

« Petites villes en montagne, de l'Antiquité romaine au XXe siècle, Europe occidentale et centrale ». Colloque international, Clermont-Ferrand, 6–9 juin 2007.

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## **Urban Development in Early Modern Europe : the Significance of Altitude**

### **Introduction**

Historians who intend to examine the development of urban settlements in European mountain regions are facing two major problems of delimitation. It is not easy to objectify the notions of « towns » and « mountains » in a way that can both claim validity beyond individual countries as well as find the approval with different traditions of scholarship. These difficulties increase all the more when we are dealing specifically with « small » towns and wish to include also « medium-sized » mountains. In order to improve the chances of reaching a certain agreement between different approaches we can choose to reduce the variables in our models. The following article is dedicated to that preliminary step. It examines the development of settlements of a certain population size in early modern Europe by altitude. Since the focus is on two variables only – population and altitude – it is less difficult to outline general developments in a large area over a lengthy period. In the present context, this framework should also contribute to a better comparability, and thus a more balanced understanding, of urban life in mountain areas on the meso and micro levels. The first section of the article deals with methodological issues, the second section presents the available evidence.

### **Methodological issues**

Around 1500, at the beginning of the early modern period, two travellers crossed the Alps from different directions over the Brenner Pass, and later put down the accounts of their experiences and observations. The German traveller went from Munich to Verona and stated that he had come across twenty towns on his way. A few years later, an Italian diplomat made much the same journey in the opposite direction and saw only two settlements which

he could call towns<sup>1</sup>. A disparity of this magnitude (2 versus 20) is an extreme case, but it illustrates the well-known phenomenon that the categorization of historic settlements as « urban » was, and still is, highly flexible. This does not only hold true for different persons, but also for different regions, and over time. Austria offers another example thereof : In the 16th century, a number of settlements, officially called *Stadt*, had only insignificant population figures – 20 houses in the town of Hardegg an der Thaya, 34 houses in the recently established town of Schrattenthal. It is no accident that these dwarf « towns » were both situated in the east of the country since Austria, at the time, was characterized by a noticeable East-West-difference in the number of settlements with urban titles. Research has shown that this difference between regions reflected above all a variation in the distribution and power of the lesser nobility which was important in the eastern, but not in the western part<sup>2</sup>.

Thus, interregional and international studies taking the political categorization as the starting point risk ending up with an analysis of the power framework and not so much of the broader issues of urban history. That is one of the reasons for a widespread tendency in scholarship to favour population figures for the first steps in comparative research. The demographic categorization of course, depends on a convention within the scientific community more than on objective criteria. There have been many proposals for urban thresholds and ratings, and often they were linked in some way to the historian's regional background. An older, rather influential study, located in the east of Austria, started for instance with the mixed category *Dorfstädte* (village towns) to define settlements with urban titles and a population below 300 persons. In another study, related to the entire German area during the 16th century, the low ranks were defined quite differently : *Kleinstädte* (small towns) for a population of 2 000–5 000 persons, *Mittelstädte* (medium cities) for 5 000–20 000 persons<sup>3</sup>.

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<sup>1</sup>. Giorgio Chittolini, « Stadt in den Bergen, Stadt in der Ebene. Die Beziehungen zum Territorium zwischen spätem Mittelalter um früher Neuzeit », *Ville et montagne (Histoire des Alpes 5)*, Zürich 2000, pp.101–108, here 104 ; the two towns were Trento and Bressanone, both episcopal sees.

<sup>2</sup>. Michael Mitterauer, *Markt und Stadt im Mittelalter. Beiträge zur historischen Zentralitätsforschung*, Stuttgart 1980, pp.278–304 ; his analysis concerns the territory of present-day Austria ; an urban history study especially aimed at the mountainous part is Franz Mathis, « Handel und Städtewachstum. Das Beispiel der österreichischen Alpen », *Andes – Himalaya – Alpes (Histoire des Alpes 8)*, Zürich 2003, pp.195–205.

<sup>3</sup>. The two approaches by Otto Brunner and Rudolf Kötzschke are cited in Herbert Knittler, « Österreichs Städte in der frühen Neuzeit », in : Erich Zöllner (ed.), *Österreichs Städte und Märkte in ihrer Geschichte*,

The discussion about urban thresholds depends also on the availability of historical data. The most encompassing collection of population figures for European cities is the study made by Paul Bairoch and co-authors which set the limit at 5 000 inhabitants and in international scholarship there seems to be a corresponding trend to set the standard limit between small and medium-sized cities at that level<sup>4</sup>. One argument, sometimes expressed against bringing the quantification down to the 5 000 threshold – and even more so to lower limits –, concerns the inverse relationship between extension of parameters and accuracy of documentation. As a rule, the many small settlements are more difficult to determine in the sources than the few big ones<sup>5</sup>. The 5 000 threshold has also been questioned from an opposing standpoint. In his important work on small towns in early modern Europe, published more than ten years ago, Peter Clark defended a rather flexible approach. He maintained that in some countries the category went well below 200 inhabitants, whereas in other countries the same label could be given to settlements up to 10 000 inhabitants. So in his view, the 5 000 standard catches some « small towns » in Europe, but not many, in fact only a « tiny minority »<sup>6</sup>. Our article does not aim to cover these variegated urban phenomena but rather to give a preliminary framework for the discussion in the specific, and so far under-researched, context of mountain areas. That is why we are mainly using the available data from the Bairoch-collection.

On the mountain side, the problems of categorisation are not very dissimilar from these urban issues. What is classed as a « mountain » in one area by some people, can be a « hill » for other persons in a different context. There is a long list of mountain-definitions, and in recent times it has even been possible to quantify the differences between some of them. In 1991, the political authorities in the Alps with those of the surrounding area had to fix the territory for the application of the newly created Alpine Convention. In Bavaria, they included a territory which touched the outer reaches of Munich at about 500 metres above

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Wien 1985, pp.43–68, here 47–48 ; and Franz Mathis, *Zur Bevölkerungsstruktur österreichischer Städte im 17. Jahrhundert*, München 1977, p.33.

<sup>4</sup>. Paul Bairoch, Jean Batou, and Pierre Chèvre, *La population des villes européennes de 800 à 1850*, Genève 1988 (the book is French/English) ; Sven Lilja, « Small Towns in the Periphery : Population and Economy of Small Towns in Sweden and Finland During the Early Modern Period », in : Peter Clark (ed.), *Small Towns in Early Modern Europe*, Cambridge 1995, pp.50–76, here 53.

<sup>5</sup>. Jan de Vries, *European Urbanization 1500–1800*, London 1984, p.50.

<sup>6</sup>. Peter Clark, « Introduction », in : P. Clark (ed.), *Small Towns [...]*, *op. cit.*, pp.1–21, here 3, 9–10.

sea-level, and was three times larger than the classical definitions of the Bavarian Alps<sup>7</sup>. In Switzerland, in 1950, a geographical study considered 69 percent of the country to belong to the mountain areas (Alps and Jura). Fifty years later, a report commissioned by the European authorities, which applied to the whole of the continent and used different criteria, classified not less than 91 percent of Switzerland as mountain zone<sup>8</sup>. This was the second highest percentage, just behind Norway (92), and before Slovenia and Greece (both 78), and then Austria (73). In the entire European study the percentage was put at 41, yet this overall mountain area included some territories in the North, on the grounds of their difficult climatic conditions<sup>9</sup>.

The central criteria for the delineation of mountains are altitude and steepness which can go together, but not necessarily so. Often altitude is taken as the single most important variable, and as a matter of fact, it is the one which can be objectified most easily for large areas. As with urban phenomena, the exact thresholds between highlands and lowlands depend on agreements within the scientific or broader communities. Map 1 shows the areas higher than 1 000 metres and 2 000 metres above sea-level. We can see at a glance that, on a journey from Spain across Southern France, the Alps and Italy, as far as the Carpathians, the Balkans and Greece, numerous « mountain-islands » appear, small and large, low and high ones. The Norwegian upland territory is conspicuous, but most mountain regions in Europe are located in the southern part. If we opt for a lower limit – in order to get a view of the « medium-sized » mountains – the geographical layout changes and the upland expands, particularly in Spain. Very large parts of that country are located above 500 metres<sup>10</sup>.

Controversies and agreements about definition concern the methodological infrastructure of research, and they should support the reflective, analytical process. For that analytical part it seems useful to recall some key arguments about urban development in mountain regions which have been put forward by scholars so far. First, there is a group of factors centred on slowing down urbanization : relief (steepness), altitude (vegetation period), population density (often low), agriculture and pastoralism (often extensive). On the other hand, one

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<sup>7</sup>. Werner Bätzing, *Der sozio-ökonomische Strukturwandel des Alpenraumes im 20. Jahrhundert. Eine Analyse von « Entwicklungstypen » auf Gemeinde-Ebene im Kontext der europäischen Tertiarisierung*, Bern 1993, pp.24, 31.

<sup>8</sup>. Martin F. Price, Igor Lysenko, and Erik Gloersen, « Delineating Europe's mountains », *Revue de Géographie Alpine* 2004/2, pp.75–86, here 83.

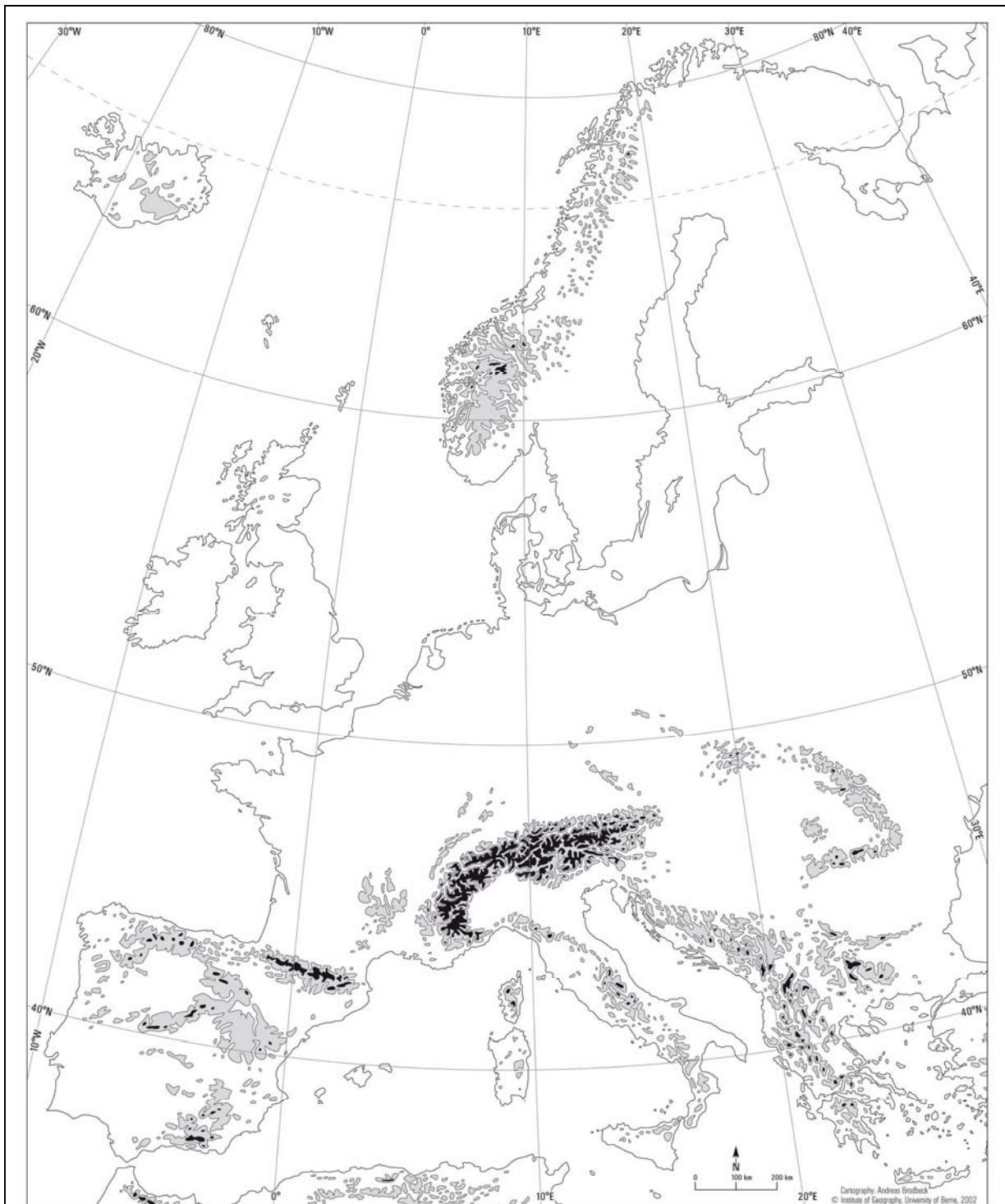
<sup>9</sup>. As note 8.

<sup>10</sup>. See for instance the map in Clifford Embleton (ed.), *Geomorphology of Europe*, London 1984, p.2.

finds a number of factors usually put forward for the acceleration of urban growth : mining activities (often above-average), transport and traffic (considered important). One driving force which could produce important selective effects, and which tends to be overlooked in mountain contexts, is to do with politics and statebuilding<sup>11</sup>. In this article we cannot deal in detail with all the arguments ; instead we want to focus on the clues offered by rather systematic quantitative evidence.

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<sup>11</sup>. A discussion for the Alpine area in Jon Mathieu, *Geschichte der Alpen 1500-1900. Umwelt, Entwicklung, Gesellschaft*, Wien 1998, ch. 4 (also in Italian, forthcoming in English).



Map 1 : Mountain regions in Europe.

Grey : above 1 000 metres. Black : above 2 000 metres.

Design by Andrea Brodbeck, University of Berne.

## Urban distribution and development

The database of Paul Bairoch, Jean Batou and Pierre Chèvre provides indications on the demographic development of more than two thousand European cities in the period up to 1850. Since its publication in 1988, the collection has been criticized several times on specific points<sup>12</sup>, but it has become an authoritative work from a more general perspective. We believe that the data can be used to examine the quantitative contours of urbanization processes, and thus give a better understanding of the main spatial-temporal distributions in historic Europe. The information on altitude has been added for each individual city by one of the present authors and is based on the satellite altitudinal data offered recently by « Google Earth »<sup>13</sup>. In order to put the significance of altitude for urban development in context, we first summarize a series of general data and calculations. The tables relate to 25 countries in Europe (excluding Russia) and include the cities which have had – at some time between 1500 and 1800 – 5 000 or more inhabitants<sup>14</sup>. The index numbers start from the data for the year 1600 in order to avoid misunderstandings of statistical side-effects which could give a distorted picture of incipient processes<sup>15</sup>.

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<sup>12</sup>. Two examples : Vera Bácskai, « Small Towns in Eastern Central Europe », in : P. Clark (ed.), *Small Towns [...]*, *op. cit.*, pp.77–89, here 79–80 ; J. Mathieu, *Geschichte der Alpen [...]*, *op. cit.*, pp.73–74.

<sup>13</sup>. <http://earth.google.com> ; the altitudinal data have been processed by Reto Furter.

<sup>14</sup>. This criterion differs slightly from the one used by Bairoch who considers the longer study period from 800 ; but the main difference to his sample concerns the cities in Russia which we leave out in the present article. The countries here included are : Albania [AL], Austria [AU], Belgium [BE], Bulgaria [BU], former Czechoslovakia [CZ], Denmark [DE], Finland [FI], France [FR], Germany [GE], Greece [GR], Hungary [HU], Ireland [IR], Italy [IT], Luxembourg [LU], Malta [MA], Netherlands [NE], Norway [NO], Poland [PL], Portugal [PO], Rumania [RU], Spain (incl. Gibraltar) [SP], Sweden [SWE], Switzerland [SWI], United Kingdom [UK] and former Yugoslavia [YU].

<sup>15</sup>. Towns with less than 5 000 inhabitants could instantly be included in the statistics if their population rose slightly ; then the total urban population would rise and purport a strong growth ; this effect does not matter with big numbers, but it does with small ones at the onset of a process.

Table 1. Cities and urban population in early modern Europe					
Year	Number of cities	<i>index number</i>	Urban population (in thousands)	<i>index number</i>	Year
1500	579	<i>71</i>	6 352	<i>64</i>	1500
1600	815	<i>100</i>	9 896	<i>100</i>	1600
1700	1 054	<i>129</i>	11 688	<i>118</i>	1700
1800	1 691	<i>207</i>	22 556	<i>228</i>	1800

Sources : P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...], op. cit.*, pp.3–69 ; the figures relate to cities with 5 000 or more inhabitants in the 25 countries listed in note 14.

Table 1 represents the general urbanization process in Europe, indicating the number of cities and the urban population from 1500 to 1800 both in absolute and index numbers. In the three centuries being examined, the number of cities (in the given definition) increased from 579 to 1 691 and thus almost trebled. The population in these cities grew at a slightly faster rate from about 6.4 million to 22.6 million. This means that also the average size of a city (of the sample) was slightly on the increase : from 11 000 inhabitants in the beginning to 13 000 at the end. Due to the general population growth, according to Bairoch and co-authors, the urbanization rate was increasing rather slowly as well. In 1500, about 11.2 percent of the European population lived in cities of the aforementioned size ; in 1800 the percentage was 13.8<sup>16</sup>. Among the largest settlements in early modern Europe were Paris and Naples, and at the end of the period, London – all capital cities.

Table 2. Urban population and population density in early modern Europe : West and East							
Year	Urban population (in thousands) <i>index number</i>		Urban population per square kilometre	Urban population (in thousands) <i>index number</i>		Urban population per square kilometre	Year
	West			East			
1500	4 811	<i>64</i>	2.6	1 541	<i>65</i>	0.5	1500
1600	7 539	<i>100</i>	4.0	2 357	<i>100</i>	0.8	1600
1700	9 354	<i>124</i>	5.0	2 334	<i>99</i>	0.8	1700
1800	17 083	<i>227</i>	9.1	5 473	<i>232</i>	1.9	1800

Sources : P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...], op. cit.*, pp.3–69 ; the figures relate to cities with 5 000 or more inhabitants in the 11 western countries and 14 eastern countries listed in note 17 ; the western part covers about 1.9 million and the eastern part about 2.9 million square kilometres.

<sup>16</sup> P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...], op. cit.*, pp.254–258.

Table 3. Urban population and population density in early modern Europe : North and South							
Year	Urban population (in thousands) <i>index number</i>		Urban population per square kilometre	Urban population (in thousands) <i>index number</i>		Urban population per square kilometre	Year
	North			South			
1500	3 246	71	1.1	3 106	58	1.8	1500
1600	4 551	100	1.5	5 345	100	3.0	1600
1700	6 659	146	2.2	5 029	94	2.9	1700
1800	12 708	279	4.2	9 848	184	5.6	1800

Sources : P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...], op. cit.*, pp.3–69 ; the figures relate to cities with 5 000 or more inhabitants in the 15 northern and 10 southern countries listed in note 17 ; the northern part covers about 3.0 million and the southern part about 1.8 million square kilometres.

As indicated by the Tables 2 and 3, urban growth was a very uneven process<sup>17</sup>. There were significant differences between regions both at the micro and the macro level. A well-known example concerns northern Italy and the Low Countries which hosted numerous and rather big cities. Some authors perceive them as two strongholds of a particular city belt structuring Europe in the *longue durée*<sup>18</sup>. In order to get an instant overview of large areas we can divide the continent into four regions and compare first West and East, and then North and South. Both the urban population and the urban population density was, and remained, considerably higher in Western than in Eastern Europe (Table 2). In 1500, the urban population was more than three times larger in the West, and in 1800 the ratio was still the same at a higher level. The growth rate developed closely parallel in the two parts despite the much lower starting point in the East which could have favored a fast upswing. Thus, the density figures remained in strong contrast : high densities up to 9 city dwellers per square kilometres in the West, low densities with up to 2 city dwellers in the East.

The differences in European urbanization on the North-South-axis were less pronounced, and they presented another shape (Table 3). At the beginning of the study period, the urban population of the South had not only a higher density (almost 2 city dwellers per square kilometre), but it was also growing at a faster rate. Things changed after 1600 when the South went into a crisis and lost more than 300 000 urban inhabitants during the 17th

<sup>17</sup>. The dataset was broken down in a western and eastern group (Table 2), and a northern and southern group (Table 3) ; countries in the West are : BE, FR, IR, IT, LU, MA, NE, PO, SWI, SP, UK ; East : AL, AU, BU, CZ, DE, FI, GE, GR, HU, NO, PL, RU, SWE, YU ; North : AU, BE, CZ, DE, FI, FR, GE, IR, LU, NE, NO, PL, UK, SWE, SWI ; South : AL, BU, GR, HU, IT, MA, PO, RU, SP, YU.

<sup>18</sup>. Charles Tilly, *Coercion, Capital, and European States, AD 990–1992*, Cambridge MA 1992, pp.48.

century. The cities of the northern part of Europe, on the other hand, continued to grow, first at a rather slow rate, and later at a very fast one. Over the whole period their inhabitants almost quadrupled. The South did not match this growth rate, but the urban density figure remained higher than in the North through to 1800.

And what about the urban development at different altitudes ? In Europe without Russia the highest towns of 5 000 and more inhabitants, during early modern times, were to be found between 1 100 and 1 200 metres above sea-level. Voskopjë in Albania appears to have reached a maximum population of 30 000 inhabitants in 1600, and might well have been the second largest city of the European part of the Ottoman Empire later on – and the city was situated at 1 200 metres ! Avila, in the central mountain range of Spain, located at 1 120 metres, reached a peak of 12 000 inhabitants in 1600 as well ; the following two centuries saw the town dwindling to a third of that size<sup>19</sup>. In order to get a simple, adapted scale for the altitudinal distribution of the cities being studied we opt for the thresholds of (above) 750 and (below) 250 metres which also makes it possible to estimate the figures in-between, if necessary.

Year	Urban population above 750 metres (in thousands)	<i>index number</i>	Urban population below 250 metres (in thousands)	<i>index number</i>	Year
1500	96	27	5 131	68	1500
1600	357	100	7 491	100	1600
1700	214	60	9 566	128	1700
1800	394	110	18 298	244	1800

Sources : P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...]*, *op. cit.*, pp.3–69 ; the figures relate to cities with 5 000 or more inhabitants in the 25 countries listed in note 14 ; altitudinal data from <http://earth.google.com>.

<sup>19</sup> P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...]*, *op. cit.*, pp.3 and 15 ; the indication is based on Odile Daniel, « Le processus d'islamisation dans les villes d'Albanie aux XVIIe-XVIIIe siècles », in : Association internationale d'Etudes du Sud-Est européen (ed.), *Structure sociale et développement culturel des villes sud-est européennes et adriatiques aux XVIIe-XVIIIe siècles (Colloque interdisciplinaire, Venise 1971)*, Bucarest 1975, pp.231–244, esp. 243 (according to Daniel, Voskopjë reached its peak population in the 17th century, due also to the fact that it was a religious-cultural centre of resistance against islamisation by the Ottoman empire ; in the 18th century it was put down by military force).

The urban highland sample – above the 750 metres-level – encompasses only 10 towns at the beginning of the period. At later stages they are joined by 56 settlements reaching the urban category for the first time. With such small figures there is a considerable risk of fictitious statistical leaps in population, since a slight rise over the urban threshold in a number of towns can produce considerable effects<sup>20</sup>. It seems reasonable to assume, therefore, that the sharp rise in urban highland population during the 16th century, and to a lesser degree the decrease during the 17th century, are partly statistical artefacts (Table 4). But the trends can be considered correct, and except for the initial phase, the growth rate of the urban population can give us some comparative clues. The index number of 110 for 1800 is by far the lowest which we have come across in the various samples : the four European regions presented figures of 184–279, and the total figure for the continent was 228 – about double the highland sample (Tables 1–3). Thus, altitude seems to have been one of the important factors constraining urban development. This conclusion is corroborated by the growth rate of the cities below 250 metres. For the 1600–1800 period, the index number of the very large lowland sample amounted to 244 (Table 4). All in all, these observations are apt to guide the interpretation in an economic direction. They point particularly to the interrelationship between environment, population and agriculture. From a certain stage of development, when population pressure emerged in the 16th century, or at any other time, it was usually more difficult to intensify agriculture, and thus increase the output of urban hinterlands, in mountainous areas than in lowland regions<sup>21</sup>.

A closer look at the individual towns, however, reveals also political conditions influencing their trajectories. Up to the 18th century, many of the highland cities were situated in one of the elevated territories in Spain. Alcalá la Real, Baeza, Burgos, Salamanca, Segovia and other centres had significant populations of 10 000 to 25 000 and more inhabitants around 1600. They often combined functions in the textile industry with a position in the institutional setting both secular and religious. Yet in the 16th and 17th centuries the Castilian Kingdom witnessed not only changing economic climates, but also a re-configuration of the justice system. The principal players thereof were the royal authorities who promoted small settlements – against financial tributes – on the hierarchy of honour and state power. Thus the old centres often saw their territory disintegrate and went into a period

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<sup>20</sup>. See note 15.

<sup>21</sup>. Details about the argument, based on Alpine evidence : Jon Mathieu, « Landwirtschaft und Städtewachstum im Alpenraum, 1500–1800 », *Ville et montagne (Histoire des Alpes 5)*, Zurich 2000, pp.157–171.

of decline, whereas the small and the booming big centre in Madrid gained force. In 1500, only 13 000 persons lived in Madrid, situated at 670 metres above sea-level. In the second part of the 16th century the town became the permanent, and later only briefly removed, residence of the royal court and other institutions. Its population increased rapidly : 65 000 in 1600, 140 000 in 1700, and 168 000 in 1800. At the same time, Toledo and Valladolid, once important seats of political power, became demographically speaking second class cities. In the mid-18th century an enlightened clergyman used a physical metaphor to describe that process : « After all, the stomach and heart of this body politic is the Court, into which flows all the blood from the other limbs. Yet it does not flow out again in the same proportion »<sup>22</sup>.

The dynamic section of the Spanish urban world included yet another category : the coastal cities at the Mediterranean and the Atlantic sea. With our sample we can get an idea how much the pronounced growth of these cities, from Barcelona to Cádiz, can be generalized for the whole of Europe. As indicated in Table 5, among the lowland cities below 250 metres, the settlements at the coast were indeed growing at a faster rate than the settlements further inland. This distinction appears in the record before and after 1600, and it seems obvious to link it particularly to maritime transport and trade. It is more difficult to see how this traffic effect worked in the mountain areas. Land transport followed different rules, and the mountain areas under study had the most diverse positions with regard to economic exchange. In the Alpine arc, situated between two strongly urbanized lowland regions, research has often claimed that traffic was an important factor of urban growth. Some authors have even presented the argument exclusively. Yet a recent survey, based on a broad collection of urban, occupational, and traffic data, gives a different conclusion, and indicates that this factor was not decisive in many cases for early modern urbanization in that mountain region<sup>23</sup>.

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<sup>22</sup>. Juan E. Gelabert, « Cities, Towns and Small Towns in Castille, 1500–1800 », in : P. Clark (ed.), *Small Towns [...]*, *op. cit.*, pp.271–294, the quote at 293 ; for the economic aspect also : Fernand Braudel, *Das Mittelmeer und die mediterrane Welt in der Epoche Philipps II.*, 3 vols., Frankfurt a. M. 1990, here esp. vol. 1, pp.129–132 ; for a systematic account of the Spanish mountain economy in a later period : Fernando Collantes, « Les économies de montagne à l'heure de l'industrialisation européenne. Que peut-on apprendre du cas espagnol ? », *L'Autriche intérieure (Histoire des Alpes 10)*, Zurich 2005, pp.267–282.

<sup>23</sup>. J. Mathieu, *Geschichte der Alpen [...]*, *op. cit.*, pp.81–82.

Table 5. Urban population in early modern Europe : lowlands coastal and interior					
Year	Urban population on sea coasts (in thousands)	<i>index number</i>	Urban population in interior lowlands (in thousands)	<i>index number</i>	Year
1500	1 399	<i>56</i>	3 732	<i>75</i>	1500
1600	2 499	<i>100</i>	4 992	<i>100</i>	1600
1700	3 530	<i>141</i>	6 036	<i>121</i>	1700
1800	6 549	<i>262</i>	11 749	<i>235</i>	1800

Sources : P. Bairoch, J. Batou, and P. Chèvre, *La population des villes européennes [...], op. cit.*, pp.3–69 ; the figures relate to cities with 5 000 or more inhabitants in the 25 countries listed in note 14 ; altitudinal data from <http://earth.google.com> ; lowlands as in table 4 (below 250 metres).

In the above-mentioned list, we have organised the arguments, discussed by historians interested in mountain urbanization, into two sections. One section centred on the slowing down of urban growth, the other on factors attributing to its acceleration. Presumably one could link most of the key words given in this series of arguments, in one way or the other, to the population data. In the present article, however, it seems advisable to draw some preliminary conclusions at this stage.

### Conclusions

Some time ago, Peter Clark in a first attempt at providing an overview of small towns in early modern Europe, preferred to give a flexible definition of the phenomenon : « Single definitional criteria are clearly useless. On the other hand, if we assemble a flexible matrix of demographic, economic, social, political and other attributes we start to get an idea of the profile of the great multitude of small communities. » Despite his pragmatic, open view the author stated that the small town-phenomenon encompassed a very large group of settlements between the rural and the unmistakably urban world : « Across Europe, there were five or more times as many small towns as all other kinds of urban community put together »<sup>24</sup>. Are these remarks still helpful and realistic today, and relevant for a project aimed at the particular developments in mountain areas ? One could argue that there is an upper limit for vagueness in historical studies. Since the difficulty in defining the « mountain »-notion add to the vague description of small towns, we risk losing our sense of direction needed for fruitful comparative research.

<sup>24</sup>. P. Clark, *Introduction, op. cit.*, pp.1 and 9.

This article has tried to give a framework, and a number of clues, which can help in evaluating some distributions and developments of sizable settlements in different altitudinal belts in early modern Europe. Although European urbanization has been debated for many years, the impact of altitude on urban development is still rather unknown. Among the towns of 5 000 and more inhabitants, contained in the database of Bairoch and co-authors, during the period under study, the highest ones were to be found between 1 100 and 1 200 metres above sea-level. The maximum was probably reached in Albania around 1600 in the town of Voskopjë, located at 1 200 metres. Today, this large city of the past has dwindled down to a small settlement which can give us a sense of the volatility of urbanization in these zones. On average, and in the long term, the towns above 750 metres sea-level in Europe were growing at a slower speed than towns in other locations. The index number of 110 for the period 1600–1800 that we found for this sample was the lowest one of all those in the present analysis.

On the analytical side, the article touches on three points. Firstly, transport and trade could be less important for early modern urbanization in mountain areas than often assumed. In any case, the geographical location of the mountain towns prevented them from participating in the traffic effect which favored growth in many settlements on the sea coast. Secondly, one should not overlook state building and politics as driving forces for urbanization in upland areas. In fact, these political forces could be very significant, particularly for the differentiation between settlements and the creation of new urban hierarchies. Thirdly, the altitudinal distribution of towns, and their development over time indicate that the interplay between environment, population and agriculture, belonged to the basic conditions of early modern urbanization. When a certain stage of population density and of agricultural and pastoral intensity was reached, it was usually more difficult to progress, and thus to increase the output of urban hinterlands in the highlands than in the lowlands. This became a major handicap for many mountain areas in a time when population growth was rapid in most parts of Europe, and when urbanization and modernization took control<sup>25</sup>.

A general study can only take us to a certain point. It would be an intriguing task to extend the examination to the plenitude of really small towns as suggested by Peter Clark. What was the relationship between different types of towns – above and below the threshold of

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<sup>25</sup>. It is noteworthy that the quantitative evidence of the altitudinal growth patterns in Europe (Table 4) shows strong parallels to the urban population data for the Alpine area as presented in : J. Mathieu, *Geschichte der Alpen [...]*, *op. cit.*, p.91 (Table 4.2) ; a useful theoretical model for these kinds of studies is Ester Boserup, *Population and Technology*, Oxford 1981, esp. pp.63–75, 95–97.

5 000 inhabitants – in different periods and in different regions ? Were there particular regularities, or was historical development open to all sorts of trajectories ? For the time being, one can only assume that the range of possibilities was rather large. Early modern Norway had many mountains but very few small towns in them. In Switzerland the small upland towns might have been more numerous, but still rather rare, compared for instance to France, where the urban model extended to mountainous regions in an earlier period<sup>26</sup>. Which were the reasons for differences like this, and how did they affect the life of the upland population ?

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<sup>26</sup>. Finn-Einar Eliassen, « The Mainstays of the Urban Fringe : Norwegian Small Towns 1500–1800 », in : P. Clark (ed.), *Small Towns [...], op. cit.*, pp.22–49 ; Reto Furter, *Urbanisierung – Transitverkehr – Bädertourismus – Alpinismus. Indikatoren zum Hintergrund des Alpendiskurses, 15. bis 19. Jahrhundert*, PhD University of Berne 2005, pp.40–41, 227–231 ; René Favier, *Les villes du Dauphiné aux XVIIe et XVIIIe siècles*, Grenoble 1993, pp.15–54 ; idem, « Economic Change, Demographic Growth and the Fate of Dauphiné's Small Towns 1698–1790 », in : Philip Benedict (ed.), *Cities and Social Change in Early Modern France*, London 1989, pp.221–241.