



KACPER JANCEWICZ

University of Wrocław, Institute of Geography and Regional Development

Department of Geomorphology

kacper.jancewicz@uwr.edu.pl

DOROTA BOROWICZ

University of Wrocław, Institute of Geography and Regional Development

Department of Geoinformatics and Cartography

dorota.borowicz-micka@uwr.edu.pl

Tourist maps – definition, types and contents

Abstract. Tourist maps are one of the most common groups of cartographic documents. Their variety in terms of content, subject matter and publication titles is a result of growing popularity of diverse forms of tourism activity. The aim of the authors of this article is to demonstrate issues related to tourist maps, including their variety in relation to contemporary forms of tourism. As tourist maps are constantly developing, the authors decided to propose a classification of tourist maps which is adequate from the point of view of the types of maps we currently distinguish. Taking into consideration the aim and type of tourism, the maps were divided into the following sub-groups: maps for sightseeing tourism, qualified tourism, and other tourism, as well as tourist city maps, and maps prepared for promotion and advertising of tourism. The first three categories were further divided into more detailed sub-categories and each of them was described briefly in terms of its content. The classification of maps based on their scales and form of content presentation was also included.

The authors attempted also to define the concept of “tourist map” itself. The authors defined it as a geographic representation of an area presented on a plane, in accordance with specific mathematical rules, which should include topographic contents, information about tourist attractions of a given area, its tourist and complementary infrastructure, presented with the help of conventional signs, in a matter appropriate for the scale of the map and its intended use.

Contributing to the discussion on the place of tourist map in the general classification of maps, the article distinguishes not only general-geographic maps and thematic maps, but also orientation and navigation maps. This terms covered tourist maps, road maps, and navigation maps: sailing, sea, aerial and city maps. They consist a group of maps in which the functions they play determine their informational content and their form of cartographic presentation. However, unlike on thematic maps, where the general geographic content is merely a background for presentation of the theme-related phenomena, the geographic content is essential in case of tourist maps. It is precisely the general geographic content which is primarily responsible for communicating information which is meant to be used for orientation and navigation purposes.

Keywords: tourism, tourist maps, orientation and navigation maps

1. Introduction

Tourist maps are one of the most common groups of cartographic documents. Their variety in terms of content, subject matter and publication titles is a result of growing popularity of diverse forms of tourism. Development of tourism is also driven by society’s growing desire to travel and encounter new places and cultures, which is in turn most often inspired by mass media. Tourist trips and holiday travel became part of “lifestyle” of many people. The

number of people who use non-traditional (not printed) forms of tourist maps has also been growing steadily. The non-traditional forms include all kinds of digital maps published on-line and maps created to be used on mobile devices, which allow for using electronic tourist maps directly in the area they represent.

Despite all the above-listed circumstances, the issues related to tourist maps have not become the focus point for Polish scientific texts. Particular attention was given to the tourist cartography in 1970s and 1980s when the scien-

tific conferences focused on issues related to unification of cartographic symbols, including methods of content presentation, methods of construction of map legends, interpretation of contents, the issue of adding maps to tourist guides, importance of cartography in the development of tourism, and other (K. Trafas 1973; *Konferencja naukowo-techniczna...* 1979; *Mapa turystyczna...* 1986). Polish journals included discussions concerning geographical solutions used in tourist city maps (J. Ostrowski, W. Ostrowski 1975) and analyses of the scope of contents of tourist maps (E. Nowak-Ferdus 1980). Issues related to representation of mountain areas were also discussed, and a new type of tourist maps was showcased – geological and landscape maps (W.A. Wójcik 1996). Simultaneously, outside Poland, special attention was paid to the issue of designing symbols for tourist maps (D. Forest, H.W. Castner 1985; R. Gerber et al. 1990).

In Poland, a conference concerning tourist maps was organised at the beginning of 21st century. The conference covered such topics as, among other things, the variety of types and content of tourist maps and different methods employed to visualise said content, as well as the issue of using maps for qualified tourism and the role of tourist maps on the Internet (K. Trafas et al. 2003). Another publication which is interesting in the context of this article is the overview of tourist map types and market in Poland prepared by W. Kaprowski (2004) and the overview of issues related to cognitive and educational functions of this type of maps written by K. Kałamucki (2005). A. Kowalczyk (2015) wrote also an article focusing on methodological and methodical issues related to tourist cartography which constitutes another important overview of issues related to tourist maps in general.

The aim of this article is to present a comprehensive overview of issues related to tourist maps, taking into consideration their variety in relation to contemporary forms of tourism. As tourist maps are constantly developing, the authors decided to propose a classification of tourist maps which is adequate from the point of view of the types of maps we currently distinguish. Another aim of the authors is to attempt to determine what a tourist map is and to contribute to the discussion about the place of tourist maps in the general classification of maps.

The subject of the research conducted for this analysis consisted mostly of printed tourist maps, mainly because of their high number and thus great variety in terms of content. Although tourist maps published in electronic form are increasingly popular, they only concern selected forms of tourism, so they are not as varied and the scope of their content does not differ fundamentally from that of printed maps. The form of information presentation is different in the case of electronic maps, as is the way such maps are used. Their content can also change with the changing scale.

2. Cartography on the issues of contemporary tourism

The concept of tourism has been present in the public consciousness since eighteenth century. Despite the huge amount of civilization-related changes that have taken place since that time, its fundamental importance has remained unchanged. W. Hunziker defines tourism as “the sum of the phenomena and relationships arising from the travel and stay of non-residents, insofar as they do not lead to permanent residence and are not connected with any earning activity”, and this definition is nowadays considered to be the most complex take on tourism (J. Wyrzykowski, J. Marak 2010, p. 11). It should be also noted that the number of factors which function as incentives for tourist trips is steadily growing. New types of tourism often go beyond the scope determined in the above-mentioned definition, as they are connected with doing paid work while making use of the tourist infrastructure at the same time (P. Różycki 2006). At the same time, its traditional variations also evolved dramatically, which is a consequence of a contemporary tendency to spend leisure time in an active manner (S. Toczek-Werner 2004; W. Kurek 2007).

Regardless of its internal specificity, tourism remains closely connected with geographical space, as it is the sphere within which all processes related to movements of people take place. Therefore, it draws from fields describing said space, in particular from natural and historical sciences, which provide information about tourist attractions of various areas around the globe. This knowledge is made available mostly through guidebooks and tourist infor-

mation. Access to information concerning the location of tourist points of interest (POI), which can be more easily presented in graphical than descriptive form, is very important from the point of view of smooth functioning of tourism. There is a link between tourism and cartography – a scientific discipline and a field of practical activity which deals with the development, production and use of maps (J. Paslawski 2010).

Cartographic publications can deal with issues related to tourism in a twofold way. The first group consists of so-called maps of tourism (tourism-related services) which present spatial differences between phenomena related to tourist flows – a good example is a map which shows “tourist attractiveness” of individual European countries (the attractiveness is measured on the basis of the number of tourists visiting individual countries within a given time period). Maps of this kind are not directly used by tourists, and their main users are researchers who analyse tourism-related phenomena.

The second group consists of maps produced and published to enable tourists to organize their leisure time and to meet their recreational needs, in particular its active aspects. Said needs relate mostly to the information about attractiveness of a given area in terms of tourism, that is, information on the significance of its tourist attractions, its general accessibility and the state of its development for tourist purposes (J. Wyrzykowski 2002); tourist maps are also meant to enable orientation in the field. Hence, there is a need for a particular type of information – determined by the preferred type of tourist activity. J. Wyrzykowski and J. Marak (2010) distinguish between the following types of tourism:

- leisure tourism (aim – regeneration of physical and mental strength),
- sightseeing tourism (aim – learning about the world and expanding one’s knowledge about the world),
- qualified tourism (aim – engaging in forms of tourism which require certain skills and appropriate equipment, for example, bicycle, automotive, aviation, nautical, climbing, ski tourism, and more),
- business tourism (aim – travelling for professional purposes),
- religious tourism (aim – participation in religious events).

There are even more detailed divisions within this classification which refer to the internal di-

versity of these types of tourism. Their diversity results in corresponding maps, which are often much different from one another when it comes to content selection and graphic form. Consequently, their users are provided with good orientation in the field and information on the properties of strictly-defined types of tourist infrastructure or a given area’s attractiveness in terms of tourism, which are considered in accordance with criteria determined by the type of tourism.

3. Definition of the tourist map

An attempt to establish a definition of the tourist map is a logical consequence of deliberations on the essence of interactions of cartography and tourism. Classical definitions define a map as a graphical model of reality that presents it in a reduced, generalized, and mathematically defined manner, by means of conventional signs. The map allows user to get to know this reality, to see the connections and relationships between its elements, and the development of each map has its own specific purpose. The term “tourist map” should therefore be compliant with all features of a map. Meanwhile, as noted by K. Trafas (2003), “tourist map” is to large extent a conventional term. As emphasised by Trafas, not all publications which are commonly referred to as tourist maps could be classified as maps in accordance with its classic definition. Such publications include, for example, perspective drawings, panoramas, cross-sections, or views or diagrams showing tourist routes. Even though they are indeed graphical models of reality which were designed for tourist purposes, they are not tourist maps.

A. Kajoch (1996) notes that the tourist map is used both for making plans concerning various tourism undertakings and for their implementation. The term “tourist map” should not, however, be used to refer to all cartographic works that meet the general definition of the map and at the same time serve the tourist in exploration and getting to know the area, or which are helpful to tourist when it comes to planning and travelling. If we did it, the term would also cover general geographic maps, which are posted on various map websites and allow potential visitors to determine their travel route on-line.

An alternative solution for defining a tourist map is adoption of the content criterion. Such a solution was proposed by K. Kałamucki (2005, p. 66) who wrote that “only such a cartographic document can be classified as a tourist map whose material content (aside from topographic content) includes tourist information on location and qualitative characteristics, or more rarely quantitative ones, as well as attractiveness for tourists, tourism infrastructure and complementary infrastructure”. A similar definition of the tourist map was proposed earlier by W. Kaprowski (1973) who emphasised the importance of not only the content of such a map, but also its function – the map should allow for better orientation in the field.

The proposed definition of the tourist map is therefore as follows: The tourist map constitutes a graphical representation of an area presented on a plane, in accordance with specific mathematical rules (which is meant to ensure good orientation in the field, allow for obtaining correct information about distances, etc.); such a map should include topographic contents, information about tourist attractions of a given area, its tourist and complementary infrastructure – presented by conventional signs, appropriately for the scale of the map and its intended use.

4. The scope of the content of tourist maps

As noted by A. Kowalczyk (2015), tourist maps do not have clearly defined target audience. They can be used by people who have a lot of experience in tourism and map reading and people who have no such experience, people with various education backgrounds, and tourists who come from very different countries and cultures. No tourist map can meet the needs of all tourists who use it. The content of the tourist map is the decisive factor for its usefulness, thus, the choice of content and presentation is conditioned mainly on the purpose which the map is supposed to fulfil. The diversity of content and diversity of the audience is reflected, among other things, in the large number of titles of published printed tourist maps, for example, a geological tourist map, a nature-focused tourist map, a topographic tourist map, a map of tourist attractions, a map of canoeing trails,

a map of religious sites or a map of camping sites.

The content of the map is also determined by its scale. When the scale is changed, the number of objects which can be presented on the map changes too, because the map needs to remain clear and attractive in terms of its graphic design. There is also a general dependency that the role of topographic elements becomes greater when the scale of the map increases (A. Kajoch 1973). The exposure of these elements depends on the type of the tourist map, which demonstrates how the purpose of the map influences the choice of graphic solutions.

Elements of topographic content play a very important role on tourist maps, as they allow map users for orientation in the field. The issue of choosing this content and the method of its graphic presentation was described by M. Roszczyńska and W. Zalewski (2003). The correct representation of topographical relief is particularly important for the map to be able to fulfil its orientational function (W. Pawlak 1973), especially in mountain areas. However, faithful and clear representation of terrain is not easy. Combination of contour lines (or hypsometric tinting) and shading methods is believed to be an optimal solution. Contemporary tourist maps usually reflect attempts to achieve a clear image of relief by applying the above-mentioned methods.

The issue of land cover representation is connected with its own set of problems. Tourist maps represent the spatial variability of this element in greatest possible detail, which is an unquestionable advantage of such maps. Methods of graphic presentation are usually analogous to the ones applied in topographic maps, but the qualitative generalization is used to a greater extent. Voices suggesting that the scope of information about land cover should be increased (K. Kałamucki 2003; M. Roszczyńska, W. Zalewski 2003) seem to be justified; for example in the case of differentiating between forest areas on the basis of their species composition. Currently there is also a tendency to introduce greater variety of built-up areas symbolization by differentiating between industrial areas, service facilities, as well as designation of object which due to their specificity function as landmarks (for example: telecommunication masts or roadside shrines which are commonly found in Poland).

Linear elements, that is waterway networks and transport networks, are presented on tourist maps in a manner similar to that used for general geographic maps. Waterway networks are subject to slightly stronger generalization, with the exception of maps meant to be used for water-related types of qualified tourism. Transport networks, represented by roads and railway lines, are treated differently – they are presented in a fairly detailed manner due to their universal use. However, this does not exclude the occurrence of shortcomings associated with the classification of roads.

Elements of map content other than the topographic elements perform a different function. They have to present information about tourist attractions and, what is most important, about the tourist infrastructure. Their choice implies that maps are useful for specific types of tourism. In the case of maps created for qualified tourism the key aspect is a careful selection of information needed for engaging in a given activity. However, a less detailed character of information meant for less demanding customers is typical for general tourism and sightseeing maps.

Diversification of information details is observed in the context of various criteria and related elements of thematic content. K. Kałamucki (2003) distinguishes natural attractions (e.g. isolated rocks, ravines, and protected areas), anthropological attractions (e.g. churches, museums and monuments), social tourism infrastructure (e.g. tourist information offices, leisure facilities), technical facilities (e.g. tourist routes, accommodation facilities) and paratourist infrastructure (e.g. hospitals, banks, post offices).

As the number of possible content elements which meet the above criteria is very large, there is a need for qualitative generalization and, for small scale maps, quantitative generalization. Location of the objects on the map is done in line with topographic method (in accordance with objects actual location) or they are assigned to places (areas) in which they are located. There is an issue of determining what level of diversity of categories of objects provide the tourist with an access to information with appropriate substantive level. As noted by K. Kałamucki (2003), it happens sometimes that the number of object classes on tourist maps exceeds the number of those contained in the act on tourism services. It applies in particular to categorisa-

tion of the accommodation facilities, which makes it difficult to identify them, and results in chaos when it comes to terminology.

The scope of presentation of tourism infrastructure depends on the type of tourist map. On general maps, it usually boils down to designating tourist routes, as well as accommodation and catering facilities. Maps which are meant to be used for a specific type of tourism are much more detailed in terms of information about the trails and the elements of infrastructure which are connected with said trails. There is a noticeable tendency to enrich the content of the map by adding profile lines of tourist trails and an information about time needed to travel through the specified trail sections.

The paratourist infrastructure is a separate issue. Such facilities are not among the facilities which are most often represented on maps, even though they perform an important supportive role to tourism. Marking such facilities as post office, health care institutions and shops on the maps would be very useful. The role played by shops can be considered in relation to the level of tourism development of the given area. The importance of shops increases significantly in the areas with underdeveloped tourism infrastructure – they become a part of the infrastructure, and therefore they become a valuable element of the content of the map.

5. The place of the tourist map in the classification of maps

The presented characterisation of the scope of content of tourist maps indicates clearly that tourist maps stand out among other cartographic publications. The tourist map is not a general geographic map, although it has its roots in it. Topographic elements which allow map users to orient themselves in space constitute the essence of the tourism-related content, just as other elements of the content. The said fact has already been emphasised in academic writing on the subject many a time (A. Kajoch 1973; E. Nowak-Ferdhus 1980; M. Roszczewska, W. Zalewski 2003; B. Medyńska-Gulij 2003).

Despite the distinctiveness of the content of tourist maps, they are omitted from the general map classification based on the criterion of content which is used in cartographic literature. The standard division into two groups: general geographic maps and thematic maps does not

indicate clearly to which of these groups tourist maps belong (A. Robinson, R. Sale, J. Morrison 1988; L. Ratajski 1989; K.A. Saliszczew 2003; J. Pasławski 2010; W. Żyszkowska, W. Spallek, D. Borowicz 2012). However, tourist maps show up in classifications organised in accordance with maps intended purpose or use, and thus in accordance to their social function.

Taking into consideration the specific content of tourist maps and other maps which perform similar functions, it seems reasonable to introduce (in addition to general geographic maps and thematic maps) a group of orientation and navigation maps. This group includes tourist maps, car maps, and navigation maps (sailing maps, nautical and aeronautical charts), as well as city maps, which are all connected by the specific content of information and the manner in which it is cartographically represented. However, unlike on thematic maps, where the topographic content is merely a background for presentation of the theme-related phenomena, its role is essential in case of orientation and navigation maps. The topographic content is primarily "responsible" for providing information about the terrain which are foremost used for orientation and navigation purposes. Depending on the intended use of the map, its content is supplemented with many elements which do not always have orientation-related functions. They are, for example, accommodation facilities in the case of tourist maps, air traffic restriction zones on aeronautical charts as well as information about the depth of water bodies or bottom types on maps for sailing. Orientation and navigation maps may therefore be described as maps whose main purpose is to be used for orientation in the field, while heading towards a particular direction, which in fact means determining one's own location and designating a route to any chosen place. These maps are characterised by specific content which makes the task easier for a specific user – tourist, sailor, or pilot.

6. Types of tourist maps

For a long time, classification of tourist maps was not seen as a subject of separate publications. Classifications were made from time to time for the purpose of evaluating already published maps (E. Nowak 1973) or in the process of characterising the scope of their content

(E. Nowak-Ferdhus 1980). Such classifications were based on the criteria of the type of tourism for which maps were prepared. K. Trafas (2003) was the first person who attempt to formulate an exhaustive and comprehensive classification of tourist maps, taking into account diverse criteria: purpose (nature) and type of tourism, map scale, content presentation methods, type of base map, presented area, type of cartographic material and its editorial form. A detailed classification of tourist maps was later presented also by W. Kaprowski (2004) who attempted to integrate various classification criteria: map scale, map content, graphic design and purpose.

The criterion of purpose and type of tourism refers to the intended use of the created map. Tourist map types are distinguished on the basis of their content, from the point of view of potential user seeking specific information. K. Kałamucki (2005) confirmed correctness of this approach in his own work. Application of this criterion led at first to the identification of maps for hiking (mountain, upland and lowland tourism), water and skiing tourism, as well as a group of tourist-sightseeing maps (E. Nowak-Ferdhus 1980). A much more extensive classification of tourist maps, taking into account new forms of tourism, was developed much later by K. Trafas (2003). Trafas distinguished between maps for sightseeing tourism, qualified tourism, pilgrimage tourism, and other, as well as tourist city maps, and maps prepared for promotion and advertising of tourism, with more detailed sub-groups within the first four groups.

Nowadays, the above-mentioned division is insufficient because it does not take into account many of currently existing forms of tourism, as well as maps which are published with these new forms of tourism in mind. Table 1 presents a proposal of a classification based on that proposed by K. Trafas and expanded to include new forms of tourism. The purpose of the map (its intended use) still plays the decisive role. Another criterion taken into account is the type of space in which the tourist flow takes place and the way of traveling chosen by tourists. After all, such factors have impact on the diversity of the content of tourist maps. This classification takes into account the contemporary types and forms of tourism flows distinguished on the basis of the motivation behind travel (W. Kurek 2007; J. Merski, J. Warecka 2009; J. Wyrzykowski, J. Marak 2010).

Table 1. Classification of tourist maps in accordance with the aim and type of tourism

Maps for sightseeing tourism	general		
	for hiking tourism	mountain	
		lowland	
	for tourism defined by modes of transport	bicycle touring	
		automotive tourism	
rail tourism			
Maps for qualified tourism	for skiing tourism	cross-country skiing	
		downhill skiing	
	for nautical tourism	canoeing	
		sailing	
		underwater	
		fishing	
	for cycling tourism	racing	
		off-road	
		mountain	
	for climbing tourism	rock climbing	
		alpine climbing	summer climbing
			winter climbing
for equestrian tourism	lowland		
	mountain		
for speleological tourism			
for orienteering tourism			
Maps for other types of tourism	for business tourism		
	for sports and recreation tourism		
	for pilgrimage tourism	on foot	
		using modes of transport	
	for geotourism		
	for biotourism		
	for culinary tourism		
		
Tourist city maps			
Maps prepared for promotion and advertising of tourism			

Maps intended to be used for sightseeing tourism are the most numerous and most popular group of tourist maps. They are created in line with with the general assumptions and aims of tourism – exploration and getting to know areas which have particular value in

terms of their natural and cultural landscapes. Maps of this type are therefore to enable tourists to orient themselves in the field and to obtain additional information about any attractions and tourist infrastructure of a given region. The most common sub-group among them is made

of so-called general maps. Versatility of the information represented on these maps allows for them to be used by people who engage in practically all types of tourism. They are usually maps which scales range between 1:40,000 and 1:200,000, although there is a tendency nowadays to use map scales larger than 1:100,000. Topographical relief is presented fairly accurately and the level of detail is highest in mountain areas (contour intervals every 10 or 20 metres). Classification of roads includes national and voivodship roads, as well as local paved roads and others. Some maps also include information about roads with damaged pavement, which is useful for tourists who travel by bikes and motorcycles.

Objects which are decisive when it comes to a given areas touristic attractiveness are represented in great detail. Natural objects include, for example, protected areas, caves and inselbergs. Anthropogenic objects include a large group of religious and historical buildings (churches, castles, palaces). Additional information about these objects are usually placed in the form of text on the reverse side of the map. In the case of less numerous sightseeing atlases, the description includes physical-geographical and ethnographic characteristics of the region.

The scope of information on tourist infrastructure, which usually consists of dozens elements, is very broad. It is the modern standard to distinguish between several categories of accommodation facilities (hostels, resorts, hotels, camping sites, tent sites) and catering facilities (restaurants, pubs, cafes). Objects which are seen as "supporting" for tourism (shops, cash machines, post offices) are included on the maps more and more frequently. There are separate symbols designating hiking, cycling, ski, and educational trails. Content of maps of mountain areas also include facilities and objects constituting the skiing infrastructure (ski slopes, lifts).

Despite the assumed popular use of general maps, they are most often used by hikers (tourist on foot). These are mostly maps with scales larger than 1:100,000, as well as maps with smaller scales covering lowland areas or less popular tourist areas. We can distinguish a separate subgroup of general maps intended for hiking. Such maps are supplemented with inset

maps with smaller scales which depict a diagram of hiking trails and additional information relating to selected sections of the hiking trails.

Maps intended to be used for purposes related to hiking in mountain areas and in lowlands constitute a separate category of maps. According to A. Leonowicz (2003, p. 69) "a rich set of names of peaks, passes, valleys, chutes, pastures and other elements of terrain topography is the necessary element of any good mountain map". Together with a detailed representation of the relief, it is supposed to provide tourists with good orientation in hard terrain. Symbols indicating places in which there is danger of avalanches are particularly important in the case of higher parts of the mountains. Maps used for mountain tourism (figure 1) contain also information about dangerous sections of trails, locations of chains and ladders, and sections which are closed due to avalanche danger. On the other hand, maps for lowland tourism are closer in their content to the general sightseeing maps. While lowlands tourism is not typically distinguished when talking about tourist flows in general (W. Kurek 2007; J. Wyrzykowski, J. Marak 2010), such identification is useful when talking about tourist cartography due to a large number of publications of this type and significant differences between maps used by hikers in the mountains and in the lowlands.

Maps for bicycle touring, automotive tourism and railway tourism are examples of maps used by tourists who use various modes of transport for sightseeing. Maps for bicycle touring place more emphasis on showing the road network along with cycling trails. Even though this type of maps usually has fairly big scales (from 1:25,000 to 1:100,000), they usually contain a very simplified depiction of topographical relief and less details about buildings and any objects classified as tourist attractions. An indispensable element of any cycling map is a detailed description of individual sections of bicycle trails: routes, lengths, and information about any difficult and dangerous sections. Such data, together with profiles of routes, are included on the back of the map or in the form of a separate brochure functioning as a supplement to the map. It should be nevertheless noted that despite the continuous efforts to enhance the content of cycling maps

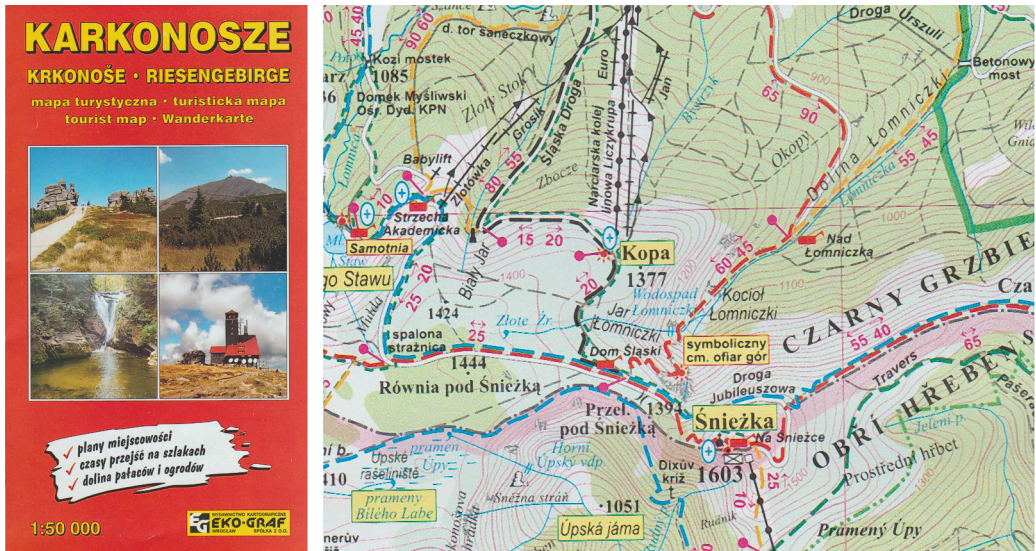


Fig. 1. Karkonosze. Mapa turystyczna (Karkonosze. Tourist map) 1:50 000. Wrocław: Wydawnictwo Kartograficzne Eko-Graf, 2011/2012

by adding new, useful elements, the quality of maps of this type often fails to meet the needs of cyclists who frequently use general maps. This can be explained by the fact that cycling maps are still developed for sightseeing tourism. Information about types of road surface and its condition could be an example of this. Such an information is included only on some of the maps and are limited to the sections which constitute marked cycling routes.

Maps for automotive tourism are usually prepared with medium scales (1:200,000) or small scales. They are designed for tourists travelling both by cars and by coaches. They are characterised by a high level of generalization of the relief, land cover, waterways network and build-up areas. This is, firstly, due to the use of smaller map scales compared to general, hiking or cycling maps. Secondly, it is due to the need to display information on the infrastructure necessary for this type of tourism (road numbers, information about steep road sections, gas stations, car parks, and catering facilities). Maps for automotive tourism differ from car maps whose purpose is purely navigational by the inclusion of information about natural and cultural tourist attractions of a given region. In addition to maps issued in the form

of individual sheets, a very large group of maps is published in the form of atlases containing information on tourist attractions.

Maps for rail tourism are maps intended for tourists travelling on historical trains or travelling to places associated with particular persons or events (e.g. "The Papal Train"). They highlight the travel route and places worth seeing located along said route.

Cartographic publications prepared for qualified tourism are meant to meet the needs related to more sophisticated forms of active leisure. They are characterized by a specific selection of content and graphic design. These maps are useful only for people who engage in a given type of tourism. It is important to emphasise that various maps for qualified tourism can have very different graphic designs, which is caused by a considerable variation in the character of the infrastructure used by various forms of qualified tourism.

The most numerous maps for qualified tourism are maps published for people who engage in ski tourism (fig. 2). Their scales vary from scales larger than 1:10,000 in the case of ski station plans to medium-size scales (1:50,000) in the case of winter maps of mountain areas (M. Roszczewska, W. Zalewski

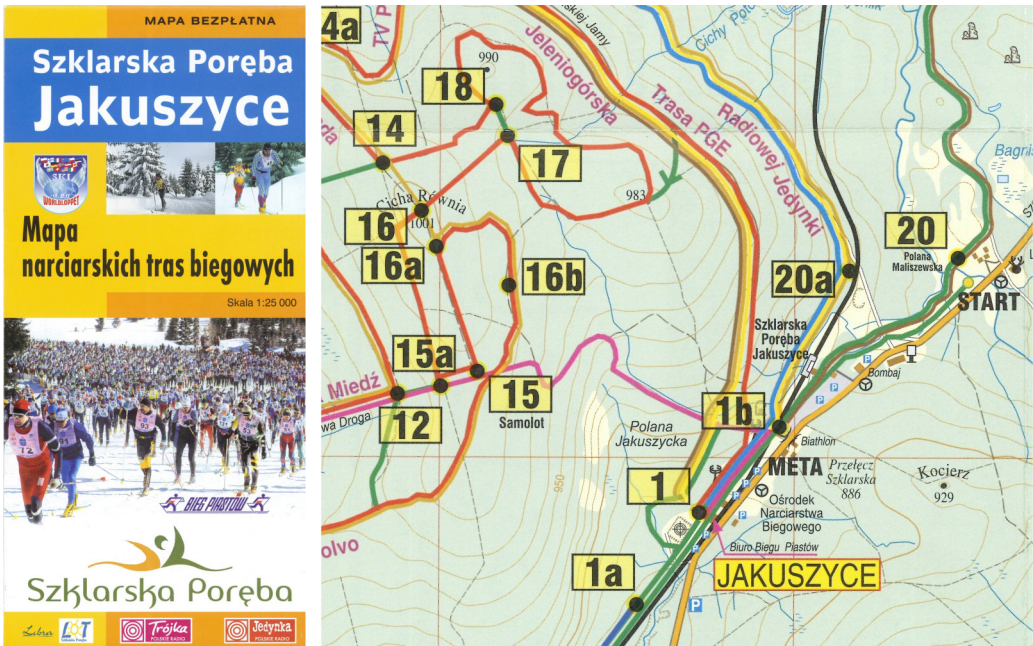


Fig. 2. Szklarska Poręba Jakuszyce. Mapa narciarskich tras biegowych (Szklarska Poręba Jakuszyce. Map of ski runner's tracks) 1:25 000. Wydawnictwo Libra

2003). Such maps are typically very diverse in terms of graphic design. In addition to typical maps, there are also various panoramas or schematic perspective drawings showing the location of lifts and ski slopes in ski resorts. However, the selection of content elements remains virtually unchanged – the ski infrastructure is meticulously presented: ski lifts, cable cars, ski slopes and their parameters, rental and ski equipment services, as well as accommodation and catering facilities. On winter maps of mountain areas the content is similar to maps devoted for sightseeing tourism – there is also a hypsometric representation of the relief, although more generalized one. The maps show not only hiking trails, but also ski trails, areas of avalanche danger, as well as sections of hiking trails which are closed during winter. On the back of the map, there is often additional information about the infrastructure, as well as the rules of dealing with avalanche risk and the rules of ski slopes.

Maps for ski tourism are published in a large variety of editorial diverse forms. Aside from single-sheet maps, there are also skiing atlases

which contain general information about winter sports centres in the country or selected mountain region and whose popularity is steadily growing. Brochures promoting individual ski resorts or complexes are also becoming increasingly common. Finally, boards with maps and profiles of cross-country skiing trails are a common sight around the tourist areas.

The next group of maps are these used for various types of nautical tourism: canoeing, sailing, underwater (diving) and fishing tourism. They contain detailed descriptions of water bodies (inland or coastal), canoe trails – on maps for canoeing tourism, attractive places for underwater exploration or location of shipwrecks – on maps for diving tourism, fishing zones – on the fishing tourism maps. The scale and form of the map depend on the characteristics of the area, e.g. maps for canoeing tourism usually have layouts corresponding to the linear shape of canoeing trails, often taking into account their mileage; difficult sections of the trails, harbours, waterside hotels and elements of water engineering infrastructure, which are represented on the map.

A similar selection of content, including elements related to sightseeing, can be found on maps for sailing tourism, with a significant percentage of the information focusing on the characteristics of a given waterbody. It should be noted, however, that professional navigation maps are used in the case of large bodies of water.

Maps for qualified cycling tourism are meant to be used by tourist who have a lot of experience in this type of tourism. They are usually maps of areas which are more difficult to explore than the areas covered by maps for sightseeing bicycle touring.

Maps for climbing tourism can be divided into maps for rock climbing and alpine climbing, with the distinction of summer and winter versions (K. Trafas 2003). These maps are aimed at ensuring efficient and safe use of the climbing routes. As a rule, these are very large scale maps, which contain technical information concerning climbing routes, such as locations of dangerous places or grips.

Maps for equestrian tourism are typically developed, just as the maps for hiking and biking, with scales larger than 1:100,000. These maps include horse riding trails and elements of infrastructure for this type of tourism: horse riding centres, stud farms and places designed for rest and grazing.

Maps for speleological tourism are intended for cave-loving tourists and speleologists who have the appropriate predispositions, preparation and know how to use relevant equipment. Because of the specific character of the presented areas, these are mostly maps with very large scales. Their content is mainly the layout of corridors and chambers of caves (or cave systems) with information about their names and exits leading to the surface.

Orienteering maps are designed with large scales, usually between 1:2,500 and 1:15,000. The detail included in their topographic content is far superior to that of topographic maps of similar scale, but most geographical names are omitted (W. Kaprowski 2004).

A special group of maps is targeted at users whose tourist trips have particular goals. The predominant motive of tourist trips undertaken by this type of map users is most often the development of one's own interests, spiritual development or business activities. These maps are grouped together and referred to as maps

for other tourism. This term was also used by K. Trafas (2003), who in his work on this group highlighted maps for pilgrimage tourism (they are only a subset of broadly understood maps for other tourism, table 1).

Maps for pilgrimage tourism (religious) are intended to be used by tourists visiting centres of religious worship. They are characterised by a specific selection of content which is focused on the characteristics of sacred objects and they are diverse in terms of their scales. Large-scale maps of cities, towns or villages in which sanctuaries (pilgrim destinations) are located are often included in the guidebooks and travel brochures. Content of maps with smaller scales is adjusted to fit the intended way of travelling – whether a given map is meant for hiking or for the use of means of transport (automotive, bus and rail tourism).

Nowadays, travelling for professional reasons is included in the scope of tourism, and its form is considered one of the most profitable in the world (W. Kurek 2007). Maps for business tourism are not, however, intended for use on individual business trips. These are maps for fair (exhibition) or conference (congressional) tourism, which are occasionally issued in the form of brochures, and designed to make it easier for participants and observers of various types of assemblies to function and move within a given area. Similar function is performed by maps for sport and recreation tourism, sometimes also referred to as "fan tourism" (W. Kurek 2007), which are published for e.g. big sports events. Their additional function is promotion of the places in which such events take place.

Currently, there is a growing interest in maps for geotourism, whose aim is to get to know inanimate nature constituting landforms created by the effects of geological processes (fig. 3). Less popular are maps for biotourism which are intended to be used by, for example, tourist-ornithologists (maps including information on bird habitats), or to present routes through areas with interesting animals (e.g. for safari tours).

On the other hand, the number of maps for culinary tourism keeps growing. Such maps show places of food production, places for tasting of local and regional dishes, and locations (and dates) of culinary festivals.

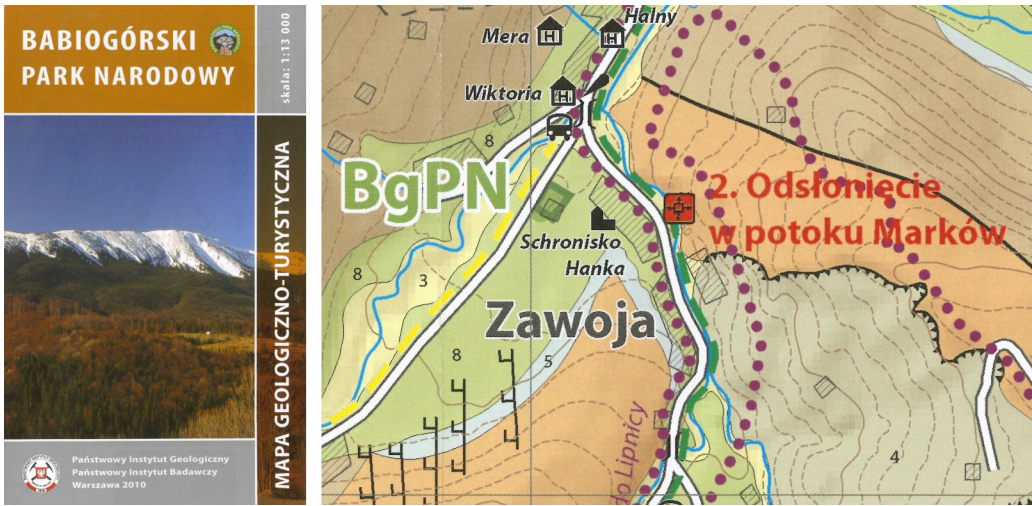


Fig. 3. *Babiogórski Park Narodowy. Mapa geologiczno-turystyczna.* (Babiogórski National Park. Geological and tourist map) 1:13 000. Warszawa: Państwowy Instytut Geologiczny – Państwowy Instytut Badawczy, 2010

As more and more new types and forms of tourism are emerging, and their importance is constantly increasing, it is expected that it will be soon the fastest growing map group – in terms of its variety and titles focusing on completely new topics; hence the openness of the category (table 1). While there is most likely no reason to expect publications of maps for linguistic tourism (aim – language courses) or volunteering tourism (aim – taking up unpaid work), tourist will surely become more and more interested in maps for festival tourism, trade tourism, sentimental tourism or tourism related to visiting places known from books and films.

Some cartographic publications designed for tourists, due to their specific content selection or presentation, differ fundamentally from the maps organised into the three above-described main categories. They are tourist city maps and maps prepared for promotion and advertising of tourism.

Tourist city maps constitute a very numerous and popular group of cartographic publications. This is due to the fact that urban centres attract a large number of tourists with different preferences regarding forms of relaxation. City maps should therefore contain a very large amount of information, and this number increases proportionally to the size of the city.

This affects the choice of the scale and the map's publication form. Typically, city maps have the scale of 1:25,000 or larger, with the city centre plan in a larger scale, and sometimes also a medium- or small-scale map of the city's surroundings. Single-sheet publication dominate among city maps, but atlases are also published in the case of large urban centres.

Placing street names and building numbers on city maps is intended to provide a basic orientation feature. The list of street names is usually placed on the reverse side of the plan or, in atlases, on separate pages. Another important element, especially for large cities, is representation of public transport lines with stops. Such selection of content enables tourists to travel relatively smoothly around the city. Unfortunately, information concerning public transport quickly becomes outdated, especially on maps of fast-growing cities.

In addition to the already mentioned content elements, city maps include also a lot of information concerning tourist attractions. Historic buildings and public facilities (cinemas, theatres, and museums) are usually marked on such maps. Tourist infrastructure tends to be presented in a fairly detailed way, with particular regard given to accommodation and catering facilities. Additional information on this subject

is usually put on the back of the map or on separate pages of the atlas.

Publications prepared for promotion and advertising of tourism constitute a particular sub-group of tourist maps. They are usually small-scale maps with strong generalization of their topographic content. There show most important tourist attractions of a given region (with vignettes), and brief information about said attractions is placed on the back of the map. Promotional maps category also includes maps inserted into advertising brochures of well-known holiday resorts.

In relation to the presented classification, it is also possible to divide maps on the basis of scale. The wide range of used scales is due to a large variation in the amount of detail required for various maps. The scales of tourist maps can therefore range “from scales typical of situational plans of particular objects (e.g. church or castle interiors) – 1:100 and larger, through all possible scales of topographic maps, to very small scales e.g. 1:8,000,000” (K. Trafas 2003, pp. 8–9). Therefore, tourist maps can be divided into large-scale maps (with scales of

1:25,000 and larger), medium-scale maps (scale range from 1:25,000 to 1:200,000) and small-scale maps (with scales smaller than 1:200,000). On the other hand, A. Kajoch (1996, p. 65) claims that “the group of proper tourist maps is composed of maps with scales 1:100,000 or larger, as they are meant to be used in direct confrontation with the area they represent”. In the case of maps published in electronic form, it is possible to change the map scale to a certain extent.

The form of the map is another classification criterion relating to the practical use of such tourist cartographic material. In the case of printed maps, we can distinguish, folded single-sheet maps (one-sided and two-sided, with or without tourist information), tourist atlases, wall maps, travel guides, brochure maps (mainly promotional and advertising maps), plastic models and interactive maps (virtual) (K. Trafas 2003). Tourist maps meant to be displayed on electronic mobile devices (figure 4) and traditional maps displayed by means of small projectors directly in the field are also popular.



Fig. 4. Cyfrowa mapa topograficzno-turystyczna „Na zachód od Częstochowy” (Digital topographic and tourist map “West of Częstochowa”), KSW Mapa. A digital tourist map for mobile devices

7. Conclusions

The increasing popularity of active forms of recreation, including broadly understood tourism, results in the emergence of new types of tourist maps and modification of their older variants. Tourist maps increasingly differ from one another in terms of their scope of the content,

forms of cartographic presentation of information and their intended use. Content of maps is tailored to specific groups of tourists. One of the consequences of this phenomena may be the further extension of the classification of tourist maps. Changes may be introduced to the rank of individual classification criteria and to the definition of the tourist map itself.

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