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**THE MULTI-SENSORY LANDSCAPE AS AN INSPIRATION
IN THE CREATION OF A TOURISM PRODUCT**

Abstract: Stimulated by growing competition in the tourism market, the offer available needs to be continuously enhanced, and as a result those doing the development reach out for increasingly sophisticated measures. An important element in this context is the popular multi-sensory perception of landscape which guarantees that the tourism product created will be interesting and unique. This helps to provide more interesting experiences and achieve greater involvement, which undoubtedly allows greater satisfaction to be drawn from participation in tourism activities. The purpose of this article is to demonstrate that the multi-sensory approach to landscape may be applied in the creation process of the tourism product, and this proposition will be supported with examples corresponding to particular landscape stimuli. The author intends to show that contemporary tourism offers benefit from the phenomenon of the multi-sensory landscape more and more frequently.

Keywords: multi-sensory landscape, landscape perception, tourism product.

1. INTRODUCTION

Sensory experiences play an important role in our interpretation of the surrounding world. The individualized process of perception allows the environment to be experienced through all our senses, each creating our own image. Visiting a particular place, the tourist experiences the surrounding landscape and interprets the stimuli received through their own knowledge, experience, needs and motivations. Landscape plays an important role in tourism and leisure, but may perform different functions from the point of view of each individual. A specific type of landscape – in terms of its genesis, degree of naturalness, form and function (as defined by CHMIELEWSKI, MYGA-PIĄTEK & SOLON 2015) – that the tourist is visiting at a specific moment has special characteristics providing a source of certain stimuli which influence its perception. Thanks to such stimuli the landscape has a unique character which determines its attractiveness for the purposes of tourism. Therefore, it is possible to show the following relationship: the more diverse the landscape is, the more senses it engages. This increases the intensity of the sensations, which, in turn, increases the satisfaction derived from tourism (Fig. 1).

The purpose of the article is to demonstrate that the multi-sensory perception of landscape has an applica-

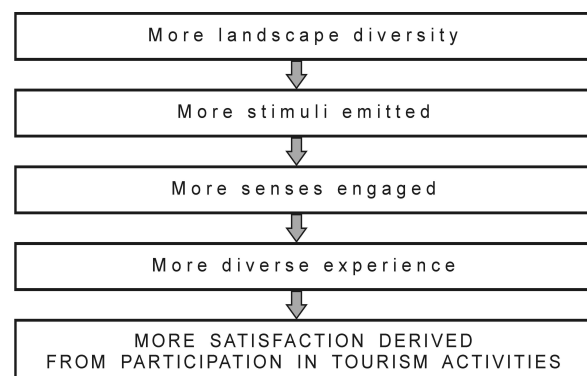


Fig. 1. Diversity of landscape and satisfaction derived from tourism

Source: author

tion in creating of the tourism product, understood by J. KACZMAREK, A. STASIAK, B. WŁODARCZYK (2010) as the entire experience from the moment of leaving home until return. If it is created according to the principles of the triad of tourist experiences (STASIAK & WŁODARCZYK 2013), it allows landscape to be experienced in a variety of ways involving knowledge, emotions and entertainment, and allows greater satisfaction to be drawn from participation in tourism activities.

2. LANDSCAPE AND ITS PERCEPTION

T. BARTKOWSKI (1985) noticed that landscape is the largest fragment of space that may be embraced by the senses, indicating a major area for research and not only in terms of visual stimuli. Within this meaning, landscape is a reflection of the sensory signals perceived, an objectively existing reality emitting such signals (BARTKOWSKI 1985) which may be categorized as sight, sound, smell, taste and touch. In reference to this approach it should be noted, to quote the words of S. KULCZYK (2014), that landscape is a holistic continuum of nature and culture perceived by people with all their senses. It has both a physical and a mental dimension, it constitutes a hierarchical arrangement which is investigated at different levels of detail, dynamic at many scales, and with a linear, cyclical or chaotic character (KULCZYK 2014).

Landscape stimuli are received and interpreted in a complex process of perception and they become one way of subjectively valuing space in terms of aesthetics, ethics, emotions, symbolism and semantics. Issues of landscape perception remain within the field of interest of many academic disciplines. According to A. RICHLING & J. SOLON (2011), its origins are connected with the 19th c. trend of gestalt psychology, although the Gibsonian ecological theory of perception referred to by P. WOLSKI (1992) is of equal importance. Today a significant research development on landscape perception related to the concept of multi-sensory landscape is occurring (RICHLING 2012). Important juxtapositions of issues of perception and the aesthetic assessment of landscape within landscape architecture have been presented by, among others, J. BOGDANOWSKI, J. ŁUCZYŃSKA-BRUZDA & Z. NOVAK (1979, 2004) and K. PAWŁOWSKA (2000); within environmental psychology by P.A. BELL *et al.* (2004); and in geography and ecology of landscape by E.H. ZUBE, J.L. SELL & J.G. TAYLOR (1982), K.H. WOJCIECHOWSKI (1986), M. BARTNICKA (1989), A. RICHLING (1992) and P. ŚLESZYŃSKI (1997). One underlined factor is the multi-sensory experience of the ephemerality of landscape (BRASSLEY 1998), as well as its seasonality (PALANG, SOVALI & PRINTSMANN 2007), and typology (MOCIOR *et al.*, 2014). The role of a 'perfect' landscape, experienced in a multi-sensory manner, has been stressed as an individualized way of interpretation (KAŁAMUCKA 2008).

These works most frequently analyse visual stimuli related to the concept of visible landscape (French: *le paysage visible*) (BROSSARD, JOLY & WIEBER 1980, WIEBER 1981), but in the recent years the multi-sensory approach has been put forward increasingly frequently (for instance Al. KOWALCZYK 1992, PIETRZAK, MIEDZIŃSKA & STYPEREK 1999, PIECHOTA 2006, PIETRZAK 2008), and was already referred to by T. BARTKOWSKI (1985)

in the concept of the 'multi-sensory landscape' (Polish: *krajobraz multisensoryczny*) for a description based on different senses – visual and non-visual. From among the non-visual senses, sound signals have enjoyed particular attention (e.g. BERNAT 2008, 2015). The most common methods include research into social preferences with the use of questionnaire techniques, photographs and mental maps. Another instrument evaluation through assigning scores (PLEWNIAK & RUSZCZYCKA-MIZERA 1995, CLAY & DANIEL 2000, ARRIAZA *et al.* 2004, ROGOWSKI 2009), verified through the results of social research (BAGIŃSKI 1991, ZGŁOBICKI *et al.* 2005, ROGOWSKI 2012). In recent years it has been found that techniques used for psychological and marketing research may also be applied here. These include eye-tracker (MŁYNARCZYK & POTOCKA 2011, POTOCKA 2011, DUPONT, ANTROP & VAN EETVELDE 2013), EEG, GSR, thermographic cameras and the program called Face Reader (MŁYNARCZYK, POTOCKA & ROGOWSKI 2015).

Landscape stimuli are subject to involuntary assessment and prioritization. Beauty, naturalness, picturesqueness, harmony and the sublimity of landscape are the more valuable, the more amazing they are and the more unique they appear (MYGA-PIĄTEK 2016). As pointed out by S. BERNAT (2010), in the light of one of the complementary reports for the European Landscape Convention (*Landscapes... 2003*), sound and smell, and even touch and taste, may contribute to whether landscapes are valued or rejected. Another study indicates that the eyes of an adult receive on average around 87% of the stimuli coming from the landscape, hearing – 7%, smell – 3-5%, touch 1-5%, and taste 1% (*Visual Landscape... 1994*).

3. EXPERIENCING THE MULTI-SENSORY LANDSCAPE IN TOURISM

Today there is an increasing quantity of research on landscape perception for the purposes of tourism, and such studies include methodological foundations for research on the perception of landscape (KOWALCZYK 1992, STEEN JACOBSEN 2007, FYHRI, STEEN JACOBSEN & TEMMERVIK 2009, BERNATEK-JAKIEL & JAKIEL 2013, KULCZYK 2014), landscape typology from a physiognomic aspect (WYRZYKOWSKI 1991) and in a multi-sensory aspect (KOWALCZYK 1992), the multi-sensory experiencing of areas such as landscape parks (PIECHOTA 2006, BERNAT 2015b), glades (TOKARCZYK 2012), the city (SZCZEPAŃSKA & WILKANIEC 2015) and the zone around cities (KOWALCZYK 1992), and attractions like a volcano eruption (BENEDICTSON, LUND & HUIJBENS 2011). The attractiveness of landscape stimuli in areas, on routes and at viewing points, referred to below, was also assessed.

Tourism, which is developing dynamically, is in constant need of new attractions. As underlined by Z. KRUCZEK (2011), a new quality emerging in tourism can be found which is focused on education and learning, entertainment and excitement. Today tourism is seeking new experiences and emotions, it is constantly chasing the new, the surprising, the wonderful (STASIAK 2011). According to the concept of the experience economy created by B. PINE & J. GILMORE (quoted in STASIAK (2013)), very important roles in landscape consumption in terms of tourism, are played by experience, knowledge, entertainment and emotions. Together, they form a specific combination which was called by A. STASIAK & B. WŁODARCZYK (2013) the triad of tourist experiences and is applied in the creation of the modern tourism offer. In recent years, much more focus has been put on the conscious and intentional shaping of the tourism offer, strongly saturated with emotions, according to the growing expectations and requirements of the tourists themselves. In this case tourism may be called 'the factory of holiday experience' including education, entertainment and emotions indicated in the Ossman triangle between the treasury of knowledge, arena of recreation and the factory of experiences (STASIAK & WŁODARCZYK 2013).

According to Y.F. TUAN (1987), experience is a combination of feelings and thoughts making the landscape being experienced (or *mindscapes*) a reflection of the environment with which we have a personal relationship, e.g. the landscape of our youth (JACOBS 2004). The experiencing tourist is seeking sensations and collecting experiences, craving for a direct contact with the unique (one of a kind) or typical (characteristic for a given place), or which is an unknown aspect of something known so far (BERNAT 2014b).

Features and elements of landscape determine its attractiveness for the purposes of tourism, and as a result, as noted for instance by W. ANDREJCZUK (2010) & M. KOZAK (2009), most forms of tourism focus on interactions with a holistic landscape. In other words, there is an unbreakable link between landscape and tourism, which has been confirmed by many researchers (including KOWALCZYK 2007, WŁODARCZYK 2009, ANDREJCZUK 2010, MYGA-PIĄTEK 2011, KULCZYK, 2013, MYGA-PIĄTEK 2016). Landscape stimuli in tourism play an important role in the experience of the tourist which according to J. URRY (2007) involves visual sensations, combinations of sounds and smells, and sensations of taste and touch. Inclusion of aspects connected to listening, tasting, smelling and touching, give a new dimension to travel and suggests that this experience will be fuller and more direct (BERNAT 2015a, b). In this context the arrangement of, for example, interiors in open-air ethnographic museums,

according to D. ORŁOWSKI & M. WOŹNICZKO (2015), has been adapted to the perception with all the senses:

- with the sense of hearing, e.g. the sounds of butter churning;
- with the sense of smell, e.g. the scent of bread baked in a traditional oven;
- with the sense of touch, e.g. direct participation in cabbage shredding;
- with the sense of sight, e.g. observing the fish-smoking process;
- with the sense of taste, e.g. sampling a regional dish.

Visiting the interiors of historic structures allows an ephemeral and difficult-to-describe specificity of a place (*genius loci*) to be experienced built up by its different temperature, the smell of the building material, of candles and incense, silence or singing and music. The entirety of the stimuli allows for a multi-sensory experience of the mysticism of the place, making up an individually interpretable character of the interior. Narrative museums have great potential in this respect. Presentation of the interior affects not only the sight, but also the remaining senses: hearing (different sounds connected with the character of the exhibition), the sense of smell, and touch (an exhibit item may be held in the hand). A coherent composition of different stimuli creates a strong impression among visitors, building up a unique atmosphere of the exhibition (ZIÓŁKOWSKA-WEISS 2013).

The multi-sensory landscape is connected with different forms of tourism. Examples include landscape tourism, a high quality product created in response to the need to learn, understand and discover, both in terms of nature and of society and culture (MATEO-RODRIGUEZ 2003), geotourism which allows the aesthetic qualities of landscape to be experienced, aside from its cognitive and scientific aspects (REYNARD 2009), tourism in a forest (SMOLEŃSKI 2007), bird-watching which involves admiring animals in their natural environment (JANEZKO & ANDERWALD 2011), sound tourism (BERNAT 2013), event, festival, concert and music tourism (MIEDZIŃSKA 2008, BUCZKOWSKA 2008), sightseeing (ROGOWSKI 2016), and culinary tourism (WOŹNICZKO, JĘDRYŚIAK & ORŁOWSKI 2015) – along with tasting tourism (BONIFACE 2003). The last two forms offer, according to K. CHOINKA (2009), the best opportunities for the use of the senses. The appearance of the dish, its flavour, taste and way of serving allow a culinary tourist to feel like an explorer. The tourism offer prepared by the operator should encourage attention to be focused on the received stimuli, evoking positive experiences.

Each tourist interprets landscape stimuli in a different way depending on biological factors, level of knowledge (KRÓLIKOWSKI 2015), cultural factors, pre-

ferences and needs (LEVINSON 2005, HARTIG & STAATS 2006, JACOBSEN 2010, STAATS, VANGEMERDEN & HARTIG 2010, CHEN *et al.* 2015), and elements of atmosphere operating in synergy which evoke specific mental and physical states. The reception of stimuli is also influenced, apart from these factors, by pollution, air ionization, strength of electromagnetic fields, as well as noise and vibrations. These elements can operate as stimulants if their values change in a short time (KOZŁOWSKA-SZCZĘSNA, KRAWCZYK & KUCHCIK 2004, BŁAŻEJCZYK & KUNERT 2011).

4. MULTI-SENSORY LANDSCAPE IN THE DEVELOPMENT OF A TOURISM PRODUCT

The multi-sensory quality of landscape refers to the entirety of sensations experienced by the tourist, connected with the perception of qualities and elements of its structure, and which also determines its assessment. In the process of experiencing a landscape, the tourist subjectively perceives all stimuli whose hierarchy is variable. In the tourism offer developed today, the multi-sensory landscape is analysed from the angle of the potential which may be used to develop a tourism product.

The tourist continuously experiences the surrounding environment with all senses. But there are situations where it is a specific type of a stimulus that allows a tourism offer to be created. Therefore, it is possible to indicate those tourism attractions which were created on the basis of a single stimulus: vision, sound, smell, taste or touch.

Visual stimuli

The most developed trend in research on landscape perception covers the analysis of the perception and assessment of visual stimuli, and it is implemented in particular in the field of landscape architecture and ecology where the assessed stimuli are referred to as visual, aesthetic or landscape qualities. This fact confirms that visual stimuli dominate in the process of perception, and this has a crucial influence on landscape assessment. For this purpose, maps of visual qualities are created, as well as assessments of the visual attractiveness of viewing points (see WOCHNA-BARTNIK 2008, ROGOWSKI & BIŁOUS 2013), routes (PIETRZAK, MIEDZIŃSKA & STYPEREK 1999, STYPEREK 2002, GRISELIN & NAGELEISEN 2004, ROGOWSKI 2012) and areas (WYRZYKOWSKI 1991, BROSSARD, JOLY & WIEBER 1998, ŚLESZYŃSKI 1999, REYNARD *et al.* 2007, KISTOWSKI 2007, CHMIELEWSKI, MICHALIK & ŚNIEŻEK 2011). Attractive visual qualities determine tourist

routes, viewing points and the location of towers and observation devices to facilitate viewing and admiring panoramas. A number of descriptions of visual qualities date back to the 19th c., and their purpose was to promote routes and attractive views, but they are being created today as well. They are developed with different auxiliary devices, as in metal plates with descriptions of panoramas, educational panels, binoculars and telescopes. One example is the viewing tower called 'Sky Walk' in the village of Dolni Morava in the Sudeten Mountains. Along with the development of the automotive industry in the 20th c., more and more scenic routes were created, and most of them are located in the mountains. One example is an Alpine route called *Großglockner Hochalpenstrasse* of the 1920's in the mountains of Austria, and another is the *Transfăgărășan* in Romania of the 1970's. Over the years many articles have been written to describe the visual qualities of routes (for example CLAY & SMIDT 2004, JASZCZAK 2008, FROCZEK-BRATANIEC & NOSALSKA 2011). At the same time, the railway network was developing and there are railway routes with visual qualities. An example is the panoramic railway route, 'Bernina Express', in Switzerland included on the UNESCO World Heritage List. Recently, tourist scenic routes with visual qualities have been developing, and an example of such a route is the 'Scenic route through the peaks of borderlands' (Polish: *Szlak Widokowy Szczytami Pogranicza*) in the Sudeten Mountains, or the 'Archaeology Scenic Route' in the Dolomites. What has also been developing is the offer of tourism events in the form of outdoor meetings and photo tours (photosafari), photo workshops and birdwatching.

Sound stimuli

In recent years new travel themes have appeared with a focus on experiencing new places and regions almost exclusively by hearing, which involves travelling to places with exceptional acoustic qualities or with a unique sound landscape (*soundscape*) (BERNAT 2015), where sound is treated as a quality of landscape (LEWANDOWSKI 2008).

The role of sound has been appreciated in research on tourism attractiveness and in the development of soundscape maps (LEWANDOWSKI & SZUMACHER 2008, ROGOWSKI 2008). All activities related to this are called sound (acoustic) tourism (BRADEN 2012), for the development of which the potential of national parks, forests and inactive quarries (BRADEN 2012, 2013, 2014a) has been described.

The experience of sound is related to the existence of attractions and events which offer a multi-sensory experience for tourists. In the case of natural sounds it is important to listen and recognize those of nature (e.g. the rustle of trees and the 'woosh' of the wind,

the songs of birds). The sound of an unseen waterfall offers the tourist a multi-sensory experience the moment they see it. Experiencing silence or the subtle sounds of nature in a natural landscape is, according to S. BERNAT (2015), a form of activity corresponding to the principles of sustainable tourism. Eco-tourism trips allow a tourist to focus on experiencing nature. Silence is protected in specially created zones focused on preserving the natural sounds of nature, while eliminating anthropogenic sound pollutants. The growing interest in silence, according to B. LEBIEDOWSKA (2009), results from the need to experience it, making it a desirable tourism product capable of competing with other, more sophisticated experiences.

Sounds connected with the cultural landscape provide tourists with unforgettable sensations, e.g. the bugle call sounded daily from the tower of St Mary's Church in Kraków or the sound of Big Ben in London create a sense of the uniqueness of a specific landscape, whereas the sound of a turning millstone or windmill in an open-air ethnographic museum is a typical and desirable sound in this kind of place. In the cultural landscape silence can be experienced in special rooms, an example of which is the Room of Silence (German: *Raum der Stille*) located in the Brandenburg Gate in Berlin, which allows visitors to rest, focus and contemplate the history of that city. There is also a group of attractions created on human initiative, but using the forces of nature. One example is the Sea Organ in the town of Zadar which uses the power of the waves. Music events allow favourite pieces of music to be experienced live including a number of events, festivals and concerts already existing which in this aspect have potential connected with sound. In the case of high culture tourism, music lovers want to hear classical music interpretations, an example of which is the Vienna New Year's Concert of the Philharmonic Orchestra.

Olfactory stimuli

Referring to the concept of J.D. PORTEOUS (1985), perception of olfactory stimuli is independent of our will. According to J.F. STASZAK (2013), the sense of smell is a direct sense, because people cannot close the nostrils as they close their eyes, and the sensations have strength and distinctiveness, transferring the impulse to consciousness. An objectively existing scent in the landscape is picked up by the sense of smell, and then it is classified through knowledge and experience with relation to its origin (natural, anthropogenic, synthetic) assessment (pleasant, neutral, unpleasant), and its intensity (strong, weak). The reception and classification of smells is a component of experiencing landscape, which in the case of tourism plays a particularly important role (DANN & JACOBSEN

2003). Smell has an influence on well-being during a journey, and its specificity, according to A. MATUSIAK (2009), allows the tourist to gain more thorough knowledge about a visited place.

Today visualisations of olfactory stimuli in the form of *smellmaps* can be found, examples of which exist for cities like Amsterdam, Milan, Glasgow and Edinburgh. Such maps have their application in tourism, as they indicate locations of specific smells in a given area and the preferences of tourists. As a reference to this, there is also a concept of *scent tourism*, there are trips called *smellwalking*, and published guides referred to as *smell-guides* with examples in Australia, New York and a smell-guide to the city of York.

Natural smells pertain to specific types of landscape, they may be used in the creating process of the tourism offer. Some smells are clearly identifiable with a specific type of landscape or even a region, and as a result the tourist can expect to experience them. An example is the seaside landscape characterized by smells brought on sea breezes or from fish, and the landscape of the Tatra region is identified with the smell of sheep or herbs in the mountain meadows.

Smells of human origin play a particular role in culinary tourism. The smell of fried fish at the seaside or of *oscypek* (a smoked cheese made of salted ewe's milk exclusively in the Tatra Mountains), *bunc* (Polish ewe's milk cheese traditionally produced in Podhale) or *żętyca* (a drink made of ewe's whey) in Podhale, tunes the tourist in for specific experiences in taste. More and more attractions use smells in the management of tourists, referring to their identification and classification. Visiting culinary museums, tourists can experience the smells of specific products, e.g. in the Living Museum of Gingerbread in Toruń, the smell of gingerbread and its ingredients can be experienced at particular stages in the show. And when visiting a brewery, the smells connected with particular stages of beer production can be sensed tuning the tourists in for sampling the beer which usually takes place at the end of the tour.

Taste stimuli

Taste stimuli are particularly important for culinary tourism, where tourists experience the taste of meals, drinks, fruit and vegetables. The kinds of taste correspond to specific taste receptors, they could be the basis for their classification, and at a later stage may be subject to assessment (pleasant, unpleasant). Taste stimuli are often accompanied by smell, which intensifies the experience (e.g. the feeling of a fuller taste when experiencing the smell at the same time) and thus also satisfaction. Today, the developers of tourism products very often refer to taste, an example of which is the Carpathia Brand (Polish: *Marka Kar-*

packa) created by the Association of the Carpathian Euroregion. As noted by its members, the sense of taste enhances the experience and helps to develop sensitivity. Sampling diverse dishes, the culture, specific nature and tradition of the region of their origin can be savoured (<http://www.visitcarpathia.com>)¹.

Fruit, vegetables and certain edible flowers provide tourists with tastes of a natural origin. In the constantly expanding eco-tourism offer, specialized guides and administrators encourage naturally grown fruit, vegetables and herbs to be tried.

There is a much larger group of tastes through dishes and drinks produced according to recipes in the resources of intangible cultural heritage. Examples here are the lists of traditional products maintained by the Ministry of Agriculture and Rural Development and the lists of products entered by the European Commission in the Register of Protected Designations of Origin and Protected Geographical Indications or on the Register of Traditional Specialties Guaranteed. According to A. WOŹNICZKO, T. JĘDRYSIAK & D. ORŁOWSKI (2015), this proves that there is a need to maintain the high quality taste of dishes which constitute culinary heritage, allowing a tourism offer to be created. It is worth noting the link between the taste of a specific dish and the type of landscape or region where it is made, allowing taste stimuli as a landscape element to be recognized.

Today, tourism products developed on the basis of taste stimuli are created by museums and culinary facilities. Examples include the Living Museum of Gingerbread in Toruń, the Poznań *Rogale* Museum and Experience, and the Museum of Bread in Radzionków. In addition, culinary routes and events are created, and their purpose is to provide taste experiences with reference to the heritage of the given region, e.g. the route called 'Silesian Tastes' (Polish: *Śląskie Smaki*), or the 'Carp Festival' (Polish: *Festiwal Karpia*) in Zator.

Tactile stimuli

Tactile sensations are the least recognized category in terms of tourist experience despite the fact that they constitute an important mechanism of learning about and experiencing the immediate surroundings. People feel tactile stimuli subjectively and assess them, according to their experience, as pleasant or unpleasant.

Natural stimuli are related to the characteristics of landscape components, e.g. to features of the ground (loose sand, smooth or porous rock, asphalt), to characteristics of vegetation (rough bark, plant stems, hard and soft fruit), or animals (types of hair/fur), and also to the presence of water. Thanks to this tourists have the opportunity to experience the physical

characteristics of rocks (e.g. hardness, porosity, strength, weight) and to recognize them, to touch bark, leaves, grass or flowers, to immerse their hands in warm or cold water and in snow.

The existence of stimuli of human origin can be related to the cultural landscape as a result of visiting historic buildings or narrative museums. Here, the tourist can touch the building material, the items in its interior, different devices or exhibits especially during interactive workshops.

Experiencing a landscape's physical characteristics is also important in the development of educational workshops. An example of this are national parks whose offer includes the chance to recognize rocks or plants in the field, or to learn about the raw materials for dishes prepared in the culinary workshops offered. Tactile sensations are included in the offer of workshops available at the Copernicus Science Centre in Warsaw, or at geology and mineral workshops of the Educational Centre in the Sudeten Mountains (Polish: *Sudecka Zagroda Edukacyjna*) in Dobków, thanks to which participation in these activities is much more rewarding.

5. SUMMARY

The above examples show that people experience their environment with all their senses, and in terms of tourism, the multi-sensory landscape may be used for the creation of a tourism product. The diversity, character and intensity of stimuli often depend on the type of landscape. Some stimuli have a wide range of effect, whereas others are extremely rare with a limited range. It is their influence that determines the uniqueness of a landscape in a given region, thus determining its attractiveness. Some stimuli are preferable to others, and this feature can be assessed in terms of its impact on landscape attractiveness. Examples include panoramas of the Tatra mountains, the bugle call sounded from the tower of St Mary's Church in Kraków, the smell of St. Martin's *rogaie* or the taste of *zetyca*.

It may be assumed that today the people and organisations responsible for the supply of services in tourism will still endeavour to create a tourism product which takes advantage of the multi-sensory landscape, because it allows a unique character and a higher quality to be provided. This is particularly important in the era of tourism needs connected with increasingly intensive experiences, as noted by A. STASIAK (2013), who pointed out that experiencing plays an increasingly important role in the tourist's interactions with a given place.

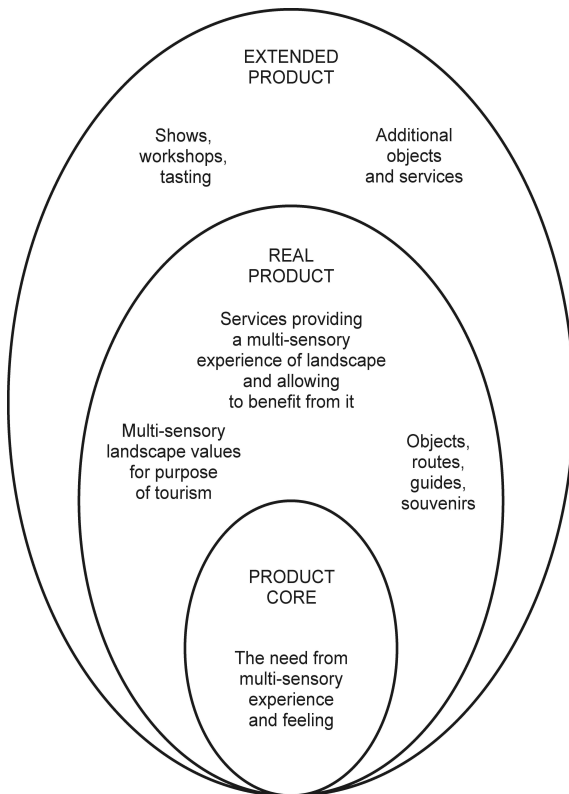


Fig. 2. Multi-sensory landscape as a tourism product
Source: author

Further works within the scope of research on the multi-sensory landscape should involve the listing of stimuli in different tourism regions, and at a later stage these should be classified with regard to their frequency (common, rare), continuity (continuous, ephemeral), intensity (strong, average and weak) or assessment (positive, negative, neutral). Such assessment should take into account the results of social research involving the participation of carefully selected groups of respondents and should be carried out within different types of landscape. It is also important to register human responses in the actual, multi-sensory experiencing of landscape. These factors allow appropriate criteria of landscape in a multi-sensory approach to be adopted, the application of which will allow regions with specific attractiveness for the purposes of tourism to be put forward.

ENDNOTE

¹ The Carpathia Brand originated from the initiative of the development of tourism based on the rich heritage of the Carpathian Mountains. The merged specificity of multiple cultures, religions and diverse mountain nature determines the unique value of the Carpathia Brand. Its tourism offer has been built on the qualities of Carpathian nature, local music, cuisine, art and the authentic hospitality of highlanders.

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