



The value of cultural ecosystem services in a rural landscape context

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ABSTRACT

Academic interest in ecosystem services has been growing in the past ten years or more with an increasing number of research studies and papers being dedicated to this complex and diverse field of enquiry. However, Cultural Ecosystem Services have been relatively under-researched, especially in terms of their value to landscapes. The Millennium Ecosystem Assessment (2005) argued that cultural services and values were not recognised enough in landscape planning and management, therefore the implications for rural landscape development are considered in this paper. This paper focuses on the value of Cultural Ecosystem Services in two rural landscapes in Hungary (Órség and Kalocsa) using in-depth interviews with a range of local stakeholders. The research analyses the relative value of different categories of Cultural Ecosystem Services focusing mainly on social, symbolic and economic values. The findings reveal the central importance of cultural heritage in relation to other categories of CES, especially its social and symbolic values.

1. Introduction

The aim of this paper is to analyse the relative value of different categories of Cultural Ecosystem Services (CES) in a rural landscape context. The justification for using a CES framework is due to the fact that although numerous studies have been undertaken on ecosystem services in rural landscapes in the past ten years or more, significantly fewer studies have focused on Cultural Ecosystem Services (Andersson et al., 2015; Chan et al., 2012; Hiron et al., 2016; Leyshon, 2014; Milcu et al., 2013). This is partly due to the challenges of measuring intangible values. Some studies focused on recreation and ecotourism but far fewer on other categories (Plieninger et al., 2013; Hernández-Morcillo et al., 2013). Hiron, Combetti and Dunford (2016) noted that there is a bias toward leisure-time concepts of CES such as recreation, tourism, aesthetic, and educational values.

The Millennium Ecosystem Assessment (MEA) (2005) study partly forms the basis of the definitions and discussions on CES in this paper as it was the largest and longest international research study (commissioned by the United Nations) that had thus far been conducted on ecosystem services. The MEA report stated that cultural services and values were not recognised enough in landscape planning and management, hence their development of the CES categories. Another important study is the CICES classification which was developed by the European Environment Agency (EEA), which aimed to promote

standardization in the process of ES valuation (Haines-Young and Potschin, 2013). This standardized classification suggested that CES provide benefits to people through physical, spiritual, intellectual and existence values. Davidson (2013, p.171) defines existence value as non-use value relating to “the satisfaction people may derive from the mere knowledge that nature exists and originating in the human need for self-transcendence.” This might refer, for example, to the aesthetics and inspiration derived from images of nature without actual visitation.

This paper seeks to understand what is meant by ‘value’ of CES in different contexts and according to different stakeholders. It also assesses the relative value of the CES categories and their inter-connections. Gould et al.’s research (2014) showed that CES values are heavily intertwined, but few studies have analysed all categories of CES and compared their relative value. Previous studies have tended to focus on separate categories of CES rather than the whole spectrum (Tratalos et al., 2016). Landscape studies have emerged (e.g. Schirpke et al., 2016; Zoderer et al., 2016), but most of these examine only one type of landscape and one or two categories of CES. One exception is the CES questionnaire designed by Smith and Ram (2016) which was distributed in six different types of landscape and examined all dimensions of CES. Zhou et al. (2020) also measured all CES dimensions in the context of wetlands using mapping and survey techniques. However, the research in the current paper is qualitative which arguably better captures the intangible nature of CES values.

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1.1. Understanding CES in a landscape context

It is important to understand firstly the meaning of the categories of CES and the research that has been undertaken thus far on their relative value in a landscape context. Blicharska et al. (2017: 56) argue that CES can be the most difficult to grasp of all of the Ecosystem Services due to the concept having many “shades of grey”, which may impede their communication with stakeholders and usefulness in decision-making and planning processes”. In their systematic review of 142 papers, they concluded that there is no consistency in general definitions of CES and wording of individual CES. Many researchers have made use of the MEA (2005: 40) definition of CES, which is “The non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection and aesthetic experiences”. They include the following categories in cultural services: cultural heritage, sense of place, recreation and ecotourism, aesthetic, inspirational, educational, spiritual and religious. However, perhaps the most relevant definition for this paper and its primary research is that of Fish et al. (2016:210) “cultural ecosystem services are about understanding modalities of living that people participate in, that constitute and reflect the values and histories people share, the material and symbolic practices they engage in, and the places they inhabit”. The research in the current paper will aim to understand the notion of ‘value’ with regard to the different categories of CES.

Hølleland et al. (2017) undertook a review of 130 articles about Ecosystem Services and concluded that only 2% of articles focused on cultural heritage compared to 75% on environment and ecology. The authors found that 70% of articles defined cultural heritage as “various tangible and intangible benefits derived from the ecosystem, mostly defined as landscape”. They also note that the few studies within CES which focus on cultural heritage tend to emphasise social and intangible dimensions rather than built or tangible heritage.

Sense of place is the focus of several articles about CES (e.g. Wartmann and Purves, 2018; Ryfield et al., 2019). Andersson et al. (2015) include strengthening sense of place as one of the important dimensions of CES. Plieninger et al. (2015) also emphasise sense of place in their analysis of landscape stewardship practices on the part of communities or a responsibility of care (Bryce et al., 2016). Ryfield et al. (2019) summarise the importance of sense of place to CES in terms of peoples’ emotional and spiritual bonds to places. Wartmann and Purves (2018) illustrate methods that can be used to elicit descriptions of sense of place in different landscapes.

It was suggested that, until recently, relatively few tourism academics had been involved in ecosystem services research (Church et al. 2017). Nevertheless, there have been more studies on recreation and ecotourism than on some of the more intangible categories of CES (Hernández-Morcillo et al., 2013; Plieninger et al., 2013), perhaps because tourism can be measured more easily in terms of economic and use value. In previous CES studies, tourism is cited as a source of income and a tool for facilitating conservation and sustainable development (Maciejewski et al., 2015; Willis, 2015). Mocior and Kruse (2016) noted the close connections between education and tourism in the context of CES.

Some authors have argued that aesthetics is the most valued ecosystem service (e.g. Plieninger et al., 2013; Sagie, 2013; Soy-Massoni et al., 2016; Tengberg et al., 2012; Zoderer et al., 2016). Schirpke et al. (2016) focused specifically on aesthetic values in a mountain landscape context and aesthetic dimensions of landscapes emerged as especially important in the study by Zoderer et al. (2016) alongside recreation values. In this context (the Alpine region), cultural heritage and spirituality played a lesser role. It seems that the inspiration category rarely features in separate studies, but is incorporated into broader studies of CES. For example, Blicharska et al. (2017) identified around twenty five papers where inspiration was included as a benefit, sometimes combined with aesthetics or spirituality. Spirituality featured in a similar number of papers.

In terms of the inter/connections between CES, the MEA (2005) definition of sense of place emphasises the importance of fostering authentic human attachment, as well as cultural heritage values. This suggests a close inter-connection between the categories of cultural heritage and sense of place. Wheeler (2017:469) examines the relationship between sense of place and cultural heritage, showing how “the perceived character of a place and its people is often associated with its historical connotations”. These provide important links to the roots of the place and its identity. Wartmann and Purves (2018) note in their landscape research that in perceptions of sense of place, several aspects are closely connected to aesthetics and spirituality. The importance of sense of place and cultural heritage for recreation and tourism development emerge strongly from the research by Blicharska et al. (2017). Tourists may be interested in the informal educational dimensions of CES (Mocior and Kruse, 2016). These authors highlight that a better understanding of the benefits of CES categories like cultural heritage, aesthetics or inspiration can help to shape decisions about economic impacts, sustainable development and visitor management (e.g. informal versus formal education for residents and tourists).

1.2. The value of CES in landscapes

The value of CES has been recognised as increasingly important by researchers in recent years. As stated by Auer et al. (2017:89) “CES are important in a wide range of situations and industrialized societies frequently value them ahead of other services”. Blicharska et al. (2017:57) differentiated between value and benefit, defining value according to MEA (2005) as “The contribution of an action or object to user-specified goals, objectives, or conditions” and benefit as “Positive change in wellbeing from the fulfilment of needs and wants”. In their literature review of 142 CES papers, they noted that most papers (138) focused on benefits but far fewer (less than 40) on value. From this, they suggest that benefits refer to what CES can deliver and values refer to how the beneficiaries value those benefits. Hiron, Comberty and Dunford (2016: 556) analyse the complexity of valuing CES, defining value as “evaluative beliefs about the worth, importance, or usefulness of something”. They also note that there may be moral principles associated with value and that they are inextricably connected to social practices and cultural processes. Values (principles, preferences) can be captured through valuation (policy, behaviour), as well as various methods which may be quantitative (e.g. for use-value, tangible and economic or financial value) or qualitative (e.g. for non-use value, intangible and social or psychological value). The valuation techniques of ecosystem services are sometimes grouped into three main value domains: monetary, biophysical and socio-cultural (Márton-Lopez et al., 2014). This study will focus mainly on the socio-cultural values.

Musacchio (2013) and Plieninger et al. (2015) argued that a CES approach identifies social values that stakeholders attach to landscapes which may not be captured otherwise. Numerous types of value could be identified or measured (e.g. economic, ecological, socio-cultural, emotional, symbolic, collective), however, it is clear in a CES context that there is a need to go beyond ‘use value’ and to analyse social valuation from different stakeholder perspectives (Auer et al., 2017). However, it is important to remember that valuing CES is also affected by politics, resource governance and can be entrenched in unequal power relations (Hiron et al., 2016).

In terms of stakeholder perspectives, Jones et al., 2019 note that individuals may switch between perceptions and functions or use values relating to landscapes depending on context and circumstances. Hiron, Comberty and Dunford (2016) also make the point that CES can be perceived differently depending on background, experience, cultural heritage, age and gender. Zoderer et al. (2016) suggested that age affects which CES are valued most by visitors in different landscapes, for example, their study showed that older people valued cultural heritage more than younger ones.

Some researchers have highlighted the value of CES for human

wellbeing (Aretano et al., 2013; Blicharska et al., 2017; Riechers et al., 2016; Vallés-Planells et al., 2014; Wu, 2013). Pleasant et al. (2014) concluded that CES were the only ecosystem service category that was linked to all four dimensions of human wellbeing as provided by the Millennium Ecosystem Assessment (2005) framework: health, good social relations, security and basic material for a good life. In a landscape context, wellbeing benefits of CES can include recreation and aesthetics, personal fulfilment through education, inspiration or spiritual benefits and social benefits through heritage or sense of place (Vallés-Planells et al., 2014).

One of the outcomes of this paper will be to suggest ways in which CES can be managed better in a landscape context. De-Groot et al. (2010) emphasised the links between CES conceptualization and landscape planning and policy making and Hirons et al. (2016) suggest that the CES agenda can also help to improve governance. However, criticisms of the ecosystem services framework emerged that highlight the difficulty of transposing the ES approach to decision making, planning and practical management (Blicharska et al., 2017). It was stated earlier that one of the reasons that the Millennium Ecosystem Assessment (2005) developed its categories of Cultural Ecosystem Services was to emphasise the importance of cultural and social values in landscape planning and management. Auer, Maceira and Nahuelhual (2017) highlight the importance of the intrinsic values of rural places (and not just their use value) emphasizing that once cultural values are lost, they are difficult to replace. However, Puren et al. (2018) state that little is known about how planners can use experiences of the interactions between people and environment to inform expressions of rural places. They argue that this is largely because of a failure to capture implicit dimensions such as peoples' emotional experiences of place, and suggest that an integrated view of sense of place includes people as creative actors in the construction of meaning in relation to places. This includes the social valuation of different stakeholders (Auer et al., 2017) and decision-making processes that involve CES should take into consideration the various perceptions of CES (Ungaro et al., 2016). The valuing of CES by different stakeholders can help to widen the range voices in addressing issues like sustainability and going beyond a focus on economic growth only (Hirons et al., 2016).

Previous studies hint at how the valuation of different aspects of CES could inform development. For example, Andersson et al. (2015) suggest that strengthening sense of place can help to connect civic engagement and stewardship, along with education and community building. Plieninger et al. (2015) also include sense of place in their analysis of landscape stewardship practices on the part of communities or a responsibility of care. Bryce et al. (2016) suggest that cultural heritage can contribute to sense of place and place identity, and that sense of place and identity are part of a broader range of cultural wellbeing dimensions. Smith and Csurgó (2018) note that a CES framework can help to understand and manage rural areas better by providing a clearer picture of local and tourist priorities and the inter-relationships between these priorities.

1.3. The relevance of CES to rural studies

It should be emphasised that some of the issues discussed above are not new in a rural studies context, but a CES framework encourages the analysis of inter-relationships and values. For example, it was suggested that a sense of place in the rural context is closely connected to cultural territorial identity (Ray, 1998), and the role of cultural heritage in place-based identification is considered important (Marsden, 1999). These perspectives are reflected in the MEA (2005) sense of place, which emphasises local history and culture in the fostering of cultural heritage values and authentic human attachment. Lewicka (2013) contended that an interest in the past is connected to place attachment, and Wheeler (2017) shows that an interest in the past can also help in fostering a sense of continuity, dealing with change, and developing adaptive strategies. Although cultural identity is often fragmented and contested,

the process of establishing a shared sense of place within a rural territory can foster cooperation, which can serve as the foundation for place-based development (Kneafsey et al., 2001; Lee et al., 2005; Mettepenningen et al., 2012). Several rural studies confirm that culturally constructed places can create regional economic spaces which provide diversified development opportunities for local actors (Ray, 1998; Moragues-Faus and Sonnino, 2012). Rural development strategies have been based on gastronomy, heritage traditions or cultural events for several decades already (Bessiere, 1998; Marsden, 1999). Another important dimension is the notion of a so-called 'rural idyll' (Bessière 1998; Bunce, 2003; Bell, 2006), which is a romanticised and nostalgic perception of the countryside as the perfect antidote to stressful modern urban living. More recently, place based approaches have gained importance in rural development studies with local specialities and resources being regarded as having potential for new developments (Horlings et al., 2018).

Wheeler (2017) refers to the lens of 'productive nostalgia', through which local history, the past and heritage practices are viewed in the context of rural place attachment and identity.

However, many development strategies involve returning or incoming residents and not only indigenous locals. Lewicka's (2013) work shows that newer residents often have a greater interest in local history than longer term residents. Newcomers may be tracing family histories and searching for a continuous narrative linking the past and present, which helps to develop a sense of belonging and attachment to place. Liu and Cheung (2016) suggest that there is a relationship between residents' sense of place and their involvement in different kinds of tourism businesses. For example, immigrants who do not have a strong sense of place towards the tourist destination may introduce tourism businesses that negatively affect local culture. Outsiders are more likely to choose business types and operation modes that are concerned more with profit-making and return rate. On the other hand, indigenous residents may choose businesses that provide a connection to existing local or traditional industries. They may even return to their community in order to do so. Examples can be found of this in rural Hungary, as discussed in the case studies.

Daniel et al. (2012) and Schirpke et al. (2016) noted the importance of human perceptions in the context of CES and landscapes therefore qualitative research was undertaken in the form of in-depth interviews. The approach follows Pleasant et al. (2014) and Raymond (2014) who advocate using stakeholder participation methods that focus on value elicitation and social representation. In-depth stakeholder interview methods have been used, for example, by Plieninger et al. (2013), Gould et al. (2014) and Riechers et al. (2016). Although quantitative methods were more often used in early ecosystem services research, there is a growing acceptance that qualitative data collection methods may be more suitable for CES (Pleasant et al., 2014; Scholte et al., 2015; Winthrop, 2014). Indeed, Hirons et al. (2016: 565) also emphasise that "The plural and fluid nature of values means that most CES are better captured through deliberative and participatory methods". This study focuses on socio-cultural values, which are predominantly non-use and intangible values (Martín-López et al., 2014). The MEA (2005) categorisation is used in preference to the CICES one as it is more structured and less generic.

2. Research methods

The case study section explores several issues in the context of rural Hungary with a focus on the following aims:

- To explore the value of CES in rural landscapes
- To analyse the relative value of CES categories in two rural landscape contexts

In the following section, two case studies are presented.

Qualitative methods were used for data gathering based on

sociological and anthropological approaches. The main method was semi structured interviews with key actors (such as local governments, tourism entrepreneurs, cultural institutions, civic associations, etc.). Approximately 40 semi-structured interviews were conducted in each place.¹ A purposive sampling method (Palinkas et al., 2015) was used for the selection of interviewees based on those actors who play a key role in rural development in each case study region. The identity of the interviewees was anonymised during the analysis, although the geographical context for the interviews was retained.

The limitation of qualitative research, such as the lack of external validity can be one risk in this analysis. However, using the same rigorously applied methods both in the data collection and analysis can reduce limitations. Similar and comparable interview guidelines were used and very similar actors were interviewed in each location. Collected data were analysed using common and comparative analysis which provides a more holistic overview of the topic than single case descriptions. The research materials were analysed using Atlas. ti software. 52 codes were generated from the terminology used by the interviewees in the whole project, including 83 texts. Codes were grouped into themes connected to CES categories. A single code was linked to a certain CES theme group if the code included relevant topics and narratives for the given CES theme (this was informed by the literature review and desk-based research undertaken by the authors). According to this method, a single code can appear in more than one code group. The MEA (2005) themes of cultural heritage, sense of place, aesthetic, inspiration, recreation and ecotourism, education, spiritual and religious were used and the researchers tried to identify through the text analysis how (far) the themes of CES appear in local narratives. The analysis also focused on values connected to CES themes. These were mainly social, symbolic and economic values. Fig. 1 presents the results of the coding connected to the CES themes.

Fig. 1 shows the number of codes in the CES-based code groups divided between two rural landscapes: Kalocsa and Órség. Kalocsa texts included 39 codes while Órség has 45 codes. There are several common codes and a few specific ones. Cultural heritage and sense of place are the richest code groups in both cases; however, the combination of codes and significance of the single codes are different (Appendix 1 shows the Coding table).

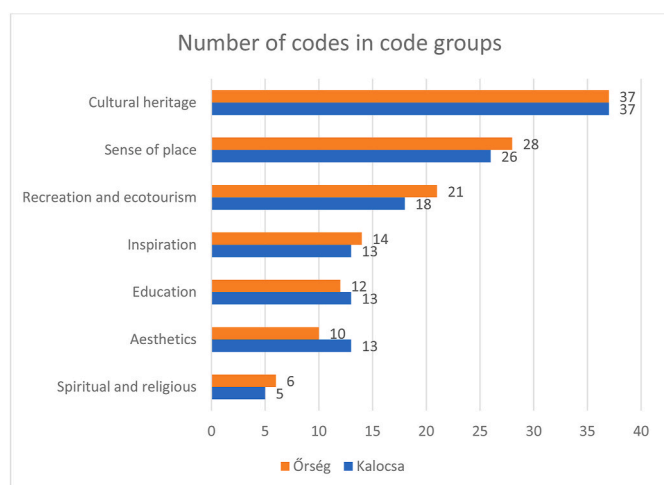


Fig. 1. Code Groups based on CES Themes.

¹ The exact number of interviews was based on saturation. 40 interviews were undertaken in Kalocsa and 43 in Órség.

3. Findings

The following sections analyse each landscape in turn to illustrate the values of the CES elements in context showing the variations in the interview narratives.

4. Kalocsa

The Kalocsa micro region in Bács-Kiskun County in South-Central Hungary was historically inhabited by a Hungarian ethnic group called the Potá characterized by a distinctive dialect, folk arts and Catholic religion. The region is known for brightly coloured flowers which feature in embroidery and wall paintings. These unique elements of the traditional peasant culture became an emblematic symbol of not only local but also Hungarian folk art and national identity. The region is also famous for its paprika production which forms the base of most traditional Hungarian dishes. There is a Paprika Museum and local festivals related to paprika (Csurgó and Megyesi, 2015; Smith and Jusztin, 2014). Kalocsa and its surrounding villages are important religious centres for the Catholic church. Historically, the Kalocsa region covers the estate of the Archbishop of Kalocsa and the town and some settlements are pilgrimage places.

The interviewed stakeholders were the main actors of rural development in the region: local governments, cultural institutions (museums, cultural centres etc.), tourism experts, civic organisations, actors of local economy including tourism and agriculture entrepreneurs, local community members who participate in cultural heritage protection such as clubs and associations for folk art and folk dance and local schools.

The analysis in Table 1 (and later Table 2) is based partly on the numerical frequency of the codes as they appeared in the narratives, but a qualitative evaluation was also applied to identify their relative importance or emphasis in the narratives. Thus, these values do not correspond purely to numerical values.

Cultural heritage is at the centre of local narratives. Kalocsa's folk art heritage is represented in local museums, houses and village centres where the target groups are not only locals but also visitors and tourists. There are several events providing the chance to see and also to practise the living and authentic local traditions, such as the Danube Folklore Festival, Kalocsa Paprika Days, and several other village festivals. Social value is significantly attached to folk art, folk dance and live traditions by local stakeholders. Almost all of the interviewed stakeholders from the local government actors to civic society members emphasised that cultural heritage has a significant symbolic value in the Kalocsa region. Local image building which is connected to both tourism and community building is based on cultural heritage especially folk art and paprika production. The strong local image could have economic value according to the local stakeholders, they emphasised that it can attract more development such as tourism development to the region. They highlighted that national identity in Hungary which has important social and symbolic values is also rooted in Kalocsa folk art.

“We must use our position in national image, and we should benefit from it. When we apply for funds (e.g. tourism development like the Heart of Kalocsa project) or write development strategies, we highlight our unique position in national heritage, but we have to connect this heritage back to the locals” – stated by a local cultural expert.

The key actors of heritage-based local development (especially local government members and tourism experts and entrepreneurs) emphasised the economic potential and value of cultural heritage. Cultural heritage is regarded as a driver of local development, and especially tourism development. Nevertheless, tourism development strategies mainly focus on Kalocsa town, while other settlements surrounding Kalocsa which have almost the same traditions are subsidiary to the tourism attractions of the town. However, all settlements use the

Table 1
Summary of CES category codes and associated values in kalocsa.

Category of CES	Kalocsa		
	Economic value	Social value	Symbolic value
Cultural heritage	moderate	strong	strong
<i>Main codes</i>	folk art, local food and gastronomy (paprika), museums, festivals and events	folk art, folk dance, live tradition, civic society, artisans	folk art, local food and gastronomy (paprika), nostalgia
Sense of place	weak	strong	strong
<i>Main codes</i>	folk art, local food and gastronomy (paprika), live tradition, local products, peasant culture	folk art, folk dance, live tradition, local food and gastronomy, place attachment	national symbol, national identity, local image
Aesthetic	moderate	strong	strong
<i>Main codes</i>	folk art, handicrafts, artisans, museums	live tradition, folk dance	local image, local symbols, national image, national symbols
Inspiration	moderate	moderate	moderate
<i>Main codes</i>	innovation, creativity, artisan, traditional agriculture	live tradition, folk dance, experience, civic society	live tradition, folk dance, authenticity
Recreation and ecotourism	moderate	moderate	weak
<i>Main codes</i>	development, local government and authorities, festival and events, experience, live tradition, local food and gastronomy, local products, rustic milieu	civic society, experience, folk dance, live tradition	folk dance, rural landscape, rustic milieu
Educational	weak	strong	strong
<i>Main codes</i>	local festivals and events, artisans	folk art, folk dance, live tradition, local identity	national identity, local identity
Spiritual and religious	weak	strong	moderate
<i>Main codes</i>	monuments, local church	local community, local church	nostalgia

common Kalocsa heritage and motifs in their image building.

“So, when we imagine the tourism destination as such, we fully agree that Kalocsa is its capital. Kalocsa offers the thousand-year-old city, religious traditions and the main elements of folk art and provides programs. The Szelidi Lake which is 16 km away from Kalocsa is an option for visitors. The Hajós wine region and cellar village, which was established by the archdiocese of Kalocsa is also a complementary program for Kalocsa tourists and other villages can provide their services in the context of Kalocsa tourism” – stated by a local tourism expert in Kalocsa.

The interviewees pointed out that local authorities and communities use their heritage connected to folk art, the church and paprika traditions for tourism related business and development. Kalocsa also inspires the surrounding villages to think about future economic development, for example, through gastronomic heritage.

“Here, tradition is very important, heritage encourages creativity and innovation. (...) there’s some competition and of course, to be livable, we need producers who are now young so there is a future (...) And therefore, these young people learn from the culture, from the heritage

Table 2
Summary of CES category codes and associated values in orség.

Category of CES	Örség		
	Economic value	Social value	Symbolic value
Cultural heritage	strong	weak	strong
<i>Main codes</i>	festivals and events, rural idyll, experience, authenticity, leisure, local food and gastronomy, traditional agriculture	local image, local identity	rural idyll, local image, natural beauty
Sense of place	strong	weak	strong
<i>Main codes</i>	rural idyll, rustic milieu	local image	rural idyll, authenticity, local traditions
Aesthetic	strong	moderate	strong
<i>Main codes</i>	handicrafts, rural idyll	rustic milieu, weak	local image, weak
Inspiration	strong	moderate	strong
<i>Main codes</i>	creativity, innovation, newcomers, local entrepreneurs, artisans	experience	rural idyll, authenticity
Recreation and ecotourism	strong	moderate	strong
<i>Main codes</i>	festivals and events, healthy life and environment, leisure, local food and gastronomy	experience	development
Education	weak	moderate	strong
<i>Main codes</i>	festivals and events	experience, local community, civic society	nature protection, environment, innovation, creativity
Spirituality and religion	weak	weak	moderate
<i>Main codes</i>	leisure	experience, local community	harmony, nostalgia, peace, rural idyll

that this village represents.” – stated by a local gastronomy entrepreneur.

Although tourism is strongly emphasised in local narratives including strategy documents, domestic tourists do not tend to visit the region according to both statistical data and local narratives. Nevertheless, Kalocsa folk art and living traditions are the main driver of local community building, thus they represent more social and symbolic values than economic ones. Most of the interviewees emphasised the social characteristics and community value of cultural heritage, which appears in the context of living traditions. These include the activities of women and their groups and societies who still draw, paint and embroider in the traditional style, as well as through folk dance groups wearing traditional costumes and art education in the elementary school curriculum. Cultural heritage-based services and activities provide recreation and experience both for visitors and locals.

“Folk dance is at the heart of community in Kalocsa region and many people dance. This is the driver of community life. In Kalocsa town alone, almost 1000 people are dancing. Locals who moved from the region come home even from very far away and they go to a dance group and dance again. The local identity of Kalocsa is totally based on the participation of folk-dance groups and members have a traditional costume too, because the authentic, traditional costume is very important for us. We really keep the tradition here” – stated by a local civic society member.

Cultural heritage related educational activities are strongly emphasised in local narratives. As stated earlier, folk art and folk dance are part of the local elementary school curriculum. Teaching and

learning about folk art also appear as part of informal education in tourism. The folk art house of Kalocsa as well as local festivals and events in all settlements provide possibilities to try and practice folk dance, needlework, and wall painting. The traditional know-how is emphasised when locals talk about paprika production, which is based on a special local knowledge. Tacit knowledge is at the centre of education related to cultural heritage in Kalocsa.

“Here the visitors can be involved in local living traditions, they are involved in activities and experiences, they can learn folk dance or try to paint flower motifs during the events or also when they visit the Folk Art House. “– stated by a tourism expert.

Kalocsa is a relatively popular tourism destination but mostly for foreign tourists and mainly for a one-day tour (confirmed by our observation in addition to the local narratives). Foreign tourists are involved in some folk-art activities during their one-day tour: they see a folk-dance show, taste local food products, visit a traditional house and receive a folk-art based gift. Recreation and experience are at the centre of narratives about local tourism services. Rural landscape is strongly connected to cultural heritage and agriculture, however agricultural landscapes are rarely mentioned, and the notion of ecotourism is almost missing from local narratives. Some aspects are mentioned when the themes of natural beauty and the environment emerge from the narratives, but it is very rare. Thus, the environmental value of this particular landscape is not emphasised, rather the social and symbolic value of cultural heritage and its role in education, recreation and tourism.

Religion and the historical role of Kalocsa as a religion centre is an important part of cultural heritage and tourism. However, interviewees placed much less emphasis on spirituality. Religion is mentioned as a part of or form of cultural heritage and its symbolic value is strongly emphasised. Some interviewees also mention the social value of religion when they talk about church communities who are important actors of heritage protection too.

“Local church is an important actor of local community. Here in our village the church helps us to protect our minority heritage (local Croatian minority). We can use the community house of the church to organise events and also the church community helps us to protect our heritage, but of course they also keep the local so-called Kalocsa regional heritage too. Here the cultural heritage is very important in the local community, and the church plays a key role”– stated by a local civic society member.

Sense of place is constructed around local heritage and symbols, some of which are also connected to national identity (e.g. the flower motifs and paprika production). Sense of place is significantly emphasised in relation to symbolic value in local narratives and local identity and image are very strong. This is partly because Kalocsa folk art tradition and especially the flower motifs and the ground paprika of Kalocsa represent national Hungarian traditions and identity for the outside world. They are one of the main ‘Hungaricums’ (government-designated unique Hungarian specialities). The first paprika mill was built in Kalocsa in 1861, thus from the end of the 19th century Kalocsa region is the most famous paprika production region in Hungary. The ground paprika from Kalocsa received a PDO protected label in 2012 and is listed as a Hungaricum² together with the Kalocsa folk art in 2014. It has an important economic value, even if less and less local producers

² The Parliament adopted the Act XXX of 2012 on Hungarian national values and Hungaricums with the aim of establishing an appropriate legal framework for the identification, collection and documentation of national values important for the Hungarian people, providing an opportunity for making them available to the widest possible audience and for their safeguarding and protection. Hungaricum refers to a collective term denoting a value worthy of emphasis that represents the highest quality of Hungarian product with its characteristically Hungarian attributes, uniqueness, special nature and quality.

participate in paprika production today. The symbolic re-discovery of Kalocsa folk-art began in the 1930s, hence the Kalocsa motif has become one of the most characteristic icons symbolising both past and present Hungarian identity. From the 2010s, a renaissance of the Kalocsa motif began and the folk-art motif was transformed from an elite to an ordinary design. However, the local area has not benefited from this symbolic rediscovery because the economic impact of the Kalocsa motif renaissance is not confined to the region. New design businesses were established outside the region (mostly in Budapest), and consumers seeking Hungarian identity products can access the Kalocsa motif everywhere in Hungary from rural festivals to commercial urban shopping centres (Csurgó, 2016).

“Well, it was not local [the Kalocsa motif renaissance] - this rediscovery has already happened and we did not get so much from this. It was so good the reputation of Kalocsa was revived with the help of the internet. But I really don't think it affected local artisans and did not noticeably benefit Kalocsa” – as a local politician stated.

The Kalocsa motif is now more strongly connected to the national identity than the local one for non-local Hungarians and has become somewhat detached from place. Nevertheless, the aesthetics of the Kalocsa motif is one of the main elements within the sense of place and they try to strengthen this aesthetic with the authenticity of place and reconnect it to the locality. More and more local products and souvenirs are developed by local artisans and entrepreneurs. ‘Try and practice’ folk art from the needle work to the folk dance became a tourism service during the events and also in local museums and community centres. These programs demonstrate the authenticity of place and products for visitors.

“When the visitors do the needle work together with an old local lady who has a real local knowledge, who represents the tradition, visitors are really involved in the local tradition by these kinds of activities. It is the real experience of authenticity, I think. Of course everybody can buy products with Kalocsa motifs everywhere in the country or on the Internet or even can try the needle work at home, but it is really different ... we try to reconnect our heritage to the place “– as stated by a tourism expert.

Kalocsa demonstrates that displacement and appropriation of local cultural heritage at national level can sometimes thwart place making developments at local level, especially tourism, even if local (community) sense of place remains largely unaffected. The local sense of place is still strong and local cultural heritage and folk traditions continue despite the nationalisation and commercialisation of the symbolic value of that art. In summary, it can be seen that cultural heritage plays a central role in social and symbolic value creation through sense of place (based on the aesthetics and inspiration drawn from folk traditions), recreation (e.g. art, dance, embroidery), education (mainly formal) and, to a lesser extent, tourism development.

5. Órség

Órség is located in the Western part of Hungary by the Austrian and Slovenian borders. Settlements of the Órség region belong to two counties: Vas and Zala. The western frontier location resulted in special status for the region with a higher degree of control and a lower degree of development during the socialist era. As a result of this disadvantaged status, the Órség region has kept its traditional landscapes with a unique settlement structure and shape of houses, as well as untouched nature (Smith and Csurgó, 2018). From the late 1980s, and most significantly after the change of political system from 1990, the Órség region became one of the main tourism destinations for upper middle classes searching for a ‘rural idyll’. Year by year, more and more urban inhabitants (mostly from Budapest) bought second homes and many of them stay there from spring to autumn or settled there permanently.

Key actors of cultural heritage-based development are newcomers who establish local tourism enterprises and organise local civic organisations. Local artisans are also important actors in cultural heritage-based processes. Since the Órség National Park was established in 2002, in addition to nature protection, it has become one of the main agencies for (especially sustainable and eco) tourism activities and local cultural heritage is particularly important.

The unique landscape was shaped by human cultivation and protection of built heritage and local rural traditions are a priority of stakeholders. Local tourism actors and especially the National Park try to find the balance between development and ecological conservation. Local tourism actors can benefit from the protected area at the same time as respecting protection and sustainability. Most of the protected sites are open for visitors and the natural and cultural heritage is presented in the form of tourist trails and visitor centres. Economic values are strongly attached to recreation and tourism, however in the context of ecotourism the social and more significantly the symbolic values also appeared.

“There are several bogs/marsh meadows here with highly protected sphagnum moss, which are ex lege [by law] protected natural areas, which means they could not be visited. However, in Szöce, we managed to develop one of them for visitors and create a tourist route via a footbridge over the bog/marsh meadow. So it can be visited all the time, even if it is wet, and information tables are placed alongside the route to provide information on the bog/marsh meadow and related protected natural attractions” – a manager of NP said.

Órség has a very strong sense of place and tourism is at the centre of place development. This sense of place is based on a combination of the perceived idyllic natural landscape, rural traditions, nostalgia for peasant culture and also the traditional shape of houses and settlement structure according to the local interview narratives. There is a strong emphasis on symbolic and social value of sense of place and cultural heritage including local external and internal image and local identity. Newcomer residents search for and reinforce a sense of place based on a ‘rural idyll’. The landscape inspired residents to move from urban environments and to establish tourism businesses.

“Well, I was in Órség for the first time in 1980, so by then I had already told everyone at home that it is so beautiful. The landscape, the nature, these villages and everything, it is an idyllic place. And then my brother was sent here to Papszer, to go on holiday. And then after that in ‘85 Mom also bought a house, a cottage, and then in ‘87 she also moved here. Well, I still lead a dual life, but I’ve been here 14 years anyway, so I still have a job in Budapest in the winter, so when the season is over here and no tourists come, the house can’t be rented out so I have to go back ... but I always miss the peace and quiet and this beautiful milieu when I am in Budapest” – stated by a newcomer guesthouse owner.

Most of the interviewees emphasised the inspirational aspects of landscape and rural milieu. Inspiration is strongly connected to the ‘rural idyll’ and the unique landscape, thus a strong symbolic value is attached. Inspiration appeared in the context of heritage protection including arts and crafts and in tourism development and tourism activities. So, the economic value is also highlighted.

“Anyone who is touched by this place feels they need to stay here, and do something. This place encourages creativity and innovation to do something valuable” – stated by a local artisan.

Aesthetics of the Órség region is significantly emphasised in local stakeholders’ narratives. Aesthetics are highlighted when interviewees talk about monuments, museums, churches, handicrafts, and folk art, but also when they describe the rustic milieu, the local heritage and local image. Authenticity is interconnected with aesthetics. However, natural

beauty also features in the aesthetics theme in the stakeholders’ narratives. Aesthetics has an important symbolic value, however economic value is also attached to it, for example in the context of visitor demand.

I respect those who went through those difficult years during the socialist period, here at the Austrian border, and I know that from what they suffered so badly at that time, we can benefit now, we build tourism based on it. Construction was banned here for many years due to the proximity of the Iron Curtain, it was a strictly controlled and repressed area. As a result, the values, folk heritage, buildings, houses, settlement structure, the harmony of the landscape, the beauty of landscape and the nature, the authenticity of the landscape have remained. These are why city people like to come here to Órség ... – stated by a local guesthouse owner.

Sense of place and cultural heritage have strong symbolic and economic values according to the local stakeholders’ narratives. Sense of place is also fostered by local product development and the National Park supports high quality and traditionally produced goods and services. A special National Park product label to reflect the Órség National Park brand was created to support and protect local products. This label symbolizes quality, aesthetics and authenticity. Most of the labeled/branded products are food items, but guest houses and artisan activities such as pottery-making can also acquire this label. The label represents the involvement of local producers and protects their interests, but also provides a value-enhanced brand which can be used in tourism. Thus, the symbolic and economic values are interconnected.

Cultural heritage narratives contain local traditions, folk art, built heritage, shape of houses, settlement structure, traditional agriculture, local food and gastronomy, natural landscape and untouched nature. Sense of place includes all the elements of a rural idyll and cultural heritage and sense of place are regarded as the basis for local development. The main actors in cultural heritage-based development activities are the newcomers from Budapest as interviewees highlighted. They were the pioneers and initiators of new, nostalgia-motivated tourism activities and accommodation in a rustic milieu based around traditions and peasant culture. They emphasise that they escaped from the alienating urban environment and found community, nature, peace, etc. (wellbeing benefits) and they share their nostalgic idealisation of place with their visitors. All of their services from the accommodation through to the food to the events contain this strongly perceived sense of place.

The National Park also plays a central role in cultural heritage protection. Landscape protection including natural and cultural heritage are at the centre of its mission. Community protection and wellbeing are also strongly emphasised. Cultural heritage and local tradition are strongly connected to the place in both senses, including the entire Órség region as well as specific places/villages. Thus, environmental value is high in this region but it is strongly connected to social and cultural values too. An Órség National park employee stated that:

“... thus the tourism here is not merely a form of national park tourism which presents only protected plants and animals. People and community are also part of the landscape protection here. This landscape is created by the men who cultivated the land and use the region in a particular and unique way. Thanks to their activities, we have this landscape with fields, with forest and with fruit tree gardens as well as the flora and fauna (...) This is why we want to focus on local community too.”

Environmental stewardship has emerged from the strong emotional place attachment in the Órség, which may be partly spiritual as well as cultural and it is also connected to the aesthetic and inspirational value of the landscape. However, religion and spirituality are not explicitly stated in the interviewee narratives, these are beyond the values associated with natural landscape and cultural heritage. Local churches are important in the local image, but only as a part of heritage.

“It is really an idyllic place, if you visit the Órség you meet and feel the rich local culture including traditions, our unique old churches,

gastronomy, handicrafts, natural beauty etc ... part of idyllic rurality ...
 – stated by a civic organisation member.

Both latent and manifest forms of education appear in the cultural heritage-based activities of the National Park. Study trails and different forms of local involvement exist in the latent forms, while there are several manifest education programs too, such as Forest schools for local and non-local pupils and courses for local schools. Thematic courses and workshops are held by NP employees in local schools. The knowledge transfer for local community is strongly emphasised by NP.

“When my colleagues or I go to the local kindergarten or school to hold a workshop or course and we see the children’s eyes light up, we think this is a really positive outcome. Of course, we organise forest schools for non-locals too, for urban pupils, but for locals we provide several services for free, because they are really important for us, so it should not be a question of money”- a NP employee stated.

Social value of cultural heritage and sense of place is significantly emphasised in the context of education and also in identity building. However local community is much less emphasised in the narratives. Cultural heritage and tourism are at the centre, but the ordinary inhabitants are marginal. Órség illustrates that tourism-focused place making does not always derive from a locally-created sense of place. It can also be created by newcomers to a region who develop and promote their own (often idealised) sense of place to visitors and tourists.

6. Discussion

Figs. 2 and 3 present a summary of the main values that emerged from the interviewees’ narratives which were coded and categorised according to CES categories. Figures show the most frequent codes that emerged from the interviewee narratives in relation to CES categories and present values (with colours).

Cultural heritage is at the centre of all narratives, so all codes are

connected to it, which means that stakeholders use a rich variety of terms when they talk about cultural heritage. When interviewees discussed themes related to sense of place and aesthetics, they talked about local image, local identity, authenticity, nostalgia etc., to which they mostly attached symbolic values. In the context of education, spirituality and religion, interviewees talked about topics such as folk dance, folk art, civic society, live traditions, local church etc., to which they attached social values. Social and symbolic values appeared in the narratives about local folk art, local food and gastronomy, live traditions and peasant culture i.e. the main cultural heritage of the region. Recreation, tourism and inspiration are the CES topics where economic value related codes and terms appeared more often. The analysis shows that the symbolic values are the most significant when local stakeholders talked about local development and they mainly emphasised the symbolic and social value of cultural heritage-related activities while the economic value is relatively neglected in the narratives.

In the case of Órség, the cultural heritage themes also include a rich variety of codes, which shows the central position of cultural heritage in stakeholders’ narratives about local development. From nostalgia to handicrafts, local food and gastronomy to innovation and creativity, almost all of the codes can be associated with cultural heritage. The sense of place theme is also very strong. Here, the most important codes are rural idyll, nostalgia, peace, quietness, but also nature protection and the environment appeared in the context of sense of place. A strong symbolic value is attached to this theme. Codes in the education theme are strongly connected to environmental issues such as nature protection, but heritage, local community and experience also feature prominently and are connected to symbolic and social values. Aesthetics-related codes such as environment or natural beauty show significant symbolic values, however other related topics (codes) such as rural idyll, handicrafts, authenticity etc. are also strongly connected to economic value in local narratives. Spiritual and religious themes seem less important in local narratives (although spirituality can be related to harmony, peace quietness, nostalgia and rural idyll). The local church

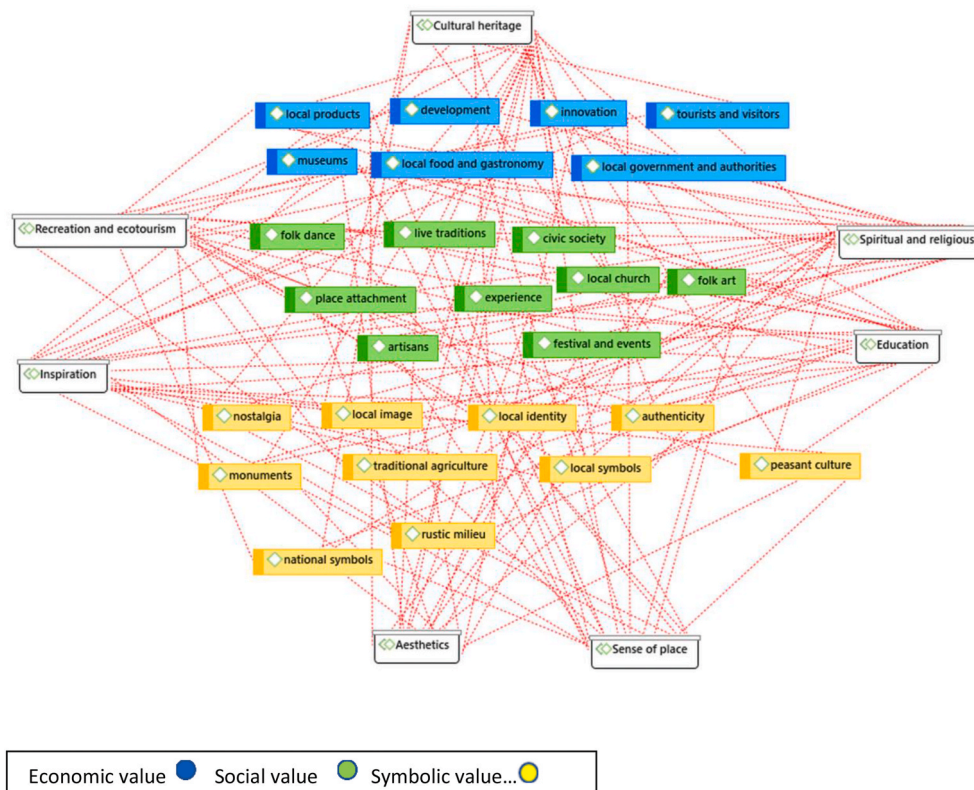


Fig. 2. CES themes, codes and values in Kalocsa narratives.

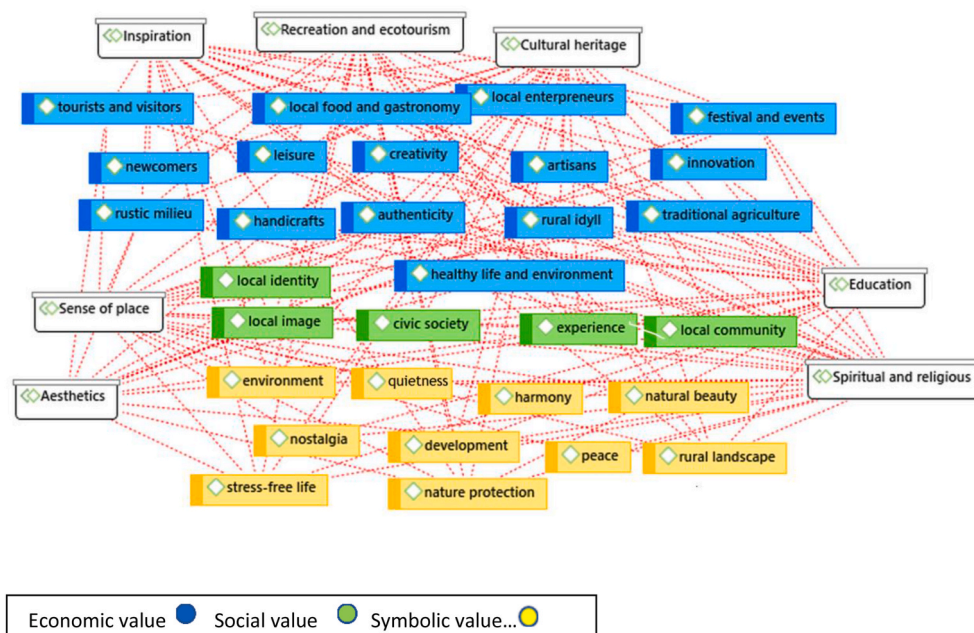


Fig. 3. CES themes, codes and values in Órség narratives.

and community appeared too, but less emphatically. It seems that local stakeholders mainly attach symbolic values to spirituality and religion. The inspiration theme included innovation, creativity, newcomers etc. and has an important economic value according to the local stakeholders. The recreation and ecotourism theme contains tourism related codes such as festivals and events or local products and also contains codes connected to the environment, such as nature protection and natural beauty. Here, both the economic and symbolic values have importance.

Overall, our analysis shows that cultural heritage is at the centre of interviewee narratives in both cases. Some common codes were generated, while the specific codes show the special characteristics of each study area: the cultural heritage of Kalocsa plays a unique role in national identity and image building which is significantly reflected in the narratives. In the case of Órség, nature protection and heritage-based tourism driven mainly by urban newcomers play a central role in the narratives. Despite the similar terminology and common themes, the analysis of values shows the main differences. In the case of Kalocsa, most topics are associated with symbolic or social values, while in Órség, economic values are emphasised more strongly, even where the same codes appear. This highlights the importance of applying detailed qualitative interpretation to coded data.

7. Conclusion

The aim of this paper was to identify the main values that are associated with CES categories in two rural landscapes, as well as analysing the inter-connections between them. The definition of CES by Fish et al. (2016) highlighted peoples’ modalities of living, their values and shared histories, as well as their material and symbolic practices. The interview data reflects this definition. Research on the experiences and interactions between people and their environment provides much needed data for landscape management and future rural development as suggested by Puren et al. (2018). This study was able to capture some information about the role of local people as creative actors in the construction of the meaning of rural landscapes, which these authors identified as missing from previous studies.

Some categories of CES emerged more strongly than others as might be expected from landscape-specific research, however, it is clear that cultural heritage was central to both locations. This is rather surprising

given that Hølleland et al. (2017) found so few papers that focus on cultural heritage in CES research. Cultural heritage is inextricably connected to landscape and ways of living, even in a case study like Órség where environmental values of the landscape are also significant. There, the National Park agency takes care of environmental protection, which includes both natural and cultural heritage.

Sense of place also emerged strongly in both contexts. The MEA (2005) definition of a sense of place connects to landscapes that foster cultural heritage values and elements of local history and culture. Cultural heritage is clearly inter-connected to all categories of CES providing the roots of a sense of place (as well as identity), aesthetics and inspiration (particularly in connection with folk art traditions in Kalocsa and the authenticity of built, natural and intangible heritage in Órség) and it forms the basis of recreational, educational and tourist activities. Formal and informal education play an important role through school curricula (e.g. folk dancing in Kalocsa; forest schools in Órség) and interactive and creative tourist programmes (e.g. folk art workshops for tourists in Kalocsa; nature trails and a visitor centre in Órség). Environmental stewardship is encouraged through both education and recreation, even though environmental values were largely over-shadowed by socio-cultural and symbolic ones.

Cultural heritage has strong social and symbolic values for local communities which are not necessarily connected to use-value, tourism or economic imperatives. However, similar to Blicharska et al. (2017), the importance of sense of place and cultural heritage for recreation and tourism development emerges quite strongly from this research. Interestingly, in the case of Órség, tourism development involved a large number of outsiders rather than indigenous residents, who were able to valorise the heritage and convey its attractiveness to other outsiders. This perhaps partly confirms the work of Lewicka (2013), which showed that newer residents often have a greater interest in local history than longer term residents.

It should be remembered that although tourism affords economic benefits, it can also be as beneficial to create a strong local sense of place and cultural pride, which retain young people and prevent out-migration, and even attract new inhabitants who in time create new economic and social opportunities. Thus, tourism development might also provide stronger economic possibilities for Kalocsa too, which largely remains a day-trip destination (with few economic benefits for the locality). In terms of future development and management,

appropriation should be minimised, but newcomers can also sometimes recognise better what is unique and what might be attractive to outsiders.

Tourists themselves contribute to development, especially through their demands for local and authentic experiences (e.g. festivals or gastronomy, which are becoming more popular in rural destinations). Aesthetics and authenticity are closely connected in both locals' and tourists' minds, especially in images of Órség's landscape and built heritage as part of a rustic milieu. The local brand there is also used to label and promote the authenticity and quality of products. In the Kalocsa case, authenticity is closely connected to the flower motifs and interactive folk art workshops led by local people.

One of the limitations of this research is that although it focused on numerous stakeholder perspectives, the analysis did not allow for detailed differentiation between viewpoints as advocated by Jones et al., 2019 and Hiron et al. (2016). This research focused only on key stakeholders in local culture and development, but did not analyse the narratives of tourists and visitors and other important actors, such as regional or national authorities. Although it was beyond the scope of this study, the national and local political agenda should be taken into consideration in any future development or management plans, as this might override some of the resident and community values and priorities identified here. Future research might focus in more depth on the wellbeing values of CES in these landscapes (after Vallés-Planells et al., 2014). Rural development strategies ideally need to take into consideration CES values and their inter-relationships in order to maximise social benefits for local communities as well as contributing to future economic opportunities. As stated by the MEA (2005) cultural services and values are at the heart of landscape planning and management and are therefore inextricably connected to the future of rural studies too.

Author statement

We the undersigned declare that this manuscript is original, has not been published before and is not currently being considered for publication elsewhere.

We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

We understand that the Corresponding Author is the sole contact for the Editorial process.

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Appendix A. Supplementary data

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References

Andersson, E., Tengö, M., McPhearson, T., Kremer, P., 2015. Cultural ecosystem services as a gateway for improving urban sustainability. *Ecosystem Services* 12, 165–168.

Aretano, R., Petrosillo, I., Zaccarelli, N., Semeraro, T., Zurlini, G., 2013. People perception of landscape change effects on ecosystem services in small Mediterranean islands: a combination of subjective and objective assessments. *Landsc. Urban Plann.* 112, 63–73.

Auer, A., Maceira, N., Nahuelhual, L., 2017. Agriculturalisation and trade-offs between commodity production and cultural ecosystem services: a case study in Balcarce County. *J. Rural Stud.* 53, 88–101.

Bell, D., 2006. Variations on the rural idyll. In: Cloke, P., Marsden, T., Mooney, P. (Eds.), *Handbook of Rural Studies*. Sage, London, pp. 149–160.

Bessière, J., 1998. Local development and heritage: traditional food and cuisine as tourist attractions in rural areas. *Sociol. Rural.* 38 (1), 21–34.

Blicharska, M., Smithers, R.J., Hedblom, M., Hedenäs, H., Mikusiński, G., Pedersen, E., Sandström, P., Svensson, J., 2017. Shades of grey challenge practical application of the cultural ecosystem services concept. *Ecosystem Services* 23, 55–70.

Bunce, M., 2003. Reproducing rural idylls. In: Cloke, P. (Ed.), *Country Visions*. Pearson, Harlow, pp. 14–30.

Bryce, R., Irvine, K.N., Church, A., Fish, R., Ranger, S., Kenter, J.O., 2016. Subjective well-being indicators for large-scale assessment of cultural ecosystem services. *Ecosystem Services* 21, 258–269.

Chan, K.M.A., Satterfield, T., Goldstein, J., 2012. Rethinking ecosystem services to better address and navigate cultural values. *Ecol. Econ.* 74, 8–18.

Church, A., Coles, T., Fish, R., 2017. Tourism in sub-global assessments of ecosystem services. *J. Sustain. Tourism* 25 (11), 1529–1546.

Csurgó, Bernadett, 2016. Nostalgia for the rural: Cultural heritage based tourism and community building in rural Hungary. In: Rogério, Amoêda, et al. (Eds.), *Proceedings of Heritage 2016 5th International Conference on Heritage and Sustainable Development*. Green Lines Institute, Barcelos, Portugal, pp. 1583–1592. In press.

Csurgó, Bernadett, Megyesi, Boldizsár, 2015. Local food production and local identity: Interdependency of development tools and results. *Soc. Sci. Rev.* (3), 167–182. <https://doi.org/10.18030/socio.hu.2015en.167>. In press.

Daniel, T.C., Muhar, A., Arnberger, A., Aznar, O., Boyd, J.W., Chan, K.M., Grêt-Regamey, A., 2012. Contributions of cultural services to the ecosystem services agenda. *Proc. Natl. Acad. Sci. Unit. States Am.* 109 (23), 8812–8819.

Davidson, M.D., 2013. On the relation between ecosystem services, intrinsic value, existence value and economic valuation. *Ecol. Econ.* 95, 171–177.

De Groot, R.S., Alkemade, R., Braat, L., Hein, L., Willemen, L., 2010. Challenges in integrating the concept of ecosystem services and values in landscape planning, management and decision making. *Ecol. Complex.* 7 (3), 260–272.

Fish, R., Church, A., Winter, M., 2016. Conceptualising cultural ecosystem services: a novel framework for research and critical engagement. *Ecosystem Services* 21, 208–217.

Gould, R.K., Klain, S.C., Ardoin, N.M., Satterfield, T., Woodside, U., Hannahs, N., Daily, G.C., Chan, K.M., 2014. A Protocol for eliciting nonmaterial values through a cultural ecosystem services frame. *Conserv. Biol.* 29 (2), 575–586.

Haines-Young, R., Potschin, M., 2013. Common international Classification of ecosystem services (CICES). EEA Framework Contract No EEA/IEA/09/003.

Hernández-Morcillo, M., Plieninger, T., Bieling, C., 2013. An empirical review of cultural ecosystem service indicators. *Ecol. Indic.* 29, 434–444.

Hiron, M., Combetti, C., Dunford, R., 2016. Valuing cultural ecosystem services. *Annu. Rev. Environ. Resour.* 41, 545–574.

Hølleland, H., Skrede, J., Holmgaard, S.B., 2017. Cultural heritage and ecosystem services: a literature review. *Conserv. Manag. Archaeol. Sites* 19 (3), 210–237.

Horlings, L.G., Roep, D., Wellbrock, W., 2018. The role of leadership in place-based development and building institutional arrangements. *Local Econ.* 33 (3), 245–268.

Jones, L., Holland, R.A., Ball, J., Sykes, T., Taylor, G., Ingwall-King, L., Snaddon, J.L., Peh, K.S.H., 2019. A place-based participatory mapping approach for assessing cultural ecosystem services in urban green space. *People and Nature* 2, 123–137.

Kneafsey, M., Ilbery, B., Jenkins, T., 2001. Exploring the dimensions of culture economies in rural West Wales. *Sociol. Rural.* 41 (3), 296–310.

Lee, J., Arnason, A., Nightingale, A., Shucksmith, M., 2005. Networking: social capital and identities in European rural development. *Sociol. Rural.* 45 (4), 269–283.

Lewicka, M., 2013. In search of roots: memory as enabler of place attachment. In: Manzo, L.C., Devine-Wright, P. (Eds.), *Place Attachment: Advances in Theory, Methods and Applications*. Routledge, Abingdon, pp. 49–60.

Leyshon, C., 2014. Cultural ecosystem services and the challenge for cultural geography. *Geography Compass* 8/10, 710–725.

Liu, S., Cheung, L.T.O., 2016. Sense of place and tourism business Development. *Tourism Geogr.* 18 (2), 174–193.

Maciejewski, K., De Vos, A., Cumming, G.S., Moore, C., Biggs, D., 2015. Cross-scale feedbacks and scale mismatches as influences on cultural services and the resilience of protected areas. *Ecol. Appl.: A Publication of the Ecological Society of America* 25 (1), 11–23.

Martin-López, B., Gómez-Baggethun, E., García-Llorente, M., Montes, C., 2014. Trade-offs across value-domains in ecosystem services assessment. *Ecol. Indic.* 37, 220–228.

Marsden, T., 1999. Rural futures: the consumption countryside and its regulation. *Sociol. Rural.* 39, 501–526.

Mettepenningen, E., Vandermeulen, V., Van Huylenbroeck, G., Schuermans, N., Van Hecke, E., Messely, L., Dessein, J., Bourgeois, M., 2012. Exploring synergies between place branding and agricultural landscape management as a rural development practice. *Sociol. Rural.* 52 (4), 432–452.

Milcu, A.I., Hanspach, J., Abson, D., Fischer, J., 2013. Cultural ecosystem services: a literature review and prospects for future research. *Ecol. Soc.* 18 (3), 44.

Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Wellbeing: Synthesis*. Island Press, Washington, DC.

Mocior, E., Kruse, M., 2016. Educational values and services of ecosystems and landscapes – an overview. *Ecol. Indic.* 60, 137–151.

Moragues-Faus, A.M., Sonnino, R., 2012. Embedding quality in the agro-food system: the dynamics and implications of place-making strategies in the olive oil sector of alto palancia, Spain. *Sociol. Rural.* 52, 215–234.

- Musacchio, L.R., 2013. Cultivating deep care: integrating landscape ecological research into the cultural dimension of ecosystem services. *Landsc. Ecol.* 28 (6), 1025–1038.
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., Hoagwood, K., 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health* 42 (5), 533–544.
- Pleasant, M.M., Gray, S.A., Lepczyk, C., Fernandes, A., Hunter, N., Ford, D., 2014. Managing cultural ecosystem services. *Ecosystem Services* 8, 141–147.
- Plieninger, T., Dijks, S., Oteros-Rozas, E., Bieling, C., 2013. Assessing, mapping, and quantifying cultural ecosystem services at community level. *Land Use Pol.* 33, 118–129.
- Plieninger, T., Bieling, C., Fagerholm, N., Byg, A., Hartel, T., Hurley, P., Van Der Horst, D., 2015. The role of cultural ecosystem services in landscape management and planning. *Current Opinion in Environmental Sustainability* 14, 28–33.
- Puren, K., Roos, V., Coetzee, H., 2018. Sense of place: using people's experiences in relation to a rural landscape to inform spatial planning guidelines. *Int. Plann. Stud.* 23 (1), 16–36.
- Ray, C., 1998. Culture, intellectual property and territorial rural development. *Sociol. Rural.* 38 (1), 3–20.
- Raymond, C.M., Kenter, J.O., Plieninger, T., Turner, N.J., Alexander, K.A., 2014. Comparing instrumental and deliberative paradigms underpinning the assessment of social values for cultural ecosystem services. *Ecol. Econ.* 107, 145–156.
- Riechers, M., Barkmann, J., Tschamtker, T., 2016. Perceptions of cultural ecosystem services from urban green. *Ecosystem Services* 17, 33–39.
- Ryfield, F., Cabana, D., Brannigan, J., Crowe, T., 2019. Conceptualizing 'sense of place' in cultural ecosystem services: a framework for interdisciplinary research. *Ecosystem Services* 36, 100907.
- Sagie, H., Morris, A., Rofé, Y., Orenstein, D.E., Groner, E., 2013. Cross-cultural perceptions of ecosystem services: a social inquiry on both sides of the Israeli–Jordanian border of the Southern Arava Valley Desert. *J. Arid Environ.* 97, 38–48.
- Schirpke, U., Timmermann, F., Tappeiner, U., Tasser, E., 2016. Cultural ecosystem services of mountain regions: modelling the aesthetic value. *Ecol. Indic.* 69, 78–90.
- Scholte, S.S.K., Van Teeffelen, A.J.A., Verburg, P.H., 2015. Integrating socio-cultural perspectives into ecosystem service valuation: a review of concepts and methods. *Ecol. Econ.* 114, 67–78.
- Smith, M.K., Juszti, M., 2014. Paprika: the spice of life in Hungary. In: Jolliffe, L. (Ed.), *Spices and Tourism: Destinations, Attractions and Cuisines*. Channel View Publications, pp. 53–71.
- Smith, M.K., Csurgó, B., 2018. Tourism, wellbeing and cultural ecosystem services. A case study of Órség national park, Hungary. In: Azara, I., Niccolini, F., Clarke, A. (Eds.), *Tourism, Health, Wellbeing and Protected Areas*. CABI, Wallingford, pp. 26–38.
- Smith, M.K., Ram, Y., 2016. Tourism, landscapes and cultural ecosystem services: a new research tool. *Tour. Recreat. Res.* 42 (1), 113–119.
- Soy-Massoni, E., Langemeyer, J., Varga, D., Sáez, M., Pintó, J., 2016. The importance of ecosystem services in coastal agricultural landscapes: case study from the Costa Brava, Catalonia. *Ecosystem Services* 17, 43–52.
- Tengberg, A., Fredholm, S., Eliasson, I., Knez, I., Saltzman, K., Wetterberg, O., 2012. Cultural ecosystem services provided by landscapes: assessment of heritage values and identity. *Ecosystem Services* 2, 14–26.
- Tratalos, J.A., Haines-Young, R., Potschin, M., Fish, R., Church, A., 2016. Cultural ecosystem services in the UK: lessons on designing indicators to inform management and policy. *Ecol. Indic.* 61, 63–73.
- Ungaro, F., Hafner, K., Zasada, I., Piorek, A., 2016. Mapping cultural ecosystem services: connecting visual landscape quality to cost estimations for enhanced services provision. *Land Use Pol.* 54, 399–412.
- Vallés-Planells, M., Galiana, F., Van Eetvelde, V., 2014. A classification of landscape services to support local landscape planning. *Ecol. Soc.* 19 (1), 44.
- Wartmann, F.M., Purves, R.S., 2018. Investigating sense of place as a cultural ecosystem service in different landscapes through the lens of language. *Landsc. Urban Plann.* 175, 169–183.
- Wheeler, R., 2017. Local history as productive nostalgia? Change, continuity and sense of place in rural England. *Soc. Cult. Geogr.* 18 (4), 466, 48.
- Winthrop, R.H., 2014. The strange case of cultural services: limits of the ecosystem services paradigm. *Ecol. Econ.* 108, 208–214.
- Willis, C., 2015. The contribution of cultural ecosystem services to understanding the tourism–nature–wellbeing nexus. *Journal of Outdoor Recreation and Tourism* 10, 38–43.
- Wu, J., 2013. Landscape sustainability science: ecosystem services and human wellbeing in changing landscapes. *Landsc. Ecol.* 28 (6), 999–1023.
- Zhou, L., Guan, D., Huang, X., Yuan, X., Zhang, M., 2020. Evaluation of the cultural ecosystem services of wetland park. *Ecol. Indic.* 114, 106286.
- Zoderer, B.M., Tasser, E., Erb, K., Stanghellini, P.S.L., Tappeiner, U., 2016. Identifying and mapping the tourists' perception of cultural ecosystem services: a case study from an Alpine region. *Land Use Pol.* 56, 251–261.