TirolCITY – emerging urban landscapes in the Alps

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Abstract

The Austrian region of North-Tyrol is famous for its unspoiled nature, magnificent Alpine landscapes and traditional farming. However, embedded in the impressive mountain scenery, a new urban landscape has emerged causing infrastructural and environmental problems in the region. This paper describes the spatial forms and underlying processes shaping the new urban landscape in North-Tyrol. Furthermore, it presents a new concept, 'TirolCITY', which shows the region as one continuous city and indicates the possibilities of a stronger regional planning.

Keywords: network city, North-Tyrol, regional planning, urbanisation, urban landscape

1   Introduction: From a rural region to an urbanised area

For centuries, a strong farming tradition characterised the North-Tyrol. During the past decades, the region has changed from a mainly rural region to an urban system. Today, the agricultural sector employs no more than 5% of the working population and more than 60% of the local population live below an altitude 800 m in the densely populated 'Inntal' (Inn Valley). The amorphous structure of the settlement area spreading along the 150 kilometres-long 'Inntal' and its adjoining valleys is home to 636,000 people (7.8% of the total Austrian population). As the political system is built on rather strong municipalities, thinking in terms of spatial planning is confined to the local scale. The result is a chaotic consumption of land triggering infrastructural and environmental problems in the region. In fact, many decisions about the built environment are taken at the municipal level and are quite often driven by private interests. The province has often the role of an observer as other actors play a part in shaping land use.

The first part of this paper briefly introduces the region. The subsequent passage describes the spatial developments in the 'Inntal urban agglomeration', followed by an introduction of the concept 'TirolCITY'. This concept shows the region as one continuous city to inspire for a stronger regional planning in the future. The concept leads to 6 planning strategies giving possible solutions to the imminent urban sprawl and the spatial fragmentation in the region. This paper does not draw up a definite blueprint for the region, but calls for a more vital discussion on the recent spatial developments and on possible planning approaches.

2 Regional level

North-Tyrol is located in the Austrian part of the Alps between two dynamic economic regions: Bavaria and North Italy. The main characteristics of the region are the limited area of usable land (the mountainous topography allows only 12% of the total area to be used for settlement (Tiroler Landesregierung 2007), mass tourism (more than 8.5 million visitors every year (Tourismusmanager der Tirolwerbung 2007) and impressive traffic flows. In 2004, 9.3 million cars (Tiroler Landesregierung 2007) crossed the Brenner Pass, and the Tyrolean ski lift network can transport more than 1.4 million persons per hour (Statistisches Handbuch des Landes Tirol 2006), which is comparable with the capacity of a metropolitan public transport network.

The main towns of North-Tyrol can be found along the 'Inntal' running across the region from East to West. Among these centres, the federal capital Innsbruck is by far the largest and together with the agglomerations in the Middle and the Lower 'Inntal' this area can be already conceived as one city region (Österreichische Raumordnungskonferenz 2002). Furthermore, the 'Inntal' is a significant transit corridor. This is translated into a tightly-knit pattern of roads, motorways, railway tracks and power lines that are meandering, ribbon-like, along the River Inn. At the major traffic junctions, new trading estates and industrial zones are being set up (figure 1). Slowly but steadily they are filling up the vacant areas between local communities with small-scale businesses, shopping malls, petrol stations, and leisure parks.

3 Spatial developments in the 'Inntal urban agglomeration'

Currently, an urban landscape dominates the 'Inntal'. Between historic centres new trading estates and industrial zones are being set up and dissolve the administrative borders of the municipalities. The newly emerging functional and social contexts can only be understood in a larger context: 'the Inntal urban agglomeration'.

We distinguish two types of urban growth in North-Tyrol: The first is the phenomena of urban sprawl between or on the edges of historical centres caused by a massive construction of single family houses and an explosive development of com-

Figure 1: New trading estates and industrial zones are filling up the bottom of the 'Inntal'. Photo: YEAN.

mercial areas containing a new mixture of business, amusement and industrial parks (e.g. Cyta shopping mall on the west border of the city Innsbruck in Völs, the DEZ shoppingmall in Innsbruck, or the Swarovski Crystal World in Wattens). These huge urban developments are located exclusively along important transport links and are expanding particularly rapidly near transport nodes where motorways, railway lines and federal highways meet. They can be autonomous – independent of existing urban structures – or create a link between periphery and motorway (Borsdorf 2004). Because these commercial zones depend on private car traffic, most of the land they occupy is consumed by access roads and parking areas.

While the commercial sector is currently attracted to the proximity of motorways, in the housing market it is just the opposite. The residential areas can be found in two types of locations. Either in the bottom areas in the 'Inntal', like in the villages Rum, Thaur and Absam (figure 2), or above the city on plateaus, which is the most favoured residential location. Nowadays, these sunny hillside locations fetch high ground prices that only the wealthier part of the population can afford, thus creating a social disparity between valley and plateau.

Despite the limited amount of space available for building, the favoured form of housing remains the single family house. Over the years its basic shape – the traditional 'Tirolerhaus' – has been adapted to the increasing floor space requirements due to intensive tourism. Nowadays, the 'Tirolerhaus' appears in all kinds of formats, up to the density and size of an apartment block, a typical form of urban living.
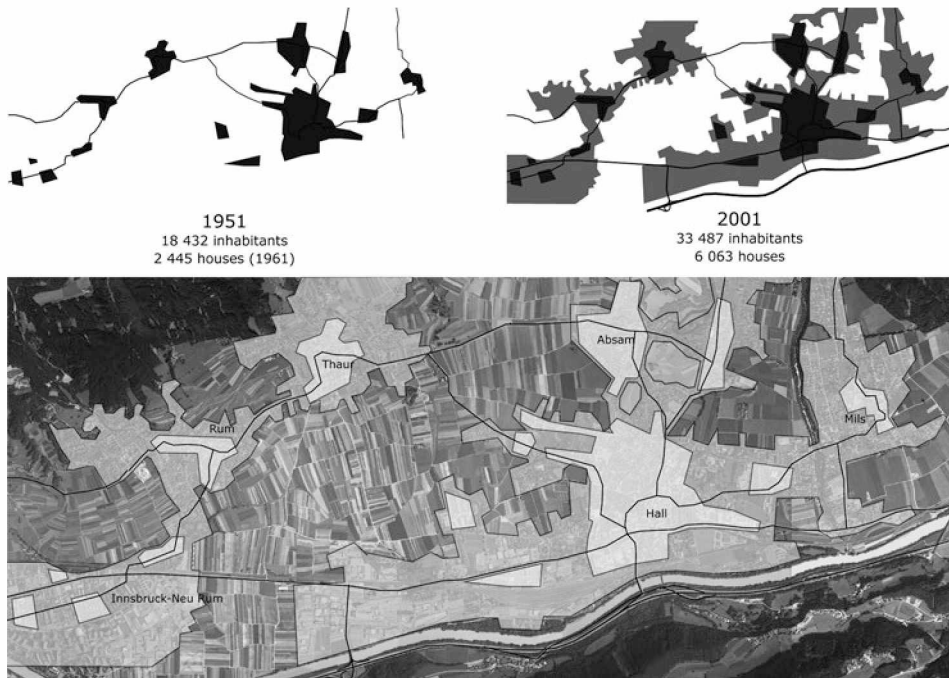

1951
18 432 inhabitants
2 445 houses (1961)

2001
33 487 inhabitants
6 063 houses

Figure 2: Development of the built-up area in the villages Mils, Hall, Absam, Thaur, Rum, Neu Rum from 1951 till 2001. Source: YEAN, Statistik Austria.

Figure 3: Ischgl. Source: YEAN.

The second type is the densification of existing structures. This is especially true in places where the settlement area is limited and where the pressure to claim land for building purposes is high (e.g. by expanding hotels). This phenomenon can mainly be noted in the adjoining valleys of the 'Inntal', where extreme topographic conditions (risk of avalanches, mudslides and flooding) do not allow any extension of the settlement area and tourism is an important factor of influence. Large amounts of visitors result in remarkable building and population densities, which do not fit with the country's image of the villages. During the tourist season these villages develop into entertainment centres and their true impact is revealed – for instance, Michael Jackson was not invited to perform in Innsbruck, but in 'Ischgl im Paznauntal' (figure 3).

4   A new urban landscape: TirolCITY

The research study *TirolCITY – New urbanity in the Alps* (YEAN 2005) describes and analyses the 'Inntal urban agglomeration', and presents new strategies for its future development. To underline the necessity of a holistic approach to spatial planning in the region, YEAN has elaborated a "TirolCITY map" (figure 4) that depicts the urbanised areas in the 'Inntal' and its adjoining valleys as one continuous city.

However, the map is not to be seen as a future plan for the region, but rather as a visualisation of the current situation. In this context, the term 'city' may be perceived as provocative, but it is meant as a tool of communication that calls for stronger regional planning and more collaboration between municipalities.

But what kind of city is 'TirolCITY'? The past few years have brought forth a series of new conceptions of the contemporary network city (Oswald et al. 2003), in which urban elements and features can be found in many forms and on many locations (Sieverts 1997). The boundaries between centre and periphery are becoming diffuse within a complex and fragmented network (Graham & Marvin 2001). In the context of emerging urban landscapes in the Alps, the study 'TirolCITY' describes the region of North-Tyrol as a network city with a tightly connected and functionally decentralised thread-like urban landscape. It consists of many centres that exist next to each other. While other cities have evolved ring-like around an already existing centre, 'TirolCITY' is growing together steadily, beginning to form one long linear pattern. Separate municipalities are becoming urban quarters of one city. In con-
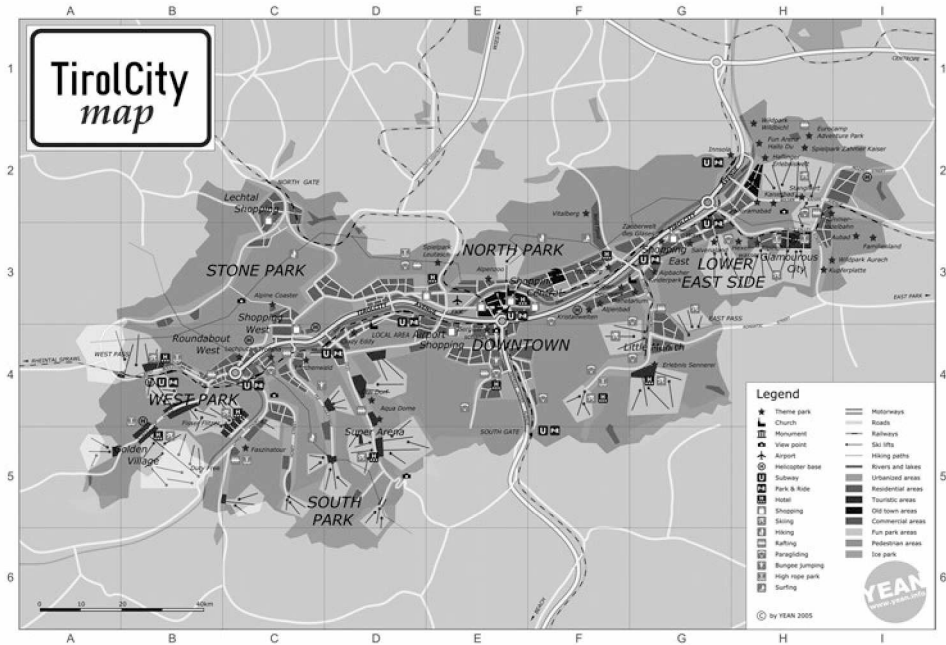
Figure 4: TirolCITY map. Source: YEAN.

trast, a mixture of trading, leisure, industrial and residential zones takes up the space in between. A new urban landscape is embedding itself in the mountain scenery.

Furthermore, 'TirolCITY' is characterised by its 'elastic' features. Owing to international traffic flows and intensive tourism North-Tyrol has been transformed into one of the busiest tourist areas in the world.

The wide range of leisure facilities, together with the vast amount of visitors every year, have led to the transformation of the urbanised area into an elastic system that expands and contracts according to seasonal fluctuations (figure 5). In winter and summer, multitudes of sports-minded skiers and hikers populate Alpine villages, whereby the settlement area in the adjoining valleys is stretched to its limits. In some villages this leads to extremes that can amount to up to 10 tourists per inhabitant. Off season, when there are fewer visitors, the city shrinks down to its infrastructural backbone.

5   Six strategies

To provide alternatives to the endless urban expansion along the 'Inntal', the study 'TirolCITY' proposes to create greater contrasts in the urbanised landscape through a series of interventions. The aim is to identify the qualities of 'TirolCITY' and develop them further for future usage: already existing advantages are to be strengthened in respect of their form and substance, whereas problem areas a perceived as a challenge. The study proposes the following six strategies.
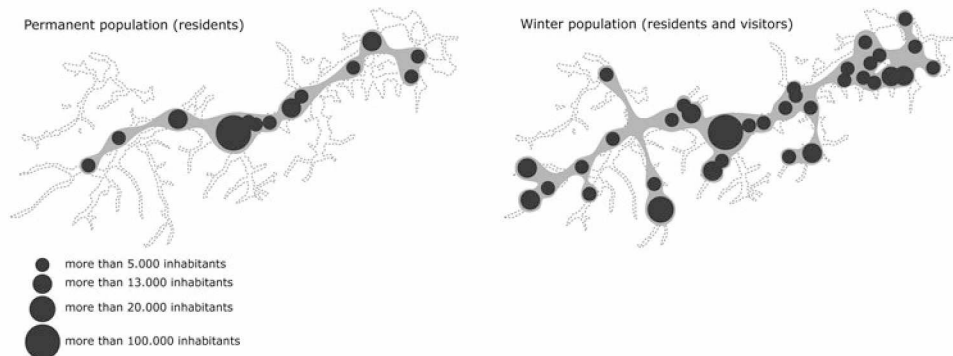
Figure 5: Elastic City. Cities with more than 5000 inhabitants. Left side: permanent inhabitants, right side: permanent inhabitants plus tourists (winter season). Source: YEAN.

5.1   Nature as a planning tool

Natural features define 'TirolCITY' to a very large extent. Therefore, to confine urban sprawl, it seems important to strictly define open spaces, both in the densely populated valleys and in the Alpine highlands. The 'Inntal' has become a chain of cityscapes that take on various functions. By extending the protected zones along the river Inn and introducing Nature Bridges and Green Islands, contrasts can be re-introduced: an interaction between open and built-up spaces. The heavily congested ski resorts are to be converted into Pedestrian Zones and relieved from traffic, which frees up existing parking areas for new uses.

5.2   Living on plateaus

Ever since the first settlements in the Tyrol, the sunny plateaus above the 'Inntal' have been a desirable residential area. But in the last decades enormous land consumption from building new single-family houses took place on these plateaus. People want to live on the periphery of the existing main settlements, close to nature. It will not be possible to stop this trend but new planning tools have to organise this uncontrolled land consumption. New housing projects on the plateaus have to be developed according to the ideas of a compact city (Jenks 1996). By connecting these villages to the public transport system (e.g. Vertical Metro), industrial and service zones in the valley are easy to travel to.

5.3   New infrastructure

The nuisances created by traffic and noise – both in the 'Inntal' and the touristic side valleys – are to be reduced through the introduction of a high-performance public transport system. In addition to the existing IC/EC line, a fast train (e.g. light rail) with shorter intervals should connect the neighbourhoods in the 'Inntal' and enable journeys to the side valleys. From there, Fun and Nature Parks can be reached by the aerial cableway network.

5.4   Developing the nodes

The emergence of the nodes is due to a consistent fusion of three 'city accelerators': shopping, public facilities and intersections in the transport network (Hamers & Nabielek 2005). The three proposed main nodes in Lower East Side, West Park and Downtown could be fitted with a Park-and-Ride system to divert residents and visitors towards public transport. Along the main connections, secondary nodes will be developed to enable access to the side valleys.

5.5   Defining zones

Nowadays each municipality competes with the next ones. As there is no financial compensation between them, there are losers and winners (Sassen 1994). The idea now is that specialisations of sub-areas have to be developed at different levels leading to an increased economic and cultural potential.

Existing qualities will be analysed and reinforced. To avoid an oversaturation of 'TirolCITY' with similar functions, a careful weighing is to bring out the most suitable use for each location. Thereby distances between locations, links to the infrastructure as well as ecological and economic prerequisites play a decisive role.

5.6   Key projects

Key Projects are to give an impetus to their surroundings. Especially in urban "problem zones", ambitious architectural and urban design projects can have a vital impact (Oswald & Schüller 2003). Key Projects can vary in scale and include cultural and social facilities of a high architectural quality, interventions in open space (Land Art or landscape design) and more protective measures in the Alpine areas.

Finally, the study 'TirolCITY' proposes to work out these key concepts by setting up a temporary planning group, which constitutes an additional source of knowledge and gives independent advice to the province. The 'TirolCITY' planning group is an interdisciplinary team of experts (economists, public administrators, social scientists, urban designers, landscape architects and planners), which will study spatial trends in full depth and lead to new insights, perspectives and visions.

6   Conclusion

Urbanity expresses itself not only through buildings, but is also through the way of living. Thus, spatial planning (large scale) and architecture (small scale) can only contribute to the improvement of the built-up and unbuilt environments if both residents and visitors are conscious about this fact. After all it is the way public space is used that shapes it. In the meantime, landscape has indeed become part of the city, and consequently a new vision needs to be developed. The city needs a label: 'TirolCITY'.

In terms of advanced European networks and increasing mobility, today's city has no boundaries. Even whole regions are no longer perceived as country scenery or districts, but as truly (interregional) urban organisations (Castells 1996). Therefore even the most isolated and rural regions may be analysed according to their urban characteristics.

In North-Tyrol, proximity both to urban areas and to natural zones is the most valuable feature of the region. But, whereas rural potential is extensively explored and promoted, some major urban developments in the peripheral zones have virtually been ignored. Decentralised administrative organisation and parochial thinking at the municipal level has lead to fragmented built-up areas slowly filling up the remaining space in the 'Inntal'.

'TirolCITY' is the label for the new urban developments in North-Tyrol and their potential for the region. In this concept, the term 'city' is meant as a tool of communication that leads to collaboration instead of competition between municipalities. Furthermore, the concept of 'TirolCITY' seeks to inspire a broader discussion about the new suburban areas and calls for stronger regional planning. We must recognise that these peripheral zones are integral parts of our living environment and therefore should be considered in spatial policy.

Acknowledgments

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