

The Mountains in Urban Development: Introduction

Note: The authors are acquainted with the history of Europe and the Alps, but to a far lesser degree with the history of other continents and mountain regions. They hope that the experts from Latin America, Asia and other areas will help to improve this draft. The version for publication is thought to be longer and more explicit. It should reflect our common intellectual effort at the Buenos Aires session.

Urban development can be considered a fundamental historical process, both for the cities themselves and for the surrounding rural areas. Fernand Braudel compared the cities to transformers: "They increase the tension, accelerate the exchange and bring constantly movement into the lives of mankind." Urbanization started a long time ago and has speeded up during the last centuries and even more so during the last decades. Today, half of the world's population live in cities. Rural areas create important pre-conditions for urban growth and, sooner or later, are strongly affected by it. When a city unfolds, life in the surroundings near and remote will change. The change relates to economic and social structures, to political relationships and cultural attitudes, that is, to most aspects of the human experience. Research into urban history, therefore, cannot be separated from research into rural history and vice versa.

Mountains, our immediate study area, cover 20-25 percent of the earth's surface. They control a large amount of available water resources and a series of further assets. Compared to adjacent plains many mountain areas today are sparsely populated and urbanized. They find themselves in a peripheral situation not only to specific lowland centers but to urban based power systems on a global scale. Somewhat paradoxically this might be an important reason for the fact that there has been little comparative research into mountain urbanization both from the urban and from the mountain side:

- Paul Bairoch's long and useful study on "Cities and Economic Development. From the Dawn of History to the Present", first published in French in 1985, goes widely into problems of unequal development and urbanization on the global scale. Yet, except for the one sentence that very cold climates and very steep lands are an impediment to urban growth, it does tell us nothing about the mountain issue.
- A recent collective work on the "Mountains of the World. A Global Priority" (1997) provides an overall discussion and many valuable insights into particular aspects of the upland problematics. It contains detailed chapters on resources, natural risks, forestry, agriculture, tourism, political conflicts and so on, yet there are only incidental and scattered hints at urbanization. One author states that "mountains are obviously rather unsuitable for the development of urban centres", which raises the following questions: Is the statement valid for all periods and areas? Doesn't research have to

explain what common sense takes for obvious? And how can rural upland areas be studied without considering the changing contexts of lowland urbanization?

Quite different from the lack of scholarship at the general level is the state of research relating to particular mountain cities and to urbanization in particular mountain areas. At this level we find a rich historical literature, or at least a very promising beginning of a historical debate. Take the case of Potosí, the famous mining center in today's Bolivia. Potosí was founded in 1547, two years after the discovery of the silver ores. The city is situated at nearly 4,000 meters above sea-level and soon ran into problems of food, water and fuel supply. Nevertheless, in 1600, it numbered over 100,000 inhabitants and was thus comparable in size to the big European cities of the period, such as Venice or Milan. Since the case of Potosí is special indeed, it has attracted the interest of many Andean scholars, whose findings, in our session, will be reviewed by Heraclio Bonilla. An example of the incipient research on mountain urbanization at a regional level is provided by the Alps. The first conference on long-term urban development in this region was held in 1999 and yielded manifold results. One of the conclusions of conference organizer Gauro Coppola was that "we should not understand the Alpine area as an isolated thing, but as a territory which in its own way inserted itself into the dynamics of a more extensive history". In our session experts from different parts of the Alps and of the Pyrenees, their "sister" mountain range, will enlarge on this point.

In order to start a truly comparative discussion about the mountains in urban development we chose to focus on a particular period and on particular areas:

- The period runs from 1000 A.D. to the present time. We do not have reliable global data for most of the period, yet it is likely that slow urban growth was typical for its first half. During its second half, and especially during the 20th century, urban growth speeded up very much. One estimate suggests that in 1300 and 1500, worldwide, there were about fifty cities with 100,000 inhabitants and more, in 1900 nearly three hundred, and in 1980 two thousand three hundred.
- The areas include the Andes, the Himalayas and the Alps/Pyrenees. This classical sample of three or four well-known mountain systems should be seen as a heuristic device, and nobody will forget about the huge differences in geographical position, extension and height. The Andes stretch for 7,250 km and, at their highest peak, reach nearly 7,000 m above sea-level; the Himalayas, in a broad definition, span 2,500 km with the top mountain at 8,850 m; the Alps extend for 1,200 km only and their highest point measures 4,800 m. The ranking between the three is less steep if we consider population. The Alps, in our times, belong to the world's most populated mountain regions. One author gives the following estimates for upland dwellers: Andes 26 million, Himalayas 33 million, Alps 11 million. Such figures, of course, depend on the delimitation used for the respective areas and cannot be objectivized in any facile way.

It may be useful to recall that the mountain systems selected share a history beyond the common upland experience. The contacts between Europe and Asia, and thus between parts of the Alps and the Himalayas, go back far in time. In an indirect manner, during the early modern period and especially since the 19th century, the contacts intensified rapidly since the British happened to expand in both directions. If the British "conquest" of the Alps was restricted to alpinism and tourism and should not be overestimated with respect to urbanization, British rule over India was certainly a major phenomenon with many important consequences for the development of the Himalayas. In our session several Indian specialists will portray and analyse the colonial impact on urban settlements in different parts of the mountain range. Spanish rule, on the other hand, provided certain links between the Alps and the Andes. In the early 16th century, the Spanish took over Milan, including its Alpine parts, and for some time played a title-role on the political stage of the entire mountain region. The early 16th century, of course, was also the period of the Spanish conquest of Latin America. Similar to the case of British India, the Spanish intrusion turned out to be much more important for the Andes. In fact, there might be few examples in history where a change in ruling class and people exerted an impact of this magnitude on urban patterns. The Andean cities, after conquest, shifted abruptly in number, size and location. The contribution of Henrique Urbano to our session touches upon the topic by going into the pre-hispanic history of Cuzco.

Whoever wants to compare mountain urbanization in quantitative terms can no longer evade the thorny problem of definition. On this occasion we do not intend to take up the time-honoured discussions, held in different disciplines, about what constitutes a "proper mountain" and a "true city". Many scholars will agree that some aspects of these notions can be generalized and that it is useful to leave other aspects open to regional, subjective and context-bound use:

- In the definition of mountains, altitude and a marked relief will be most important elements, yet it is advisable to link them to specific problems. A mountain need not cover precisely the same area for a scholar interested in, say, hydrology, forestry, or like in our case, urban history.
- We may define a city as a major population center, the inhabitants of which do not themselves produce the food they consume. This brings into focus that ancient urbanization in general required a certain density of rural population, and that it is important for historians to pay attention to urban size. We do not believe, however, that a demographic and economic definition makes other definitions – political, juridical, architectural – superfluous for specific questions.

Quantitative evidence on urban growth has been gathered and processed during the last decades by quite a few scholars. Table 1 restricts itself to some indicators for the period 1500 to 1900 in our sample of upland and lowland areas and shows, first of all, that the important empirical efforts have to go on. There are still too many missing data, and there are too many unreliable data. We invite the experts from America

Table 1: Urbanization in mountain areas and adjacent lowlands, 1500-1900

Area	Indicator	1500	1600	1700	1800	1900
Andes	C20	20?	7	11	11	28
South America	C20	20?	7	14	19	82
	C100	0	1	0	0	12
	PD	2-3	–	1	–	3
	UR	–	–	13	15	20
Himalayas	C20	2	2	2	4	–
Indian Sub-continent	C20	–	–	–	–	–
	C100	5-10	–	10-32	–	18
	PD	6-7	–	7	–	8
	UR	–	–	11-13	9-12	9-11
Alps	C20	0	0	1	1	4
Pyrenees	C20	0	0	0	0	0
Europe	C20	95	117	130	182	1009
	C100	4	11	11	18	121
	PD	5	–	6	–	7
	UR	11	12	12	12	38

Indicators and areas: C20: number of cities with 20,000 and more inhabitants, including the C100 cities. C100: number of cities with 100,000 and more inhabitants. PD: population density; number of density group arranged on a scale from 1 to 10; the 1700 data relate to 1750. UR: urbanization rate; urban population as percentage of total population. Andes: Bolivia, Chile, Colombia, Ecuador, Peru. Europe: without Russia. –: no estimates or data available at the moment.

Main sources: Paul Bairoch: *Taille des villes, conditions de vie et développement économique*, Paris 1977, p. 24, 42; *ibid.*: *La population des villes européennes de 800 à 1850*, Genève 1988, p. 15-21, 23-31; *ibid.*: *De Jéricho à Mexico. Villes et économie dans l'histoire*, Paris 1996 (2e édition corrigée), p. 182, 203, 282, 452, 453, 496, 499, 513, 522, 538, 542; Tertius Chandler: *Four Thousand Years of Urban Growth. An Historical Census*, Lewiston NY 1987, p. 41-43, 367, 375, 391, 392, 399, 432; Ester Boserup: *Population and Technology*, Oxford 1981, p. 11; Jon Mathieu: *Geschichte der Alpen 1500-1900. Umwelt, Entwicklung, Gesellschaft*, Wien 1998, p. 77, 216.

and Asia to complete, correct and prolong the figures; in the version for publication we would like to include data for 2000 and for the period before 1500. Nevertheless, the table can give some clues to a comparative discussion of mountain urbanization. On the one hand, the figures suggest that the historical context or stage was not very diverse in the early modern period. For 1700, the urban population in each, South America, India and Europe, is estimated at 11 to 13 percent of the total population. Urbanization rates drifted apart only later, and in 1900 the range was as wide as 9 to 38 percent. On the other hand, the figures indicate that urban development in the Andes had a trajectory very different from the one in the Alps and probably in the Himalayas. The number of South American big cities in 1500 may be over-estimated, it

seems certain, however, that in the 16th century all these cities were to be found in the Andean area. This situation began to change in the subsequent century, and in 1900 the majority of the South American big cities lay outside the Andean area. If large scale urbanization in this case started in the mountains and went down to the lowlands, the Alpine development was almost opposite, as indicated by the quite reliable figures given in the table. Urbanization in this area has to be labelled scarce and retarded with respect to the adjacent lowlands. The same may apply to the Himalayas, although some of their cities probably reached remarkable sizes at an early date. Srinagar and Lhasa are reported to have sheltered respectively 125,000 and 80,000 inhabitants in 1700. We are not able to judge the accuracy of these figures.

Another way of comparing the mountain systems relates to their role in trade interaction with and between surrounding areas. The interaction was linked to the urban potential in these areas during particular periods and is partly reflected in the indications above. It seems useful to make a tripartite distinction for this purpose: Whereas the Andes, for a long time, found themselves in a kind of insular situation (with little urban trade potential in the surroundings), the Himalayas represented a peninsular pattern (with large cities at one side of the mountains), and the Alps a continental pattern (with urbanized lowland areas at both sides). Some important aspects of trade relationships seem to have varied according to these historical backgrounds. Andean scholars, for instance, highlight various forms of exchange between rural areas at different altitudes of the mountains, the so-called "vertical archipelago". In other cases rural exchange was accompanied by voluminous trade between different urban destinations. In the Himalayas, the major trade routes ran parallel to the mountain chain: the Ganga-Indus connection to the south, the silk road to the north. In the Alps, on the other hand, there were also major routes leading from south to north right across the mountains. One could, of course, relate this to low altitude, yet, if urban development would have been missing on one side of the range, the reasons for transalpine trade would have been much more limited.

Within the theme of mountain urbanization, our session at Buenos Aires gives special attention to two topics: (1) urban growth and political power structures, (2) the role of cities in interregional exchange systems. Usually, for a discussion of particular factors such as politics and exchange, it seems advisable to start with a general urbanization model. We can assume that the possibility for urban concentration increases with increasing population density and that the activities of urban centres develop according to a certain pattern. Deviations from that pattern can then be considered important factors for the case under study. Yet we are not forced to attribute unique functions to individual cities which could easily lead to artificial, if not ideological classifications. It is unlikely that urban life and urban growth, in any period, depended on one function or one factor, not on several of them. The two topics selected for the session open up a set of interesting, far-reaching questions:

(1) Urban growth and political power structures: • How and to what degree did state-building affect urban organisation and growth? • How did urbanization, reversely, affect state-building, and to what extent? Was upland/lowland urbanization a factor determining political boundaries and thus the development of dependent or independent mountain states? • What importance can be given to respectively military and religious forces in urban development?

(2) The role of cities in interregional exchange systems: • How and to what degree did long-distance exchange affect urban growth, as compared to political and other factors? • Did urban growth, reversely, affect the volume and direction of long-distance exchange, and in what measure? • How did urban supply systems work and develop at different altitudes?

This set of questions points to some promising directions for research and discussion, yet it should be extended and detailed in the process of our historical enterprise. The same applies to this introductory text on the whole. It proposes a framework for research and discussion, yet we are well aware of the fact that any framework has a fragile status. Since we wanted to give a comparative outline, we had to focus on the most obvious phenomenon, which is large scale urbanization. Therefore, in conclusion, it is necessary to stress that a micro study on one very small mountain city can be just as enlightening and important. In each the Andes, the Himalayas and the Alps/Pyrenees, there must have been many more settlements of this semi-rural category than of the big city category. By going into their records and discovering new aspects of their development, a micro study can reveal many unexpected aspects of the realities of mountain life in the past. – 2002 is the U. N. Year of the Mountains, and our session at Buenos Aires is intended to make the right use of this opportunity. It should promote the scholarly debate, between three continents, about a topic both relevant in history and neglected for a time too long.

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