sense of place tells something about the emotional attachment that people have to a place. From a phenomenological perspective, sense of place is related to the view of place as a concept of meaningful relations, connecting people with the world. In paragraph 3.1, this school of thought has been introduced. Phenomenological place studies (like Relph, 1976) have brought great insight in sense of place, but are considered outdated nowadays. In most of these studies, place was seen as the root of human identity and a notion of place was constructed that was essentialist and exclusionary, based on notions of rooted authenticity (Cresswell, 2003, p. 14). A routed (or relational, see paragraph 3.1 as well) and less recessive interpretation of place has been proposed by Massey (]994). She argues that places are created in connection to global processes, they are dynamic not static. The feeling that places invoke are likewise different. As people have different connections in a particular area, their senses of place will differ as well. Creating place with a 'singular sense of place' is recessive and not realistic. Therefore this is something which planners and designers should not strive for. As we will see in a later chapter of this thesis, much has been written on this particular issue.

Besides the new insight on the dynamic nature of sense of place, scholars state that sense of place still remains a very important component of place. Subjective attachments and interpretations of place matter as much as ever (Castree, 2003, p. 177). It is probably therefore that the city of Calgary tries to make TOD station areas 'subjective' places, gateways for communities. Some cultural geographers have argued that place is linked to the formation of personal and group identities (Keith and Pile 1993; as cited by Castree, 2003, p. 177). From this perspective, the sense of place component looks to be important in Calgary's policy. But the more relational view on sense of place raises some doubts to which extent the City will succeed in this policy. In the discussion of the location element op place, Shelley's view on a changed world has already been mentioned. According to Shelley, the forces that made location less

important have affected the sense of place component as well. Sense of belonging, community, and communality associated with sense of place is also less directly dependent on location than has been the case traditionally. A more detailed view on the concept of place in the twenty-first century looks to be important, because as the world is rapidly changing and relations between people and place are changing as well. Therefore, a successful TOD place making policy should not only identify for the three elements of place in order to grasp this concept in its whole, but also take account of these kind of challenges.

3.3. | Place is changing

The theory to discern location, locale and sense of place as the three pillars that constitute a place is a useful method to work with this hard to define concept. Thus far, this place-analysis has helped analysing the TOD place making policies in Calgary in a basic way.

The introduction of place as a location clarified the transit station as a geographical entity. The node-element of a LRT station gives station areas a potential to be developed into mixed-use areas. The analysis of the locale component of LRT station's clarified that the City's main objective for making station areas places is

Figure 3-A: Dynamics of place
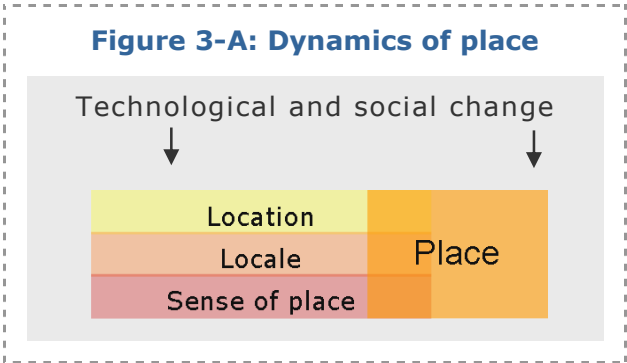
because they might have the potential to become a community-gateway and thereby help to create more integrated, diverse and liveable communities in Calgary. This is hoped to be achieved by developing mixed use in general and by specific place making actions, like to emphasize important buildings and to use open space creatively. This might influence people's sense of place, the third place component which tells something about people's subjective relation to a place. The more theoretical aspects in the previous paragraphs gave some insight in the latest developments around the three components that constitute place. The route-concept to regard place, for example, clarified how a place can be an individual-construct and therefore creating places with a 'singular sense of place' is recessive and not realistic. Especially the changing role of place in the twenty-first century society has raised some questions about the relevance and method of place making in the present time and the future. The influence of technological and social change on place is an important issue and a major theme in the geographical discourse of the last decade. Figure 3.A illustrates how the three components of place are interconnected and all of it is influenced by technological and social change.

In the paragraph about the concept of place, the relational theories of place have been introduced. Manuel Castells, one of the most influential scholars on this issue, published the encyclopaedic trilogy *"The Information Age: Economy, Society and Culture"* (Castells, 1996,1997 and 1998a). In this study and in other recent works (e.g. Castells, 1998b, 2002) insight is given on how technological and social change alter the way in how place functions and is created. In his texts, Castells does not only analyse these changes, but he provides practical information on how the issue of place should be handled by planners these days as well.

As mentioned in the previous paragraph, the world is rapidly changing and this alters the dimension of place as well. Castells (1998a), among others[9], states that we are living in a moment of historical transformation which is, according to Castells, characterized by a bipolar opposition between techno-economic globalization and socio-cultural identity. Those two trends have an important influence on how people sense space and time:

> *"In the last quarter of this fading century, a technological revolution, centered around information, has transformed the way we think, we produce, we consume, we trade, we manage, we communicate, we live, we die, we make war, and we make love……Space and time, the material foundations of human experience, have been transformed, as the space of flows dominates the space of places, and timeless time supersedes clock time of the industrial era. Expressions of social resistance to the logic of informationalization and globalization build around primary identities, creating defensive communities in the name of God, locality, ethnicity, or family. At the same time, founding social institutions as important as patriarchalism and the nation-state are called into question under the combined pressure of globalization of wealth and information, and localization of identity and legitimacy". (Castells, 1998a, 1f)*

Castells describes our current age as the Information Age (and our society as the Network Society). This in age in which the logic of timeless time and the space of flows have become dominant factors. Herewith aiming, among others, at the billions of dollars that circulate around the world every second and the rise of the Internet and other telecommunication systems that render geographical proximity superfluous for decision making. However, the roots of culture and the search for meaning continue to emphasize the space of places, biological time, and clock time as the lasting categories of most human experience (Castells, 1998a). According to Castells, there is a tension between the space of flows and its logics of a so called real virtuality and the space of places, a different set of logics in people's physical world.

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[9] Castells is one of the many academics writing about these issues. The acceleration of, and the change in the relation of space and time is a main theme in the works of Virilio and Harvey as well.

These kinds of analyses, with an own set of words and concepts, are exemplar for Castells[10]. This scholar's macro theories are not directly applicable on station areas, and although much praised, Castells' analyses and theories are not completely agreed on by every scholar. Therefore it is not the complete framework of thoughts and theories in Castells' works that are going to be discussed in relation to TOD developments in Calgary. Only some the topics in his work that apply to the subject of this thesis and that are in line with current academic geographical developments will be discussed.

If we apply Castells thinking on the specific issue of the concept of place, we first see that that this concept is changing as a result of the Information Age. An illustration of this is how people become more flexible, and social relations become less bounded by geographical proximity. This can result in a change in how people relate to places and to which places they relate. Sennett, for example, states that a post Fordist state of flexible production does not only produce short-term relations at work, but creates a regime of superficial and disengaged relations in the city as well, because lack of fixed work means less attachment to place (Sennett, 2002).

Nevertheless, the Information Age does not render place obsolete. The globalization of economy, technology and communication is not an all changing development at first (e.g. people will still walk on streets and use cars and LRT to get around in Calgary), and secondly, Castells characterizes the Information Age by another macro-trend as well: the affirmation of identity as the source of meaning (Castells, 1998a, p. 311). People still need identity, meaning and places. Globalization has not altered the way in which our brain functions. This affirms the relevance of phenomenological theories of place in the twenty-first century. As discussed, do both trends have relevance for the concept of 'place' which has a different role in society and is shaped in a different way in the Information Age. Castells states that more than ever, the professions[11] of city and regional planning are a necessary tool to tackle the explosive spatial, economic, and social problems that are emerging under the shock waves (that are only starting to appear) of the Information Age. The next paragraph will issue discuss if the TOD place making policy in Calgary, at its very basic level, is a type of policy that fits the Information Age.

3.4. | 'Making place' in the Information Age

Castells argues that planners should not face the transformation towards the Information Age defensively. They have to renew their thinking, framework and method away from a "*world centered on the welfare state, on rigid zoning, on the belief in models of*

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[10] Some people associate his type of vocabulary with postmodernism. Castells clearly states that he is not post modern: "*I do not construct and deconstruct; I am trying to analys*e" (Castells 2002, p. 556).

[11] Castells sees planning as a profession, not as an academic discipline (Castells, 1998a). From this point of view, planning is not an objective science like physics. This view is shared by many other academics like Clara Greed (1994) who argues that planning has often created male-oriented 'gendered realities'.

metropolitan growth, on the predictability of social patterns, on the legitimacy of national governments, on the long term benefits of economic growth without social and environmental constraints and on the view of the world from partriarchalism as a way of live" (Castells, 1998b, p. 2). Castells plea is not written from a practical perspective, but his most important recommendation for planning in the current age, a non-defensive form of planning (1998b, 2002), is easily understood. His appeal for flexible, non-rigid planning (1998b, 2002) is a challenge for planners in their attempts to create place. A look into the world-of-Castells learns that there are quite some resemblances between his theory and Calgary's form of TOD (The City of Calgary, 2004e).

At first, Transit Oriented Development is an innovative, non-defensive type of planning: it is a new approach instead of a continuation of the current planning type. TOD is a type of planning in which economic growth goes hand in hand with social and environmental perspectives; this is exactly what the triple bottom line policy is about. Castells sees environmental sustainability as the overarching issue for planning (Castells, 1998b), figure 2.B (see previous chapter) illustrates how this topic is a key priority in TOD as well. The active promotion of pedestrian, bicycle and especially Transit Oriented

Development might not particularly look non-defensive from a Dutch-perspective. But as is mentioned in the first chapters of this thesis, Calgary is an automobile-oriented city. This is illustrated in figure 3.B (previous page). This figure shows that a car, truck or van is by far the most popular mode of transportation to go to work. However, a slight trend towards more use of more sustainable forms of transportation as a mode to go to work between 1996 and 2001 are noticeable. To "*Encourage appropriate new office development to locate in transit supportive areas through the amendment of land use classifications, and the provision of infrastructure..*", (The City of Calgary, 1998, 2-2B) has been one of the key policies in the Calgary plan from 1998 and TOD should especially help to encourage people to use sustainable transportation including in their trips to work.

One of the main policy objectives of TOD in Calgary is to plan in context with local communities and to make each station area a community gateway. This shows that The City of Calgary respects the local (this very important to Castells opinion, more about this topic in a next paragraph) and

**Figure 3-B: Mode of transportation to work in Calgary (CMA)**
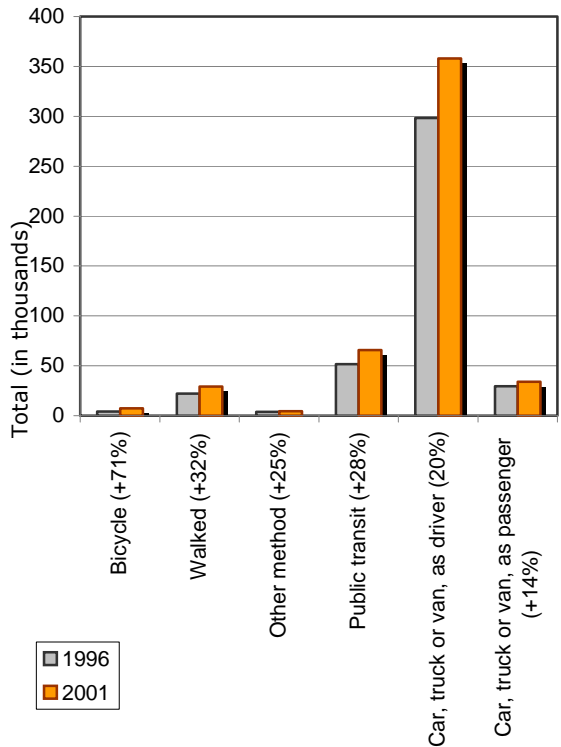
Source: Statistics Canada, Census 1996 and Census 2001

acknowledges that each local station area is unique and should be planned in a unique way.

One of the other main challenges for planners is the reconstruction of "*cultural meaning in spatial forms and processes, attributing identifiable meaning to the places where we live, work, travel, dream, enjoy and suffer*" (Castells, 1998b). In trying to make each station area a 'place', it is tried to give these places an identifiable meaning. This is again a development that in harmony with Castells' vision.

In addition to these positive remarks, the TOD-policy is not completely 'Castells-proof'. His critique on rigid zoning, can maybe translated to a critique on the 'station area zoning policy' of the TOD policy in Calgary as well. TOD is defined as a "*walkable, mixed-use form of development typically focused within a 600m radius of a Transit Station – a Light Rail Transit (LRT) station or Bus Rapid Transit (BRT) stop prior to the arrival of LRT*" (The City of Calgary, 2004e, p. 1). The 600 metre radius is the main tool to define a station planning area, it is a good tool for analysis and planning, and having a clear policy. But this zoning should not be regarded as more than a mere tool. In the cited definition, the word "typically" could best be emphasized. This is because the 600 metre radius is an arbitrary[12] tool to include the walking distance that most pedestrians are

Figure 3-C: Walking distances at Brentwood station

Source: O'Sullivan and Morall, 1996, p.23

willing to walk to take the LRT (a majority of the people that use the LRT are non-pedestrians), it is by no means a 'scientific' tool and therefore should be applied loosely.

Research has shown that the distance that people are willing to walk and the mode of transportation he or she will use are strongly affected by the walking environment (O' Sullivan and Morrall, 1996, 19). In this study, walking distances for Calgary LRT stations were calculated, the CBD stations and Sunnyside and Brentwood station were the focus of the report. Brentwood was the terminal station and the NW Line when the study was performed and was characterized as a transfer station, because it was served by 15 feeder bus routes (20 bus routes by 2005) and has park-and-ride stalls. Sunnyside station, on the contrary, is a local inner-city station. Pedestrians accounted for more than 25% of the mode split at non-CBD stations. The mean walking distance at Brentwood station was 1,097 metres and it was 444 metres at the Sunnyside

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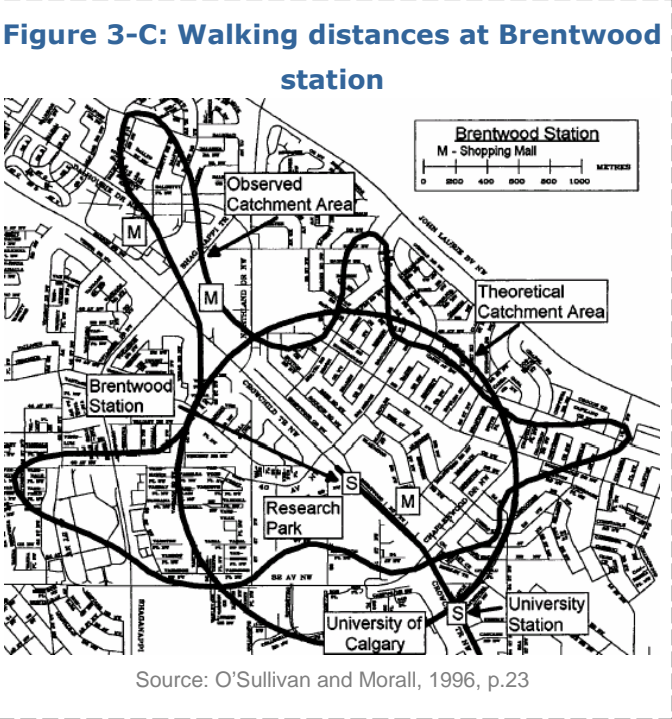
[12] The general walking distance guideline for surface transit in Toronto is 300 metres, while the guideline for LRT in Vancouver is 900 metres.

station. The study recommends a radial of 700 metres (based on the 75th percentile and an average circuity factor) as pedestrian zones for non-CBD LRT stations. But, for this chapter even more important, the study showed that pedestrian walking preferences cannot be put into a simple radial. A lot of secondary factors (of which some can be altered by TOD) contribute to people's walking behaviour. This is shown in figure 3.C. At the Brentwood station, the theoretical catchment area differs highly from the observed catchment area.   The 600 metre radius is a helpful tool to define a catchment area for Transit Oriented Development, but it is clarified that reality is far too complex to put in such a simple model. This will be illustrated in one of the case studies in a next chapter as well.

It can be concluded that Transit Oriented Development is a suitable policy for planning in the Information Age. Exactly those issues that Castells labels as important are what Transit Oriented Development is all about. A key policy in TOD; making each station area a place even answers Castells' specific call to attribute an identifiable meaning to the places where we live, work, travel etc. With its TOD-policy, the City of Calgary acknowledges that each station area is unique and should therefore be planned in a unique way, taking the local community into account. This flexible, non defensive attitude in Calgary's TOD policy is what Castells pleas for. Unfortunately, the zoning policy to determinate station areas is a bit rigid, and therefore, as illustrated, an arbitrary tool. In the next paragraphs a more in-depth analysis of threats and opportunities of planning in the present time frame will be discussed. This analysis will finally contribute in analyzing some of the case station areas in the final chapters.

4. Placing place

4.1. | New relationships

The key issues that planning in the current timeframe should encompass social and environmental perspectives try to create meaningful places and be non-defensive in its type, are what TOD should and *does* strive for. In the next paragraphs, these and other issues of planning and place making in the twenty first century will be analysed in more depth. In an effort to keep this analysis clear and not too theoretical, the discussion has mainly been split up in threats and opportunities. The understanding of place as having the components location, locale and sense of place will hereby help understanding the themes that will be discussed. In the previous chapter, it has been argued that the concept of place should be handled with in a new way, as our society is changing. The purpose of the upcoming analysis is to help summarizing and characterizing what a successful TOD station area, as seen from the concept of place, should be like in the years to come. This analysis will give a general vision on TOD and place making in Calgary, and will lay a foundation for the next chapter in which two case-studies of transit oriented station areas in Calgary will be discussed.

As the concept of place has a social component, it is important to know how relationships are characterized by in our twenty-first century society, because this has influence on making station areas successful places. Castells (2002) sees individuation[13] and communalism as the two opposing developments or processes by which our society is characterized in terms of meaning. These processes create a hybrid and personal pattern of sociability, existing out of online and offline interaction (Castells, 2002). Together with the crisis in the patriarchal family, they cause a shift that is taking place from sociability from family units, to networks of individualised units. These developments have "*extraordinary consequences for the uses and forms of housing, neighbourhoods, public space and transportation systems*" (Castells, 2002, p. 550).

The first consequence of these developments in our society is that new forms of sociability have a hybrid character. And thus, the old fear that online communication would greatly diminish neighbourhood communities can be rejected. The Netville study (see Box 4.A) clarifies how online communication has a complex outcome on communities and strengthens individual sociability. This study tells that the Internet offers opportunities in the social development of communities. Although online communication is not something that can actively be dealt with in TOD, its potential and its function in people's sociability pattern is something that might very well be

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13 With this term, borrowed from Giddens (Castells, 1997, p. 7), Castells understands "*the enclosure of meaning in the projects, interests, and representations of the individual*" (Castells, 2001, p. 397).

investigated upon. There is a potential for Transit Oriented Development and online activities to strengthen each other.

The shift from sociability from family units to networks of individualized units (or personal routes) is something that should be taken into account in TOD. Society has developed into a multiform and moveable entity. Transitions in the course of live have become less predictable and more flexible, just as the daily activity programme of most people. The patriarchal system has lost its authority, people tend to combine tasks and their day paths become more complex (Bertolini & Dijst, 2000, p. 35). A successfully planned station area should encompass this flexibility. Whereas planners in the 1950s could, for example, work with a standard blueprint of their users being a 'suburban family'; these days households are far more diverse and people's activities often less predictable and more complex. This influences why and how people use and percept a station area. In Castells view, people communicate in different 'languages' these days. This is because the world has changed to a place in which each community has his values

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Box 4.A: The Internet and community life

The Internet has become an important method to share information and communicate with each other. It allows mobile people to maintain community ties to people at distant places and can also support face-to-face ties closer to home. The old fear that the Internet would undermine 'community' has faded, the reality is that using the Internet both expands community and changes it in subtle ways (Wellman, 2004, p. 23). The Netville-study in the late 1990's, was an experiment in which many residents of the suburb near Toronto where the study was named after, were given free broadband Internet access and became members of a neighbourhood email discussion group. The outcome of the study was that the wired residents regularly talked with twice as many neighbours and had been invited into the homes of an average of four neighbours as compared to two and a half for the un-wired. The Internet gave the wired residents opportunities to identify others in the neighbourhood who shared common characteristics and whom they might want to know better. The Internet also supplied the social bonds and tools for political organizing. This study proved that the Internet can not only increase the scope and amount of long distance contact, but that of neighbourly contact as well (Wellman, 2004). Therefore, this new communication technology offers a possible opportunity for planners in their goal of intensifying neighbourhood-communities.

However, the Internet facilitates a routed network instead of a rooted one. It helps people to personalize their own communities, less defined by physical proximity than it was in the past. Wellman (2004) calls this new type of community 'networked individualism'. It makes clear that the digital revolution should be taken account of in a very subtle, almost delicate, way. The Internet revolution does not just render physical communities obsolete. Instead, it can even intensify neighbourhood communities to those who are connected, but from an individual perspective. As the Internet changes and expands communities, it can for example be considered to start community-pages or groups in addition to transit oriented (re)developments. A possible synergy of these elements can strengthen community-life. In a broader sense, Neal (2003, p. 69) describes a successful implication of the digital revolution on the making of communities as taking "*advantage of telecommuting and electronic commerce to reduce trips out of the neighbourhood, while simultaneously deploying local attractions and circulation networks to encourage interaction within the neighbourhood*".

and each individual has his own project. Castells statement might be a bit metaphorical and exaggerated if applied on every Calgarian. But the indicated trend of estrangement is clearly recognizable. The case study on the Bridgeland area in the next chapter gives statistical data that supports this viewpoint and clarifies its implication on TOD.

As the individualization of work, the metropolis (in terms of spaces), and an individualization and communalism in terms of cultural sets create a fragmented multi meaning agglomeration, there is a key challenge to restore communication by building and redeveloping communication networks (Castells, 2002). Therefore it is stated that "*public spaces and urban centers have become critical expressions of local life*" (Castells, 2002, p. 551). These spaces have the potential to restore communication. This overlaps with the goal of Transit Oriented Development in Calgary – creating places and station areas as a gateway to mixed-use vibrant communities.

This paragraph clarified that fundamental changes in society do have influence on the concept of place and these processes are therefore important to consider in the development of TOD. The shift that is taking place from sociability to networks of individualised units creates a hybrid form of sociability. People's daily life paths have become less predictable and households have become more diverse. Therefore, communities in the twenty first century are not comparable to those in, let's say, the nineteen fifties. The rise of new information and communication technologies are important factors in how communities change into more individualised networks, this should be taken progressively into account in TOD.. It has been clarified that these new types of social networks can encourage interaction within the neighbourhood.

As Castells analysed, people talk in different languages these days, the first step in creating more integrated communities is to consider – at a basic level - how Calgary's TOD policy objective to make each TOD station area a place, can help restore communication.

4.2. | Restoring communication

Castells provides three examples of so called "*communication protocols that restore communication*" (Castells, 2002, p. 555). The first protocol is physical. It is argued that we need symbolic nodality that will identify places in this world of (metaphorically spoken) *endless sprawl*. Having public works as architecture can restore spatial meaning and mark places symbolically around the landscape (Castells, 2002; 2004). This helps to restore communication. Not only do statues or squares have this potential, but bridges and of course LRT stations do have this potential as well. It almost seems if the City of Calgary has literally implemented this first recommendation of symbolic nodality. However, this is not too remarkable as TOD is, just as this recommendation, a reaction to a *placeless* urban sprawl.

Two sub policies of making each station area a place, are to make each transit station a landmark, and secondly; emphasizing sightlines and views. Figure 4.A gives a clear example on how this policy takes shape in Calgary. The first photo is 39th station. This station is one of the stations that have opened in 1981 when the C-train was introduced in Calgary. This small station only has low ridership (see Appendix A). 39th station closely resembles an ordinary bus stop; it does not have any distinctive features and does not seem to be placed in its environment. 39th station could, for example, be placed in almost any western city without people especially noticing it. The ticket pavilion at the Fish Creek/Lacombe station, at the contrary, does not have such a placeless appearance. This building is placed within its environment due to the specific lodge-style architecture referring to the nearby Fish Creek provincial park. The Fish Creek/Lacombe station can only be situated in this area of Calgary, and due to its specific architecture, it is something that people notice: it is a landmark and it gives an example of the new landmark-architecture of Transit oriented stations in Calgary.

Castells talks about symbolic nodality, a distinctive feature that landmarks do possess. Exactly the word landmark places this symbolic nodality into perspective, as the need for landmarks is not a new need. Already in 1960, in the classic book *The image of the City*, Kevin Lynch identified five basic elements of urban form – paths, edges, districts, nodes and landmarks. These components together form people's mental maps of a city and are the distinct features in how people perceive cities[14]. Understanding this can help urban planners create cities that are more *imageable*. A landmark is an external physical object that acts as a reference point in Lynch's vocabulary. The Fish Creek/Lacombe station (see figures 4.A) is such as a landmark; it is clearly identifiable and even helps, even non-LRT users, in finding their way.

But TOD is about more than just creating landmarks; station areas should become nodes. The node has already been introduced in earlier parts of this thesis. Lynch defines

Figure 4-A: LRT stations as landmarks

39th Station

Ticket Pavilion Fish Creek/Lacombe station

Photos by author

14 Just like Jacobs discussed book, this work by Lynch can be seen as criticizing modernism. By analysing how people perceive cities and mental maps are being made, Lynch brought shortcomings of modernisms' narrow scientific approach on planning and architecture to the surface.

nodes as: "*the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he/she is traveling*" (Lynch 1960, as cited in Carmona, Heath, Oc & Tiesdell, 2003, p. 90) He adds that, while not essential, distinctive physical form is more likely to make the node more memorable.

The node function brings us to the second level of urban interaction that Castells has analyzed, the level of social communication. People need to be together and share cities again. Public spaces, especially those where people have to bump into each other and spontaneous social interactions can take place, can facilitate this (Castells, 2002). LRT stations are those type of places. As discussed, they are nodes in many people's daily paths. The Transit Oriented Development policy in Calgary is expected to boost the number of transit users and activity near stations; this can have beneficial consequences for the level of social communication. Figure 4.B shows some people sitting and chatting at a bench near Somerset/Bridlewood station. This station has recently been built (see Appendix A) and many of the transit oriented-guidelines have been implemented in its layout and architecture. Contrasting this picture to 39th Station (figure 4.A) makes clear that design can help facilitate social communication at station areas.

Castells third level of urban interaction refers to the combination of electronic communication and physical face-to-face communication as new forms of sociability. In the previous pages this development has already been explored. The Netville study (Box 4.A) illustrated that the influences of electronic communication on sociability are complex. Due to the hybrid character of these developments, the City of Calgary cannot just ignore this in its TOD policy. Although there is no easy method to integrate these developments, the City of

Figure 4-B: Bench at Somerset-Bridlewood Station

Photo by author

Calgary should certainly think about investigating this and making policy that can hopefully strengthen TOD by making use of new perspectives that online communications offers. The author of this thesis, for example, once attended a community meeting on the poor transit services in the Sundance area in Calgary. Afterwards, participants exchanged email addresses and it thereby gave birth to an email forum on transit services in Calgary and particularly Sundance. This is just another example of how online and offline communications do interact and strengthen each other.

Albeit the three communication protocols mentioned above encourage communication, they are not the sole instruments to create integrated, diverse and liveable communitie*s*. The citizens create communities, and as Castells states: "*urban innovation and social change will have to push government and people, rather than being the result of politicians*" (Castells, 2004). Castells (2002, 2004) makes clear that people

have to fight for urban life as an increasing bureaucratization and alienation of institutions in relation to their citizens is taking place in the Information Age. A key TOD policy objective in Calgary is to plan in context with the local communities. The case study on the Bridgeland area in the next chapter shows that there is an alliance between the city government and its citizens in TOD. Therewith Castells observation of growing disconnection between citizens and government looks not to be the case for TOD planning in Calgary.

Although the communication between citizens and the City of Calgary regarding TOD is good, this does not mean that every citizen embraces TOD. Planning magazine concluded that the weakest link of Smart Growth (and this could have been TOD as well) is the willingness of individuals to embrace the change in their own community (Neal 2003, p. 46). Especially the issue of living in high density looks to be concerning for sprawled Calgary. Castells states that high density is necessary for planning in the new age, this is the case for TOD planning, but as already discussed in chapter 3, does Smart Growth in Calgary runs head long in a culture that fears crowding. The next paragraph will expand on this specific issue of Canada's fear for density.

For now, we can conclude that the objective of TOD in Calgary to create transit station areas as vibrant and mixed use places answers Castells plea for people to be together and share cities again. The combination of high car use with the flexibility and individuality of present day society makes the need for these places high. The discussion in this paragraph gave some practical implications and highlighted some issues that are of particular importance for Calgary's TOD policy in order to be successful on an elementary level, as Castells understands that people talk in different languages nowadays. In the next paragraphs, a few interrelated topics will be discussed into more depth. The different topics are arranged as opportunities and threats herewith explaining which vision should, or should not be, encompassed by The City of Calgary to reach it goal of making station areas places and thereby gateways of diverse and liveable communities. The next paragraph handles the shopping mall as an example what a TOD station area should not be like.

4.3. | Station areas as shopping malls

There is one type of environment that has especially proven success in mixed-use and high density in Calgary: the shopping mall. Just like LRT station areas, malls can be considered nodes and places were people meet and talk. Malls can bundle leisure, hotel, commercial, residential and other uses; they are mixed environments. There is one major contrasting difference I would like to discuss: the closed character of the mall. Malls do not help create more integrated, diverse and liveable communities in Calgary and this has to do with that particular characteristic. Although shopping malls are collective spaces, they are privately owned and directed at consumption, not at public

life. In a critical social study on the shopping mall, they are described as relying on "*a form of fortress architecture to secede from the immediate urban environment*" (Dick & Rimmer 1998, as cited by Graham, 2000, p. 195). *Direct highway links and capacious integrated parking areas allow seamless flow of consumers from across the wider urban region and beyond directly into the protected "inverted city" within* (Dovey 1999, as cited by Graham, 2000, p. 195). Gottdeiner (1997, as cited by Graham, 2000, p. 195) explains that the problem with the architecture of malls is the way it ruptures the urban fabric by isolating buildings from both the surrounding landscape and the street.

This is certainly the case for Chinook Centre. This is Calgary's main shopping mall and includes over 200 retail stores, a large food court and movie theatre. The centre is surrounded by a total of 5000 parking spots, offering free and easy parking for customers coming by car. Chinook LRT station is located three blocks from the mall to the east, at a distance of about 500 metres. This is not too far for pedestrians, but the walk is not a pleasant one, as the environment looks to be mainly created for cars instead of pedestrians. Figure 4.C is an aerial photo from this centre and its most direct environment. Chinook centre ruptures with its environment and looks like an inverted city. The architecture of the centre proves to be an example of what a TOD station should not be built like, if it is to foster vibrant and diverse neighbourhoods. Its design is

Figure 4-C: Chinook Centre

100 metres N

Source: Google Earth©

efficient: everyone is pulled into the mall. Its environment does not encourage people to walk to the mall or stroll around near the mall and meet other people. It is efficiently created for people to go there by car, consume, and leave.

It is easy to forget that people tend to go to shopping malls because they just like going there. Malls are, just like sprawling cities, successful suburban phenomena. The normal Calgarian likes to shop in malls, because they are easy to reach by car, it is safe to shop, and very convenient as well they are covered environments where, unlike outside, the weather is always the same[15]. Malls are not only characterized by their closed physical character, but also by their enclosed social character. The archetypical mall is a single-minded space; it is not built for people to play in, to loiter, leaflet or

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15 Ritzer (2000, p. 35, p. 100) sees shoping malls as interlinked with and strengthening the so called McDonaldization of society. He explains that the attraction of malls can partly be credited in its ability to make shopping more predictable. Together with efficiency, calculability and control does predictability form the principles of McDonaldization.

conversate. They are built for people to consume. Zygmunt Bauman[16] explains the structure of the shopping mall as being "*structured to consumption and movement, not to communication and reflection*" (Abrahamson, 2003). Malls normally do not enhance civic society and community, while Transit Oriented Development is expected to do so. Therefore TOD areas have to be open minded both physically and socially.

The physical nature of a successful TOD area should be so that it encourages people to go there for various reasons, not only to consume at daytime, like shopping malls. The bench at Somerset-Bridlewood Station (previous paragraph) is such a feature. As being a public space, a LRT station area should encourage a diversity of activities and, unlike single-minded spaces, be oriented towards "*the unpredictability, difference tension and potential conflict of strangers, friends and neighbours meeting one another*" (Madanipour, 1999 as cited by Lovejoy & Lowe, 2000). This condition of open-mindedness meets Richard Sennett's and Manuel Castells' view on urban life as based on encounter instead of enclosure. Dovey (1998, p. 4) explains that Sennett sees the somewhat anarchic diversity of function[17], people and activities as what enables the development of culture, art and identity. Only if a TOD area is open-minded it can become a real and safe gateway for *diverse* neighbourhoods

The shopping mall proves to have a single-minded orientation that LRT station areas should not have. Apart from this threat-feature, malls can be learned from as well. They are very successful and linked with this, densely populated environments. As suburban development is normally

Box 4.B: Closed kiosks

Figure 4-D: Closed kiosk at Anderson station

Photo by author

At the end of 2004, there was no LRT station left that had a kiosk facility. Although kiosks offer convenience to travellers and the facility can increase safety in a station, Calgary's LRT-kiosks proved to be unprofitable, even if there was free rent (D. Colquhoun, personal communication, October 2004). This example is exemplarily, as Calgary's LRT station are no knots of activities were people meet other people. Most LRT stations are a bit isolated from their environments and they are not places were a lot people come for different purposes at first, and secondly feel invited to buy a newspaper and read it on a bench. TOD station areas will hopefully have a more inviting character and will be used more densely, they are places were these kiosks can make profit and help make TOD in Calgary be successful.

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16 Consumerism and globalisation are two of the themes where this influential sociologist has written about. Bauman sees the loss of public space to privately controlled space as one of the spatial consequences of globalization (Abrahamsen, 2003).

[17] Sennett proposes public spaces that are spaces of labour, not just of pleasure. He believes that spaces that are only based around consumption do not promote meaningful interactions. In his view public space gets secured if people mix, interact and overcome indifference to each other (Sennett draws a crowd, 2005).

associated with low density, this is certainly not the case for malls. These places are lively and crowded. Although it is asserted Canadian culture fears crowding (Grant, 2004, p. 154), malls are crowded, but successful. The sociologist Whyte argued that density is what makes cities attractive, because people are mostly attracted by…other people (Grönlund, 2002). Just like many of Calgary's LRT stations, Bryant Park in New York was a park that people did not like going to. A redevelopment of this park in accordance with Whyte's values (people seek other people, comfort and care in public spaces, not seclusion and refuge) proved to be a great success. "*The basic design ideas were to open the park's constricted entrances and removing hedges along its perimeter so that people could more easily view the interior from the sidewalk, and adding semi-commercial uses such as a food and beverage kiosks and a ticket stand*" (Grönlund, 2002). Box 4.B illustrates the closed kiosks at Calgary's LRT stations. Whyte's vision on urbanity is outlined in Appendix D. It clarifies that planners should focus on people; making attractive places where people meet. However, making attractive places needs subtlety. This will be discussed in the next paragraph.

4.4. | Station areas as mimicked places

In the present-day discourse of cultural geography, one threat of place making is emphasized in particular: the threat of creating mimicked places. In the 1970's, Relph added the now popular term placelessness to the vocabulary of human geography. As discussed in this thesis, placelessness refers to 'anonymous' modernistic architecture, but a countertype of planning and architecture is also labelled as exponents of placelessness by Relph. These are (among others) disneyfication and museumisation. The products of disneyfication are "*absurd synthetic places made up of a surrealistic combination of history, myth, reality and fantasy that have little relationship with particular geographical setting*" (Relph, 1976, p. 93). Museumisation is a sub-form of the latter; it is the preservation, reconstruction and idealization of history.

Harvey (1989, ch. 17) among other, emphasizes that through time-space compression the image of places and spaces becomes open to production (or commoditisation) and ephemeral use. The production of a place is therefore a way to attract footloose companies, people or activities. TOD areas are created as having there own sense of place, because it is a selling point to attract people and business. This production of place manifests itself on different levels of scale, including the city-level. For the city of Calgary, selling-itself has become more important as well. More on this issue can be read in Box 4.C, which discusses Calgary's downtown Urban Structure Plan. This box exemplifies Calgary's awareness of this development and, more importantly, the subtlety in which it is handled with. Appendix C illustrates the vision of the City of Calgary on urban life and (special) places as it is defined in an E-zine on the Urban Structure Plan. In this structure plan, vital urban life is based on elements as people,

embededness and encounter. This will hopefully guard Calgary (at all scale levels) from falling into a common pitfall of mimicking urban life while (re)developing public spaces: "*Many public spaces are being transformed into theme parks, where symbols rather than experience creates a life-size urban virtual reality.*" (Castells 2002, p. 551; Bryman, 2004, ch. 2). The use of themes with symbols or icons placed outside their geographical and historical context do not render good places: they are often more experienced as stage sets than real places (Kohn, 2004, p. 147). Unfortunately it are the

themed environments, which often can be characterized as mimicked places, like " show-piece waterfronts, river fronts or heritage districts" that increasingly dominate the Canadian landscape (Grant, 2004, p. 150).

In paragraph 4.2, the objective to make LRT stations landmarks has been

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Box 4.C: The Downtown Urban Structure Plan

The City of Calgary is developing an Urban Structure Plan (USP) for Downtown Calgary. It is sketched as a framework to guide what should happen as well as a promotional tool help Calgary stay on track (The City of Calgary, 2004c, p. 2.). This document will describe how the future growth and public systems, including transit, will be managed, but also focuses on two important ingredients of the Downtown character: its culture, and the public realm. This plan is relevant for TOD, successful TOD areas will become central places in their respective communities and therewith share characteristics with the downtown centre.

The City of Calgary putted three so called "E-Zines" on planning on-line. The digital format is progressive and its content is so as well; issuing footlessness and our post-modern society. *"It has been acknowledged that cities in the future, particularly in North America, will have to be able to sell themselves in order to attract new growth. With progressively falling birth rates, in-migration has become the major component of city growth. As a result, there will be increasing competition among cities for the "creative class" of mobile workers that will fuel the future economies. As employers and workers make choices as to where they want to locate, there will be increasing value placed on subjective values relating to culture, recreation and "sense of place"* (The City of Calgary, 2004c, p. 2).

On the subject of transportation, the pedestrian public realm is regarded as of pre-eminent importance. The LRT lines should be as pedestrian friendly as possible and new lines should be integrated into the Downtown urban fabric. The LRT must be seen as an integral building block for the city at large. These issues are part of transforming Downtown into a robust community which is "everyone's second community". Appendix C gives some principles and definitions for public life and places in downtown Calgary. This illustrates the vision of the City of Calgary on this development. It can be concluded that this vision is twenty-first century proof, as it fits the newest theories of place and urban life as discussed in this thesis. In Calgary's TOD policy objective to make each station area a place, this vision is helpful.

Apart from this, a guiding framework for the USP of 21 important principles are appointed in this e-zine. From a transit point-of-view, especially the principles 15, 16, and 17 are of major importance. In these principles, it is first stated that the downtown should be viewed as part of a broader cultural eco-system. Secondly, that making connections to areas adjacent to the downtown is critical from a cultural point of view and finally that "Active nodes" are people places. These lands should be preserved, and ways should be created to link these nodes throughout Calgary (The City of Calgary, 2004c, p. 8)*.

discussed. A focus on design and architecture is common in the New Urbanism planning style and, as explained, not without its reasons. Unfortunately, sometimes it is forgotten that a new traditionally designed neighbourhood is not the key to create an integrated community. Creating mimicked places is interwoven with New Urbanism, and neotraditional urbanism in particular. Box 2.A gave a short introduction on McKenzie Towne, Calgary's neotraditional suburb. The opinion that this *towne* is just a suburb with a neotraditional façade is not agreed on by everybody, but the remark is unmistakably holds some truth. The definition of neotraditional urbanism being deeply rooted in invented tradition and borrowed attachment to place[18] (Calthorpe, Till, Audirac & Sheyman as cited by: Arefi, 1999) is one of those critical viewpoints on neotraditionalism.

Castells is critical on neotraditional urbanism as well, he labels those developments as a defensive battle of nostalgic reconstruction of the old city: "*I am going to build a suburb that looks like a city*" (2002, p. 557). This point of critic is wide of the mark in the case of TOD planning in Calgary. Nevertheless, a strong point is being made by saying that planning should focus on that people interacting and how they interact. You cannot foster integrated and diverse communities by just focusing on architecture and artificial place making. This should be stressed in Transit Oriented practices in Calgary. Although architecture can help in reaching this objective, it will not do more than that. People can even interact in horrible places and reconstruct these spaces to make them meaningful places. A salient example of this is the rise of evangelical church communities of Surinam immigrants who held services in the parking garages in the modernist-planned Bijlmermeer high-rise area[19] in Amsterdam. This example is being used by Boomkens (1999, p. 71) as an illustration on his analysis of urbanism. He states that spatial actuality is not determinative for modern urban culture. In his opinion, the use of space is as least as important, and this puts the constructive role of spatial planners in perspective.

It can be concluded that an externally constructed (sense of) place, as is often the case in neotraditional developments, is not the key to create a vital urban or community life. Place making has to be done by citizens themselves. Planners can only facilitate this. Illustrations of how this can be done have been given in the previous paragraphs and the vision as illustrated in various documents on the Downtown Urban Structure Plan. Architecture and planning should play a role in fostering place making; though it should be realised that creating mimicked place can be harmful as it creates placelessness.

In addition to Relph, does Sennett (1995, as cited by Madanipour, 1996, p. 24) warn that place making based on exclusion, sameness, or nostalgia is socially poisonous and psychologically useless. Creating place with a 'singular sense of place' is recessive

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[18] They look to be rooted in history, as authentic places with an authentic past (Creswell, 2004, p. 95).

[19] The Bijlmermeer area in Amsterdam is a classic example in the Netherlands of the failure of modernist planning paradigm. A series of high rise buildings were built in the 1970s, but they never attracted young middle class families as was planned for.

and not realistic. Places are dynamic and the feelings that they invoke are likewise different (as is already explained in the first discussion on sense of place in this thesis). The permanent exposition in The Glenbow museum in Calgary on the Niisitapi (Blackfoot) people, for example, show a counter side of the 19th century pioneering in Western Canada. Likewise, the prairies around Calgary can invoke the feeling of adventure and pioneering to some people, while the sense of that particular place to other people might possibly be one of grief. To theme a new station area in a late 19th century Wild West theme will probably lead to a one-sided success story of pioneering and colonisation, characterized by selective romanticized architecture. Therewith it mimics place because an externally created singular sense of place is enforced: it is a form of museumisation or disneyfication and useless in creating *authentic* places.

As transit oriented station areas will be created in consultation with the local community, station areas will probably not become extreme museumized or disneyfied places with a singular externally enforced sense of place, as these type of places normally do not connect to their environment. Arefi (1999, p. 192) concludes his paper on place by stating that it is essential to design places not just as locations, "*but based on how to connect them, on the one hand, and the nature of social contractual obligations they purport to have, on the other*". Maybe, Massey's concept of place could be kept in mind in order to create station areas that can foster dynamic and possibly better integrated communities, as her definition of place is based on people meeting each other (locale) at a particular area (location), sense of place is hereby not enforced, but created from the inside. Massey argues for an understanding of place as "*a meeting place, the location of the intersections of particular bundles of activity spaces, of connections and interrelations, of influences and movements*" (Massey 1995, as cited by Coates & Fordham, 2000, p. 2). This open-minded and flexible understanding of place is also needed for successful Transit Oriented Development in the twenty first century. This does, however, not mean that stations cannot be created as landmarks and possess some kind of created identity, as this is one of the key policies of TOD in Calgary. As explained, it is important not to fall into the pitfall of creating those places on a recessive or exclusive basis or creating mimicked places.

Max Robinson (2003) gives a phenomenological perspective on architectural place making. He explains that, as our geographical freedom is accompanied by a lack of roots and a loss of community, the status of place with its fixation on location is reinterpreted and the notion of centre has evolved. Centres can simultaneously comprise different meaning for different people, but are a reference to our comprehension, as things are organised around centres: we use it to identify, describe and allude to the gravity of items in our everyday live. Robinsons attacks a pure pluralist' perspective on centres and place, as it reduces space to its objective basis and this leads to a form of placelessness. Robinson states (2003, p. 144) that place making derives meaning from the qualities of a location as it envisions it envisions capitalizing upon the potential of their attributes. This is achieved when building and site successfully fuse with one another (Robinson, 2003, p.

144). The newly designed Fish Creek/Lacombe LRT station is an example of such a fusion. This station (figure 4.A) is themed in a lodge-style, referring to the nearby located Fish Creek provincial park. The architecture therewith can be marked a landmark as it is unique and clearly recognizable and fuses with its environment of the park; which is one the most distinctive features of the neighbourhood. Still, the station area does not completely enforce a sense of place. Its theming corresponds with its environment, but does not include a social dimension. Therewith it stays flexible and open-minded.

Unfortunately, the station area of Fish Creek is not a community gateway, a mixed-use hub of activities, or places were people go to meet other people. The opportunities that an LRT station has to offer are not fully applied here yet (see Box 4.E) . The next paragraph will discuss the opportunities that TOD station areas have to offer into more detail.

4.5. | Station areas as mobility environments

In this chapter, the node, as a strategic spot of intensive focus has been introduced. Massey's definition of place in the last paragraph, and Whyte's view on density clearly illustrated the potential that nodes, like station areas, have for being places.

This paragraph handles Bertolini & Dijst's theory on mobility environments, already shortly introduced in the paragraph on the location element of place. Just like Castells and many other scholars, they argue that society has become very pluriform and mobile and is thus changing into a network society (Bertolini and Dijst, 2000). Boelens (1999, as cited by Bertolini & Dijst, 2000, p. 39) states that transportation nodes form the link between the transportation- and communication networks and the surroundings in which interactions take place. These nodes and their environments are places where there is a high potential of physical human interaction or face-to-face contact. The rise of the mixed use airport-city is a non-placed exponent of such a node, but a placed LRT station also has potential for becoming a multi-oriented gateway for communities. According to Bertolini & Dijst (2003, p. 30) and Castells (2004), the evidence documents an articulated coexistence of spatial decentralization and concentration forces.

For many, and often high-profile activities, 'urban' diversity and frequency of human physical contacts conserve a crucial role. The authors (p. 39) strengthen their argument with Ascher's paradox of telecommunication, which tells us that in this Information Age, there still is a persistent core of urban activities that thrive in physical proximity. These activities apply to social, cultural and economical activities. Not surprisingly, these are the activities which a transit oriented station area is ought to foster. A critical quality of locations in the increasingly borderless system is their physical accessibility, or the quality of their connections to transportation (and increasingly, telecommunications) networks at multiple spatial scales. The combination of accessibility and more proximity-related features of a location are labelled as mobility environments.

"An accessible mobility environment is a place where many people can come, but also one where many different people can de many different things: it is an accessible node, but also an accessible place" (Bertolini 1999, in Bertolini and Dijst, 2003, p. 31)[20]. The composition of the visiting population will largely determine the potential for human interaction of such a mobility environment. Of course, an airport city having high-speed Internet connections is a perfect hybrid example of a mobility environment which attracts people and business. But, LRT stations are mobility environments as well. It bares characteristics of types of nodes distinguished by Bertolini and Dijst, namely (heavy rail) railway station and a pedestrian/bicycle node. As TOD station areas are anchored in their respective communities, LRT-stations could probably best be described as 'slow' mobility environments: a potentially huge area of diversity and intensity. An ideal scenario from this perspective would be a station area located at the centre of a community, being a knot of intersecting pathways, bicycle lanes, railway and of course, roads for public and private transport. However, roads should be planned with care as the TOD station area must not become unfriendly for pedestrians. The sketched scenario assures a high density of people going to this place for various reasons and exactly this makes the area an attractive meeting spot, an attractive location for commerce and this helps creating a successful mixed-use TOD area that is more than a transfer machine.

Neal (2003, p. 128) explains that a successful street and walkway pattern is important to the social and economic life of urban communities as this does not only increase opportunities for people to meet, but increases trust as well, through the frequency of face-to-face encounter and negotiation. Box 4.D gives an example of a non-successfully planned mobility environment in Calgary, the Dalhousie station. From a pedestrian-perspective, this area has some TOD characteristics, but it is still primarily oriented on the car. As LRT stations have to become community gateways, more attention should be paid on people that do not come by car. If, for example, a station area becomes an attractive multi oriented place for people arriving by car or by other types of transportation, it will only become more successful as people are attracted by other people. This pattern of behaviour might also explain why kiosks at LRT stations have proven to be unprofitable in Calgary. This was explained in box 4.B.

Unlike the current orientation of many LRT stations in Calgary, the station in the sketched scenario is located in close proximity to intersecting roads and urban activities, it has a high potential to become a place, as it serves as a point of reference, as well as a centre in people's minds. In reality this is not easily achieved (see box 4.E). Practical issues like the costs of these developments and the (re)structuring of (present) infrastructure have not been taken into account. Although the situation of the sketched

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[20] Jane Jacobs' plea for more diversity in cities in *The death and life of great American Cities* (1961) seems to have inspired these authors. One of the main conditions to generate exuberant diversity is the following (Jacobs, 1961, p. 150): *"The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common".*

scenario is not easily achieved, it emphasizes that a LRT station is a node; and making it into central node of (local) physical networks does strengthen its position, and therewith its potential to become a successful transit oriented area. So, in more contradictory terms it can be stated that if the LRT station area is a (local) hub for many people for various reasons it then offers a potential to become a mixed-use and time-thickened place for its users. How commercial activities can be attracted to LRT station areas has not been discussed in this thesis. However, mobility environments can be described as an asset to attract commercial activities. In the field of economic geography, it is commonly stated that the (relative) location of a node on a transportation network expresses its economic potential (Wheeler, Muller, Thrall & Fik, 1998, p. 103).

Box 4.D: Conflict at a mobility environment
Figure 4-E: Dalhousie station and its environment

Photos by author

Dalhousie station opened in 2003. The top-left picture shows the 'landmark'-style architecture of the station. Like many of the stations on this line, Dalhousie station is located within the Crowchild Trail, Calgary's major northwest route. Unfortunately, there is a conflict between pedestrians and cars near this station, this is illustrated is the top-right picture. During rush hour, the station area is packed with cars and pedestrians. Normally, pedestrians tend to take the shortest route home, unfortunately the designed route pedestrians is not well marked and is not the easiest and shortest route for a lot of people. As the photo shows, this can lead to unpleasant situations. The right-down photo is a computer manipulation of the left-down photo. This photo was taken at the non TOD-planned shopping-area near to Dalhousie station. This place is not-yet pedestrian friendly because it lacks good pedestrian crossings, for example. The right-down photo shows the same environment but with pedestrian crossings aded, these make this area safer and friendlier for pedestrians. It can be concluded that Dalhousie station has some TOD-elements, but unfortunately the area suffers from conflicting cars and pedestrians. From a pedestrian point-of-view, there is still a lot of work that needs to be done at this station.

The topic of making LRT station areas real places has been extensively discussed in this chapter. According to today's academic literature on this topic, do LRT stations have the qualities to become real places and gateways for diverse communities, however it should not be forgotten that planners and architects can not just create places. They only have a facilitating role in place making. With this in mind, it has been stated in the last few paragraphs that the concept of centre is vital for making LRT stations vibrant and mixed use places. The notion of mobility environments helped explaining that LRT stations have to become central nodes in local webs, as this will

Box 4.E: Fish Creek/Lacombe LRT Station as a mobility environment
Figure 4-F: The direct surroundings of Fish/Creek Lacombe LRT station

Metres   50   100   N
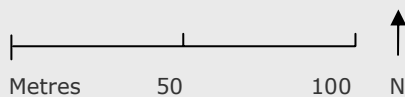
A good illustration of a station having some TOD elements, is Fish Creek/ Lacombe station. The station itself is designed as a landmark and fist its environment (see figure 4.A and paragraph 4.3). However, the edited top-down view of the station and its immediate environment show that the station area is not transit oriented yet. The dark blue 600 metre radius and light blue 200 metre radius show that the immediate environment of the LRT station is strongly oriented to car-use. The many parking lots and close proximity to McLeod Trail offer convenience for people to take the car to reach the station. But, as the figure also illustrates, the parking lots and highway are contra productive for developing the immediate environment of the LRT station into a lively, mixed-use (pedestrian oriented) environment. This is a dilemma for many stations in Calgary.

attract many people and business to the station areas. Apart from this, a centre also is a reference to our comprehension and therewith it is a real place in our minds. However, a centre does not specifically enforce people a specific sense of place. In this chapter, the dangers of mimicking place and enforcing sense of place have been clarified. As our society has become more diverse and individualised, Massey's routed concept of place should be kept in mind when developing TOD station areas. Although this does not mean that TOD station areas should be planned and designed characterless. Castells explained that the policy of making LRT stations landmarks is needed, as we call for symbolic nodality. Subtlety is required in this process, as (social) flexibility and open mindedness are core values of vibrant and diverse station areas.

The next chapter will address two case studies of TOD-like developments in Calgary. The vision on place making, as outlined in this chapter and the previous chapters will be the theoretical foundation for the review of these case studies.

5. Case studies

5.1. | Introduction

In the previous chapters, the topic of Transit Oriented Development in Calgary has been analysed from a mostly theoretical perspective. Calgary's choice to implement TOD and its specific TOD policy have proven to be quite twenty-first century proof on the analysed concept of place. Threats and opportunities on place making have been issued and elements on how TOD station areas in Calgary can become successful places have been given.

This chapter will present two case studies that help explain, from a place point-of-view, the strengths and weaknesses of current transit oriented-like developments in Calgary. The fieldwork for this thesis was executed at the end of 2004, during the time that the final policy on TOD was published by the City of Calgary. Unfortunately, there were no station areas that were planned with this policy as its manual to study yet. Therefore, two alternative areas have been picked to study. The first case study is the Bridgeland-Riverside redevelopment. This development can be labelled as having a transit oriented character. The second case study is Calgary's Southeast Centre. This greenfield area is expected to become the new heart of Southeast Calgary. In 2004 the (proposed) Southeast Centre Area Structure Plan was published, giving a vision on future transit oriented developments in Calgary.
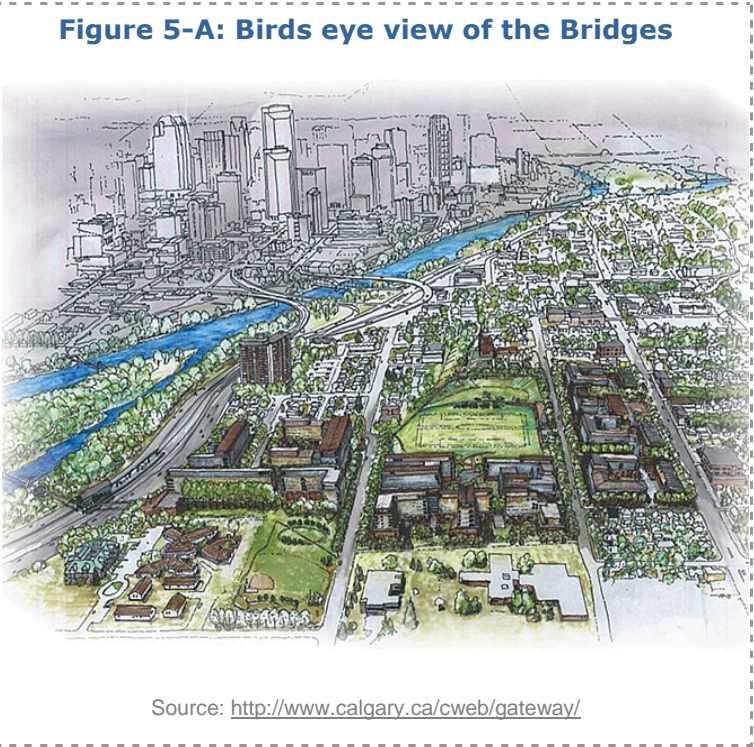
5.2. | The Bridges

The Bridgeland-Riverside community is an inner-city neighbourhood located on the north-shore of the Bow River near downtown Calgary (see appendix E). This area was one the first neighbourhoods that developed in Calgary. In the last decades of the 19th century, increasing numbers of Russian-German immigrants settled into the inexpensive working class neighbourhood of Riverside, which became known as "Germantown". Italian immigrants concentrated in Bridgeland. In 1910, a steel bridge was constructed and the area was annexed by Calgary. In this same year, The Calgary General Hospital opened. This hospital was demolished in 1998.

The hospital lands are currently being redeveloped by the owner of these lands, the City of Calgary. The Bridges development (slogan: building an urban legacy) is a 37 acres (15 hectare) redevelopment project. This plan has three phases, and phase three will not begin until 2008. The "Bridges" site is a mixed-use development, accommodating around 1,575 residential units, a large park, a new community hall and commercial/retail development. Figure 5.A gives a birds eye view of the developments. The Bridgeland/

Memorial LRT station is located at the road axis at the left corner of the illustration. Appendix B provides a photo impression on the area and highlights the LRT station.

The Bridges development is seen by the City of Calgary to set a new standard in urban development for Calgary. Its vision is to create an urban village that respects and enhances the surrounding community, while creating a distinct environment of its own. The Bridges area is introduced as: *"A pedestrian-friendly design combined with landscaped elements such as tree-lined avenues, street lighting and wider boulevards will encourage residents to walk to public transit, work, stores and recreational amenities. As the landowner and developer of the site, The City of Calgary will realize key strategic objectives that will increase population density, support transit use at the existing LRT station and encourage pedestrian activity"* *(The City of Calgary, 2003b)*. The Bridgeland/Memorial LRT station is a significant factor in the Bridges development. Albeit the project is not officially labelled transit oriented, as it is developed prior to the TOD policy guidelines came out, it shares most

Figure 5-A: Birds eye view of the Bridges

Source: http://www.calgary.ca/cweb/gateway/

characteristics and goals with the newly developed TOD policy guidelines. The Bridges development is the first large-scale transit-oriented like redevelopment in Calgary and for that reason it has been chosen for to analyse in this thesis.

In this case-study, the main focus will be from on the Bridgeland/Memorial LRT station and its surroundings from the concept of place perspective. The next paragraphs will therefore discuss the three distinguished concepts of place: location, locale and sense of place.

5.2.1. | Location

The first component of place, as distinguished in this thesis, is place. Figures 5.A and 5.B and Appendix E illustrate the central location of the Bridgeland-Riverside community in Calgary. The area is easily reached by for a lot of Calgarians by public transport. Likewise, public transport is an attractive means of transportation for the inhabitants of this community. Figures 5.A and 5.B also show the relative peripheral location of the Bridgeland/Memorial station within its neighbourhood. The station is located near the

river banks, on the Memorial drive corridor. This is an artery that connects downtown Calgary with the Deerfoot Trail highway. The demolition of the old hospital gave the City of Calgary the opportunity to develop the hospital lands into an urban village, but it had to deal with the situation of an LRT station that was placed at the border of the redevelopments.

Already in the first chapter of this thesis, a theory that argues that urban villages and transit oriented developments should occur near transit stations has been handled. Location of LRT stations has proven to be of main importance from different perspectives, this has been discussed in the chapters following the first chapter. The new developments in Bridgeland do take place near a transit station, but the somewhat peripheral location of the LRT station is far from ideal. The idea of place as a centre and the concept of mobility environment have been introduced and discussed in the previous chapter. Due to its location, the Bridgeland/Memorial station can by no means be regarded a *centre;* as the

Figure 5-B: Aerial overview of the Bridges area
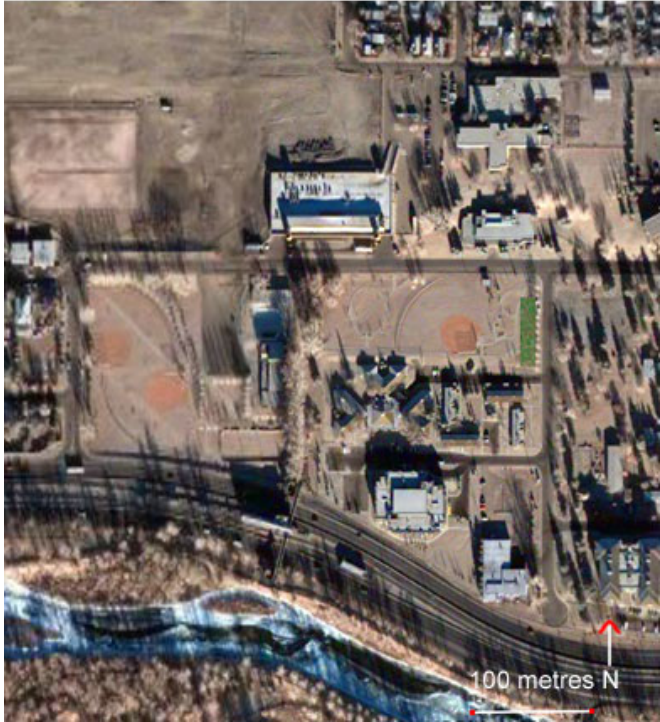
Source: Google Earth© 2005

Bridges development is far from organised around the LRT station. Therewith it is not a reference to our comprehension, as Robinson (see paragraph 4.4) would say. Neither is it a mobility environment to its full potential. The station is easy to get by for cars, but only one bus route serves the station. The station acts as a node for LRT passengers and it also has a 'bridge' function for pedestrians and cyclists who have to cross memorial drive

In the newly developed TOD policy objectives, it is stated that TOD is expected to transform a utilitarian transit node into a community gateway and a vibrant mixed-use of activity. The Bridges site will hopefully become such an area, but unfortunately the LRT station will mainly contribute to this by transporting people into and out of the area, like any ordinary LRT station would do. The weak positioning of the LRT station in the area becomes even more clear if a 600 metre radius is drawn around the station. As explained in a previous chapter, this is a normal procedure to determine a transit oriented station area in Calgary. In the case of this specific LRT station, a substantive part of its surroundings show to be not suitable for any development; the Bow River breaks this station area into two parts. But, the Bow River is more than just an obstacle. It is a place for recreation. The infrastructure near the river banks could be optimized for people to stroll, bike or sit near the river. It is talked about to connect the LRT station area to

the nearby St. George's island and have this island connected to Downtown Calgary. These connections are already drawn in figure 5.A. unfortunately; this is not reality yet, as these plans are only talked about (D. Colquhoun, personal communication, October 2004).

From the perspective of this thesis, connecting the LRT station (area) to St. George 's Island and downtown Calgary offers a great opportunity and this connection should be built as soon as possible. It adds a non-automobile axis from the downtown area to the Bridges site. Apart from making the Bridges site more attractive for inhabitants, the LRT station will become more of a mobility environment as it will host additional and more diverse movements. This is beneficial from a place point-of-view, as will be discussed in the next paragraph.

5.2.2. | Locale

The relative peripheral location, both physically and connectively, of the LRT station in the Bridges development has been discussed in the previous paragraph. A good bicycle and pedestrian connection to the downtown area through this station (the station already serves as a bridge for passing memorial drive for pedestrians and cyclists), would enhance the amount and variety of people passing the Bridgeland/Memorial LRT station: this provides density (paragraph 4.5) and diversity (paragraph 4.3). These are two much needed elements in creating people-oriented and diverse neighbourhoods, and making LRT stations real places. A high amount of people passing the station is important as this attracts businesses, like kiosks or coffee shops, near the station and this increases the attractiveness and rate of social interaction at the station area.

Apart from making the station area more connected, enhancing the station's design and environment can also improve its sociability. Currently, the station is not really welcoming; this will be better in the future as the Bridges development is not finished yet. For example, placing benches (see paragraph 4.2) and designing the station to fuse with the Bridges development, can make the station and station area more welcoming and enhance urban life (see also Appendix D).

Infrastructure can thus enhance the locale-component of a place, but as argued in paragraph 4.4: planners and designers do not posses the magic key to successful community life. In this thesis, it has been argued for a progressive, non-backward looking, conceptualisation of the locale component of place. Societal developments, such as an increasing flexibility and loss of patriarchal values do influence how, where and which people interact. In a promotional brochure of two types of condominiums that are going to be built in the Bridges area, the community aspect of the Bridges area is described as follows: "*Walking, jogging, cycling, shopping, dining, connecting The Acqua & The Vento, in the heart of The Bridges, puts it all within reach. Moments from downtown Calgary, you have entered the soul of a village. Even with a growing retail sector, Bridgeland has the unmistakeable sense of community. More than atmosphere,*

more than charm, a typical day offers an ease of living, where everything is within walking distance and the face behind the counter is familiar" (Windmill developments Group, 2004, p. 3). The picture of an archetypical village community is sketched. This might attract buyers, but this is not completely realistic as society has developed into a different direction.

Just like the Windmills group, the City of Calgary looks back when issuing sociability in the Bridges Development. This is because he Bridges development plan has its roots in the Bridgeland-Riverside Area Redevelopment Plan (ARP), a plan originally dating back to 1977. The Bow Valley Centre plan (issuing the Bridges) only is an amendment to this Area Development Plan (The City of Calgary 2003c). In this community-wide ARP, eight goals are set. These goals provide the framework for the plan. Two of these goals are as follows: to provide opportunities for a wider range of residential alternatives for different ages and income levels. A second goal is to conserve

and stabilize the family-oriented areas of the community and to ensure their long-term viability. The goal of family-oriented development is widely backed by the Community Association and area residents (*ibid,* p. 9). Of course, family-oriented development is really important and should be stressed as the strategic location of the community will create high pressure for apartment developments. Therefore, different residential districts are established in the plan, this is shown in figure 5.C

Figure 5-C: Residential Districts

Source: The City of Calgary, 2003b
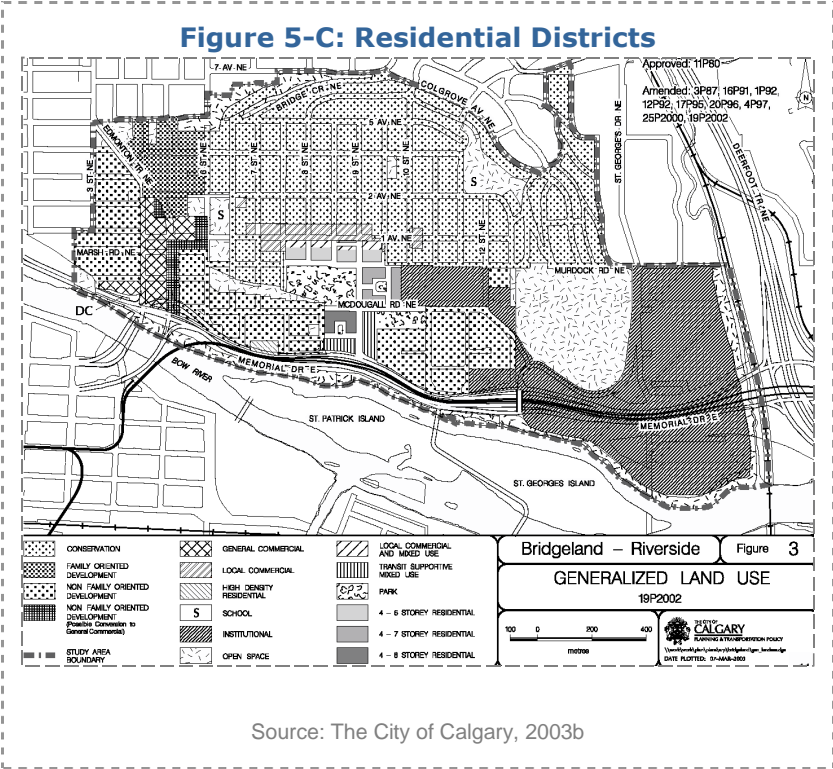
Rigid zoning is arguable not the solution to contradicting interests in a flexible society (see paragraph 3.4). Besides this, the patriarchal family is not the all-standard mode of living anymore. By 2001 around 60 percent of the population of this area (against 82% in the Calgary CMA) lived as a family person[21]. Out of those census families, 53 percent had a family living status as married couples and 23 and 24 percent as common-law couples or lone parent families (for the Calgary CMA, these figures are

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[21] Family persons are defined by Statistics Canada (2001) as "*those living in households, containing at least one census family, that is, a married couple with or without children, a couple living in common-law with or without children, or a lone parent living with one or more children*".

approximately 73, 12 and 15 percent). The increasing rate of flexibility is not only increasing different forms of living, but people also change jobs more often   A   closer look at the statistics of the Bridgeland-Riverside area shows us that approximately 28 percent of its population has moved in 2000-2001 (against 19 percent in the Calgary CMA. Statistics from Statistics Canada, 2001). All these statistics elucidate that the concepts of social networks as individual routes and a flexible understanding of place are already highly relevant and their importance will arguable only increase in the years to come. The danger of The Bridges project is therefore is that outdated policies (as rigid classification and zoning) influence future decisions. Policy objectives and tools of interrelated plans to the Bridges developments should be investigated upon as society has changed and will only further change in the years to come. As stated, TOD can not create old fashioned communities. An element of the strength of TOD, as explained in many paragraphs, is that it is adapted on routed sociability, something that is not fully taken into account in the Bridgeland-Riverside ARP.

A weakness of The Bridges project is therefore that its outdated policies (as rigid classification and zoning) influence future decisions. Policy objectives and tools of interrelated plans to the Bridges developments should be investigated upon as society has changed and will only further change in the years to come. As stated, TOD can not create old fashioned communities. An element of the strength of TOD, as explained in many paragraphs, is that it is adapted on routed sociability, something that is not fully taken into account in the Bridgeland-Riverside ARP.

5.2.3. | Sense of place

In addition to the routed individuality, it has also been argued in this thesis that sense of place is not just a collectively rooted concept, but should be understood in a more dynamic fashion and from a more individual perspective as well. This has been argued in the third chapter. The previous paragraph gave an example on how collective sense of community, associated with sense of place, is less directly dependent on location than has been the case traditionally.

Because sense of place is perceived by individuals, it has been extensively discussed that it is useless to create places with a singular sense-of place or to mimic places (paragraph 4.4.). The Bridgeland/Memorial LRT station and its environment do not invoke such a singular sense of place. The station itself is neutral and modest in its design. The view on the Bow River, downtown area and of course on the characteristic Bridges site, help people identify where they are. Avant la lettre to the TOD-policy, sightlines are also emphasized. Another issue of the TOD policy in Calgary is to make LRT stations landmarks. The Bridgeland/Memorial station is not a characteristic landmark. It can be argued for that it does not have to become a landmark either, as the station is located at in a very characteristic environment (see the paragraph on Castells need for symbolic nodality) and is not at or near the direct centre of developments in the Bridges

site. It is anyhow important for the station to be interwoven with the rest of the Bridges site as the redevelopment of the Bridges is expected to 'knit' the community into a cohesive whole. Slight changes in design might help the station area to be more connected to its immediate environment.

5.3. | Southeast Centre

In contrast to the Bridges development, the LRT stations and their surroundings that will be analysed in the upcoming paragraphs are non existent yet. The Southeast Centre (SEC), or South City Centre, is a proposed town centre along Calgary's southeast edge. It will be the home of Calgary's new health care facility, and two transit stations along a new southeast LRT line are planned for. In March 2004, the proposed Southeast Centre Structure Plan was published. The area is in accordance to the main sustainability policy-objectives of the City of Calgary (see paragraph 1.4) and envisions the idea of Transit Oriented Development. In the introduction of the proposed area structure plan, the SEC is introduced as follows: *"Heart of Southeast Calgary where people come to work, live, shop, play, learn and entertain themselves. The SEC facilitates the well-being and health of residents through a state-of-the-art regional health care facility. It is also home to people of all ages and walks of life, who find the variety of housing meets their needs well and contributes to an interesting, lively neighbourhood. Neighbours run into one another frequently at, for example, one of the many interesting stores on their way*

Figure 5-D: Placement of the LRT station at the Southeast Centre
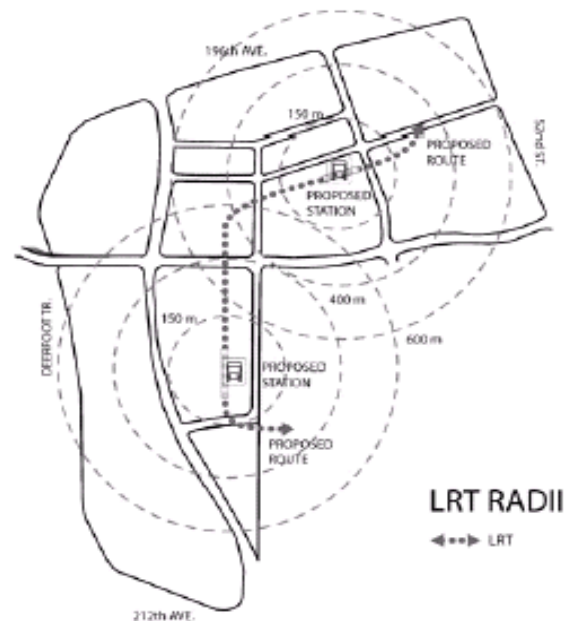
Source: The City of Calgary, 2004f, p. 46.

home from work, the café across from the recreation centre, the park or high school, or while waiting for a friend by the fountain at the LRT station. With so many choices of things to do, it's easy for each member of the family to pursue their own interests within the SEC (The City of Calgary, 2004f, p. 1)."

The anticipated LRT line and LRT stations highly contribute to the character of this new centre. Unfortunately, the SEC LRT-line is not anticipated for 15 to 30 years (The City of Calgary, 2004f, p. 106). A Bus Rapid Transit line will bridge the time until the heart of the transit oriented developments, the proposed LRT line is built, which is a highly undesirable scenario. In the discussed policy orientations that lead to a decline of

automobile dependence and ascertain a progress in sustainability (paragraph 1.4), the first step is creating high quality *rail*[22], and then implementing the policy of traffic calming and designing urban villages. The City of Calgary almost tries to turn the order of these steps around. Successful mixed-land use near station areas drives on diversity and density. Shop owners, for example, will not be eager to open their shops on a place where an LRT station will be opened after, let's say, 8 years. As urban transportation and land development is path-dependent to some extent (Gifford, 2003, p. 151), it should be tried to have the anticipated LRT line finished as soon as possible after the SEC is built. Otherwise, the outlined vision and policies that anticipate on LRT-transportation make only little sense.

The developments surrounding the proposed LRT stations will be "a*ttractive and offer convenience and safety to transit users and pedestrians alike - there are housing, shopping and/or office concentrations (transit-oriented development) at the major transit hubs*" (The City of Calgary, 2004f, p. 1).   One of the stations will presumably be built in the close proximity of the newly planned hospital, while the other station will be located in the hart of the "Main Street" precinct. The regional recreation centre and library will also be located in proximity to one the LRT stations. Residential developments are encouraged to locate in proximity to the LRT stations and the public places (*ibid,* p. 15, 16).   The ARP is clear on the fact that transit-oriented development is encouraged by concentrating the most intensive uses within close proximity to the LRT stations. This leads to the first component of place: location.

5.3.1. | Location

Concentrating the most intensive uses within close proximity to the LRT stations adds to the centrality of the stations, and is one the many policy-directives that will make the Southeast Centre a true transit oriented environment.   The discussed concepts as mobility environment, centre and node all illustrate the importance of an LRT station to be well-connected and centrally located.

The first quote in the previous paragraph gave an image of the Southeast Centre to be a people's place. The area was sketched in a way that accurately contrasts the archetypical suburb: boring, mono-functional and automobile oriented.   This does, however, not mean that car travel is of secondary importance in this centre. When "*people drive to the Centre, it's easy to go where they need to and park the car"* (The City of Calgary, 2004f, p.7). As Calgary is automobile-oriented, it is important to facilitate car travel in these new plans. A total of 1000-1200 parking stalls will be located at or adjacent to LRT stations. More specifically, policy objective 5.6.2 states that "*within 400 metres of a future LRT station, the location of surface parking on the site should be*

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[22] Litman (2005, p. 63) argues that there is considerable debate on the relative merits of bus and rail transit. He agrees on the fact that rail has a much greater impact on land use patterns than bus transit.

focused at the side or rear of the site taking into account the functional requirements of the user" (*ibid,* p. 67). Argued from the concept of place, a large surface parking lot is a disruptive urban element. In the structure plan (*ibid,* p. 46), it is argued that structured parking may be considered in certain occasions. From the viewpoint of this thesis, structured parking is strongly preferred to surface parking. As transit stations have to become central nodes, levelled parking instead of surface parking near these stations is of primary importance for the TOD environment to be successful. Figure 5.D shows that the stations (especially the north-station) are located at central locations in the new centre. Big surface parking lots are planned, as cited: *close to the stations at the side or rear of the site*. But, TOD station areas are not supposed to have a rear or side nearby.

Figure 4.3, the parking lot surrounding the Chinook mall, and Box 4.E, gave an example on the disruptive character of surface parking lots. Surface parking is a cheap solution to facilitate people travelling by car, but it results in a lifeless area at a location that would be highly suitable for mixed use environments. Besides this, surface parking forms a buffer, seceding, instead of integrating the area into a whole. The City of Calgary probably realizes these issues as two of the objectives on the design of the LRT stations are that they shall not create a large separation between transit users and the station and secondly that the design of the LRT station shall be integrated with adjacent development. These objectives should also be kept in mind when developing the issued parking facilities. The City of Calgary should therefore consider levelled parking near the LRT stations. Then, cars can still be accommodated, but not on a site that negatively influences the transit oriented character of the centre. The extra expenses of levelled parking can be (partly) financed by the revenues of more intensive land use.

5.3.2. | L o c a l e

It has been discussed for a few times already that the three components of place are interrelated. Besides the comment on levelled parking near the LRT stations, the station areas are centrally located, both physically and connectively, and therefore have a high potential for social contact. The mechanisms that make this area highly sociable have been discussed throughout this thesis (especially paragraph 5.2.2).

Again, the quoted introduction of the SEC proves to be interesting as it mentions: "*Neighbours run into one another frequently at, for example, one of the many interesting stores on their way home from work, the café across from the recreation centre, the park or high school, or while waiting for a friend by the fountain at the LRT station. With so many choices of things to do, it's easy for each member of the family to pursue their own interests within the SEC*" (The City of Calgary, 2004f, p. 1). This sketch of the SEC illustrates that the southeast centre is ought to have a clear identity as a neighbourly place (*ibid,* p. 10), and secondly that this character is partly formed by the site's facilitative urban design, mixed land use and attention to individual interests. These are

all elements that have been discussed throughout this thesis in which a progressive understanding of place has been pleaded for.

The discussed weaknesses on the locale-element of place in the Bridges redevelopment do certainly not apply to the Southeast centre. A specific type of social character of the place, apart from being neighbourly, is not argued for. Just like the Bridges development, this plan also emphasizes the special needs of families with children, but in contrast to the other development, it is also recognized that society changes. Flexibility and adaptability are key-elements in the discussed plan. It is planned for that the Southeast Centre can "*adapt to changing market dynamics, community demographics, and land use demands*" (*ibid,* p. 65). As stated before, station areas have a high potential for sociability. Recognizing these areas as mobility environments will only increase this potential, which is an important asset in our age of increasing flexibility and individual routes of sociability. In the discussed Area Redevelopment Plan, the LRT station areas are not officially labelled as mobility environments, but the pedestrian and bicycle routing plan will, for example, be interconnected and provide efficient connections to LRT stations (*ibid,* p. 91).

From the discussed locale-component of place, the Southeast Centre looks to be a promising new centre. The area redevelopment plan provides a much-needed progressive view on the social element of place. The next paragraph will discuss if the component sense of place is also understood from a likewise progressive viewpoint in this plan.

5.3.3. | Sense of place

Chapter four has extensively discussed that place, or sense of place should and cannot just be designed, as this can lead to mimicked places and might even be harmful. In the Southeast Centre Area Redevelopment Plan, the word sense of place is often mentioned with a notion that it is something that can just be created. However, point 5.3 of the plan is very clear on this: "*A true sense of place will evolve over time as individuals, families, and businesses begin to establish their unique presence. However, the initial development pattern and quality will be instrumental in establishing a framework for a rich and varied environment that evokes sense of place. In this respect it is essential to establish a high standard for urban design and pay careful attention to the elements that have place making qualities (e.g., landmarks, nodes, pathways, edges and precincts)"* (The City of Calgary, 2004f*.,* p. 51). This policy is in accordance with new academic theories on sense of place, as discussed in the previous chapter of this thesis.

A unique sense of place is promoted throughout the design of the SEC and the station environment, but it is emphasized that a sense of place can and should not be created from a top-down perspective. Urban design is a tool to reinforce a sense of place, not just to create one. The dangers that Relph, Sennett and Castells (chapter four) signalled do therefore not apply on place making in the Southeast Centre. On the contrary, Lynch's theory on good urban form (paragraph 4.2) as well as Robinson's

theory that building and site should successfully fuse with one another (paragraph 4.2) seem to be carried out in the new SEC. Attention is paid to how buildings, parks and art have been designed and located, how sun exposure is maximized and on the views of the city, mountains and major landmark from major roads and public spaces (*ibid,* p. 2).

Herewith, the City of Calgary illustrates that it knows what successful place making needs to be like. This is furthermore demonstrated at page 108 of the Structure Plan (The City of Calgary, 2004f): "*The greatest opportunity for creating an authentic sense of place in the SEC lies in the relationship between the land use mix, urban design parameters and provision of amenities – that is, sense of place can (and must) be designed in*" (*ibid,* p. 108). If all three components of place will be recognized to form this concept and all are planned with care (which looks to be the case), the Calgary SEC and its LRT station areas especially, have a great potential to become real places for people and therewith contributing to the success of the Southeast Centre as a transit-oriented environment.

Conclusion

In 1976, Edward Relph published *Place and placelessness*. In this much praised phenomenological book, he pointed out the differences between the 'old road' and the 'new road' (Relph, 1976, p. 90). The old road was a definite place, a strip of land that went between other places and involved the traveller directly in the landscape. The new road, on the other hand has a placeless character, as it starts everywhere and leads nowhere. Being a functional type of mass movement with stations that are hubs for frictionless movement, Calgary's Light Rail Transit shares many characteristics with the new road. Augé (1995) would even label this traveller's space a non-place.
However, LRT stations are points of connection that might be embedded in their local neighborhoods and they have a potential to become places and gateways to their communities.

This thesis has put the City of Calgary's policy of Transit Oriented Development (TOD) and place making in its historical and geographical context, and secondly, evaluated Calgary's policy on place making from a cultural geographical perspective. The roots of TOD as an answer to urban sprawl have been thoroughly discussed and its focus on place has been uncovered. Place is an elusive concept that is under pressure and is subject to much debate in geography; especially as time-space compresses. Two major schools of thought that have proven to be influential in conceptualizing place; the phenomenological movement and ideas of network urbanists have been introduced. Both perspectives have shown that place remains a highly relevant concept, as both social connections and human consciousness have a geographical ramification. Transforming station areas into places, therefore, can contribute to the success of transit oriented LRT station areas.

Agnew's tripartite definition of place, constituted of the components location, locale and sense of place has proven to be a helpful tool to work with the concept of place. Combined with theories on the Information Age, a state-of-the-art-review of making station areas place was given. Firstly, it was found that planning in the current timeframe should encompass social and environmental perspectives try to create meaningful places and be non-defensive in its type. This fits Calgary's TOD policy quite accurately. A more in-depth review showed that the two sub policies of making station areas places, make each transit station a landmark, and emphasizing sightlines and views even answers Castells' call for symbolic nodality.

A discussion on threats and opportunities for station areas helped summarizing and characterizing what a successful TOD station area, as seen from the concept of place, should be like in the years to come. Shortly summarised, do LRT stations have the

qualities to become real places and gateways for diverse communities, although it should not be forgotten that planners and architects only have a facilitating role in the process of place making. The dangers of enforcing sense of place and mimicking place, as is often the case in New Urbanism planning, have been clarified.

The discussion on mobility environments explained that LRT stations have to become central nodes in local webs, as this will attract many people and businesses to the station areas. Dennett's plea for urban encounter, Whyte's view on density and Massey's routed view on place, all added to the concept of *centre* being vital for making LRT stations areas vibrant and mixed use places.

The discussion on threats and opportunities of making TOD station areas places, gave a theoretical foundation for the review of two case studies. Analyzing the station areas at the Bridges and the future Southeast Centre as places showed some strengths and weaknesses of current transit oriented developments in Calgary. The Southeast Area Structure Plan gave a progressive, well rationalized view on place making and the role of LRT station areas in this new centre. Nevertheless, the proposed surface parking and the uncertainties on when the LRT line will be opened are issues of major concern.

The LRT station at the Bridgeland-Riverside community suffers from a peripheral location and a low connectivity. Together with a backward looking view on locale in the Area Redevelopment Plan, these issues form a barrier for the station area to become a place for many people.

It is a challenge, but having Light Rail Transit which has features of both the old *road* and the *new road* will help Calgary fighting urban sprawl. Having high quality rail, making LRT stations central nodes in local webs and working with place from a progressive point of view are important factors in facilitating transit oriented LRT stations to become vibrant and mixed-use *places*. This does, however, not imply that these areas will then return to a compact, close-knit community (the focus of New Urbanism), but it will transform a utilitarian transit node into a unique environment and community gateway.

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