

Status and trends in atlas cartography – considerations of an atlas producer, researcher, user and collector

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Abstract:

More than 450 years have now passed since the edition of a widely recognised first «cartographic» atlas, i.e. a structured and complete collection of maps, by Abraham Ortelius. Since then, more than half a million atlases have been produced until today, and the atlas has truly become one of the most popular ways of dissemination for cartographic material (worldcat.org today lists 460,000 printed atlases alone since 1570) – a «travel guide» through natural spaces and later – with the rise of the thematic atlas – also through our societies. It is often and rightfully regarded as the «crown of cartography». «Atlases» are also much talked about, and the term generally evokes positive associations in the wider community (Google alone has 1.5 trillion references to the term «atlas», amongst them 10.8 million references to «cartographic» atlases). This is an extremely positive news, of which cartography can be proud of. «Atlases» – just like the term «cartography» itself – are positive ambassadors of our science and profession – you may call them a brand – and it is impossible to imagine the language and memory of most people without them.

The negative side is: as it is with every «crown», so it has been happening to atlases for quite some time. Many of the well-known, talked-about famous atlases, especially from the golden age of atlases, are degenerating into mere objects in museums and libraries, that people like to look at on guided tours, but which few collectors actually put on their bookshelves at home any more – and which, for sure, nobody reads any more. Let's be honest: many of the 460,000 atlases published since Ortelius' work are gathering dust on bookshelves and, at least most atlases since 1950, no longer even find collectors. This contrasts with the apparently still large quantities of new atlases issued every year (currently app. around 2,000 atlases) and the stable number of atlases in our biannual International Cartographic Exhibition – but if you look more closely, these are no longer the classic geoscientific or educational atlases that have shaped the atlas market and our text books for centuries. Today, the market is dominated by small atlases with a popular look or dedicated to a popular and «catchy» topic, and most of them, when they appear online, are no longer made to last forever.

The conciliatory news is: while some atlas types are dead – in general, we can say: long live the atlas! The atlas has been reinventing itself at ever shorter intervals for about 40 years, and new types of atlases are emerging all the time. This is thanks to the fast development an information society that still needs the essence and nature of such an old concept – and perhaps today more than ever. After all, the concept is ingenious. Just as Ortelius selected a few special objects from hundreds of maps, put them together conceptually, supplemented them with further information and distributed them with the corresponding marketing efforts – this is exactly how the publishing and information industry functions today. The atlas is a very modern communication medium – like the many modern portals and dashboards from which a knowledge-hungry population can extract information. Perhaps atlases can finally flourish only in today's environment! Through atlases, large amounts of regional statistical data sets can be paraphrased into generally simple, compact and attractive images. From the beginning, atlases have been a visual medium – another advantage in a society that reads less and less and looks at more and more images in books and digital media. By using and combining colourful charts, maps, images, tables and text, they can tell stories about the state and the development of a country and its society. Atlases contain everything that is needed in the information industry. In addition, several other factors are currently favouring the emergence of more atlases, e.g. the digitisation of the administration, which is making open and free data available in ever greater quantities, sometimes live, via APIs for cartography, or the development of ever more powerful smart phones, which today easily transport digital and virtual atlases in 2D and 3D.

But if we say that atlases in general fit perfectly into today's information society and note that more and more new atlases are being published, then this does not apply equally to all well-known atlas categories that have been cultivated by cartographers for centuries. The successful ones today are those who develop new concepts in structure, access and communication – independent of technical finesse or infrastructures. Success factors for modern atlases are: simplicity, location-independent access, even simpler consumption, low or no access costs, not too large a volume, high graphic

quality, knowledge and information gain without technical and scientific paternalism, consistent storytelling, up-to-the-minute (live) information, no fixed scale, few but unusual and current topics.

Atlases for mere orientation are no longer or less and less in demand - be it for navigation or education. For two decades now, the number of travel atlases, nautical atlases or school atlases has been declining with the rise of mobile orientation technology. Specialised atlases, which deal with unique, usually consolidated knowledge (geology, languages, history, culture), are also on the retreat today and appear less and less frequently in new editions. With the disappearance of encyclopaedias and the rise of Google and Wikipedia, more and more general reference atlases are also disappearing, as they are no longer needed in this form as a storage of knowledge. The classic national atlas also suffers from this. Atlases, which aim to cover an immense variety of topics and questions are often outdated when they appear and are thus slowly becoming obsolete. Furthermore, the national atlas is increasingly deprived of the very purpose it had originally at the beginning of the 20th century and again after 1990 in the context of the formation of new nations – namely to represent new nations and their situation. So, it will probably keep popping up where new nations are still being formed – and stay there as long as there are nationalist governments, or states simply forget to cut the funding once it has been provided.

This leads us to another problem. While classical atlases do not completely vanish from the market – and certainly not from the collectors' eyes focussing on older atlases, their importance in modern atlas cartography decreases, if not erodes. However, they are being replaced by a large variety of new and smart atlases, which are not so easy to categorise any more, especially because they are relatively young and unstudied, and their existence for a longer period of time cannot be guaranteed. We may all still know (or think to know) what a National Atlas, a School Atlas, a Road Atlas, a Geological Atlas, a Health Atlas or even a Statistical Atlas is. But when we listen to atlas presentations at the ICC or visit International Map Exhibitions, do we really have a common idea of what a Structural Atlas, a Hyper Atlas, a Virtual Atlas, a Living Atlas, a Gaming Atlas, a Literary Atlas, a Modern Atlas, a Non-Atlas or an Institutional Atlas is – and what relations exist between those atlas types? When we start to collect something or deal intensely (also with a scientific approach) with an object or theme, the number and variety of those objects as well as the growing knowledge gathered about them one day inevitably raises the question of how to order and structure them – again and again. Structural schemes evolve, and in the scientific context, classifications emerge which aid to comprehend and further study the object.

More than 150 years ago, with the publication of first thematic and special-purpose atlases (school atlases, hand atlases, historical atlases, national atlases etc.), a growing differentiation of atlases began. It took another century until, in the 1970s, when many textbooks and theoretical articles on Thematic Cartography and Atlas Cartography were written, also first atlas classifications were subsequently set up and delineated by cartographers. They were further developed and supplemented in the 1980s and early 1990s, but still used more or less the same fundamental parameters to classify (paper) atlases. They were often aided by and published by the ICA Atlas Commission at the time. But since then, it has become very quiet for three decades in this field. In all recent cartographic textbooks, the classification of atlases (also of maps) has apparently lost of importance or has been reduced to very short structural schemes. While most articles (and ICC presentations) in recent years focus primarily on the technical evolution, the production of new atlases and fancy interactive features, theoretical contributions and structural schemes regarding their contents and essence have become rare. This can mean, that we either don't see any more problems in this field, which call for a scientific consideration or that the changes are still not seen by everyone and everywhere? The question may be allowed: are we trapped forever in classical categories, or have we capitulated before the growing quantity of new atlases and the ever increasing number of new atlas types and new output media and functions?

This presentation primarily wants to give insights into the evolution of atlas products in recent years and highlight some of the important current trends, developments and the reasons behind these – less from a temporary technical point of view, but from the long-term perspective of consumers and collectors of atlases. It further wants to give an overview of existing atlas classifications and further examine the suitability of various parameters of maps and atlases for a modern, sustainable classification that serves the 21st century's user, such as geographical coverage, scale, topic and contents, target group(s), topicality, production methods, sources, degree of complexity, medium, format, publisher etc. With the help of a subset of these criteria and the analysis of modern catalogues, first parameters and a call for a new, contemporary atlas classification are being presented, which can be further developed in the coming years by the atlas community.

Last but not least, as we currently see a dramatic change in the nature and use of atlases, plus a shift from traditional to new atlas categories, this contribution wants to stimulate and encourage the discussion and study of these within the ICA Atlas Commission and other interested colleagues to dive deeper again into theoretical and systematic aspects of atlas cartography and also develop new definitions and classifications for today's and tomorrow's atlases, as we have done some decades ago. Both, cartographic science and practice, need this basic framework to support them with the study of the evolution, changes and (ir)regularities of atlases and atlas types, their commonalities and differences, the organisation of their production and dissemination, and finally their usage and systematic cataloguing in collections and libraries.