Applying Social Impact Assessment (SIA) Principles in Assessing Contribution of Cultural Heritage to Social Sustainability in Rural Landscapes

Purpose: The paper proposes the use of social impact assessment (SIA) principles to evaluate the contribution of cultural heritage to social sustainability, supporting both a people-centered and socially responsible approach to heritage management.

Design/methodology/approach: Specifically the paper explores SIA as a methodological tool for post-project evaluation, used to define projects' contributions to aspects of social sustainability through analyzing impacts of participation in a rural context case study; that of the Scapa Flow landscape heritage scheme in Orkney islands, Scotland, UK.

Findings: Based on research findings from the thematic analysis of 40 semi-structured interviews on impacts (with heritage managers, planners and participants in the scheme), the paper proposes a combination of heritage value assessment process with social impact identification to achieve a context-relevant assessment of social sustainability. Existing research around social capital and sense of place support the analysis of relevant impacts and heritage values. Findings support overlaps between socio-environmental impacts, when looking at the role of heritage for community well being in rural contexts.

Originality/value: Through this case study the effectiveness of SIA principles when applied in cultural heritage project evaluation are discussed, opening space for reflection around novel methodologies for impact assessment in heritage.

Keywords: Social impact assessment, heritage management, participation, value assessment, rural landscape, cultural heritage, indicators, evaluation.

1. Introduction

Social together with environmental impact assessment procedures (SIA and EIA respectively), are one of the main policy tools and participatory methods, which have been developed in order to satisfy the legitimacy qualifications concerning the environmental and social questions of planning (Saariner, 2004). SIA methodologies have also been developed to function in project planning scale as used to identify potential/expected impacts before the start of a project, while the potential of the methodology in informing evaluation and post- project appraisal stages has not yet been fully explored, nor discussed in the field of heritage studies.

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Moreover, recent research around the role of heritage for sustainable development, looking at rural contexts, identifies particularities for achieving sustainable historic rural settlements (Karvelyte-Balbieriene development Grazuleviciute-Vileniske, 2014) and varying priorities for local communities that affect sustainable management of historic assets in rural contexts (Swensen and Sætren, 2014). At the same time, innovative tools for community-led heritage management, tourism planning and inclusive governance are on the rise. All these, suggest that contextual needs and natural priorities need to be reflected in local practices in order to achieve effective, participatory approaches to management which in return could stimulate sustainable development of cultural heritage, both tangible and intangible (Pereira Roders and Van Oers, 2014). In that light the role of evaluation tools, like SIA can be crucial to understand local social impacts but also to locate local needs, which can help describe the contribution of heritage especially to social sustainability and local development, in a contextually relevant approach.

Pereira Roders and Van Oers (2014) have also rightfully underlined that research in the field, may have low validation potential due to the lack of contextualization (within existing research, physical or social context), that would allow for the findings to be embedded in a broader discussion and thus be meaningful.

Aiming to respond to this call, we will discuss here SIA's role in heritage, as a tool to support socially sustainable management of heritage landscapes based on the grounded findings of an evaluation case-study from a rural context, based in northern Europe.

SIA principles have only lately being applied in culture, through the proposed Cultural heritage Impact assessment (CHIA) model (Partal 2013; Partal and Dunphy, 2016) to

assist with planning cultural projects, but still not exploring its role in evaluating impacts. nor extending in heritage projects involving management of built heritage assets.

Keeping all these in mind, this paper proposes a methodological framework to integrate social impact evaluation with value assessment, based on SIA principles, integrating it within existing heritage management processes. It does so by providing findings of the case study application: this offers empirical insights for the underexplored rural settings, while the discussion of SIA (a tool form planning) within the context of heritage projects evaluation aspires to contribute to research on improving planning and operational management processes- It can also significantly improve current practices via producing targeted recommendations for professionals working with communities in such contexts.

1.1 SIA's role in heritage evaluation: towards facilitating social sustainability outcomes

Multiple voices in heritage studies during the last two decades have been debating on how much the field needs people-centered approaches to management (ICCROM,2012) to respond to the desired social sustainability outcomes and achieve smooth operational processes, ensuring public consent. Public private partnerships (Bevilacqua and Trillo, 2012, Calabro and Della Spina, 2014 amongst others) and involvement of heritage projects in the third sector activities are recognized as producing social value (Ragozino, 2016).

Latest approaches for management of heritage in landscapes have emphasized the important role of communities in re-accepting responsibility for conservation initiatives (Veldepaus and Pereira Roders, 2014), enabling preservation of local values through participatory approaches (Ragozino, 2016).

However, while existing tools for heritage managers or experts, (like community mapping or participatory value assessment guidelines) are not always clear about their integration within existing heritage management processes, making them thus useless or hard to apply in practice to enable participatory project delivery. Our paper will contribute to this discussion as well by specifically discussing the role of SIA in post -project evaluation stages and its ability to inform a socially reflective, heritage project planning, while

facilitating positive social development. This enables a reflection on new challenges: those stemming from applying SIA for project evaluation, aiming ultimately to connect planning and evaluation within a circular, iterative approach to adaptive management cycles (Franks, 2011), as opposed to "linear" or step by step procedure prevailing in some of SIA methodologies (criticized also by Gomez et al, 2013). This is also concurrent with ICCROM's suggestions on achieving a circular heritage management cycle, in the heritage sector, consistent with the nature of the management and planning process (Wijesuriya et al, 2013) see (Fig.1)

In such an approach, the knowledge gained from projects, referred to usually as "legacy", can be more efficiently incorporated in the institutional capital of heritage organizations and retrofitted into the successive project planning and design processes they undertake. The approach is consistent with the concept of a *learning organization* (Finger and Brand 1999: 136), that can avoid and improve by avoiding existing pit falls while having a high level of *social responsibility* towards its audiences-a feature recently recognized as crucial for social sustainable heritage management that deals with common cultural resources (Babic, 2015).

Within this approach, we introduce practical steps to assist managers to locate project impacts, specifically focusing on a bottom -up approach for defining heritage values and indicators for social impact evaluation that can ensure a holistic understanding of impacts in relation to their recipients (in the context of rural landscape projects). We explicitly show how the defining variables for SIA and heritage values both crucial for heritage management project cycle, can coexist as part of evaluations in heritage management.

Burra charter (ICOMOS Australia, 1999) suggests the constant process of participation during all phases of heritage management -implying but not stating- that a re-evaluation of values could be happening in the background of all the rest of operations that heritage institutions perform. Based on this realization, we specifically point out ways for integrating aspects of value assessment (VA) with SIA, performed at an evaluation stage, assuming that VA runs through all phases instead of being a static first stage of any heritage management process (Fig. 2). We argue that this way it can feed-back to the planning level decision making, when institutions require public endorsement or common agreement to proceed-another "social license to operate" to translate this in the language of SIA practitioners- with project planning.

Hockings et al (2008:12) provide us with a graphic representation of stages and tools for assessing management effectiveness in their toolkit within the WCPA Management Effectiveness Framework. We have elaborated how SIA and VA fit within this framework: in the evaluation phase (after defining project outcomes) they can both can inform heritage management towards adaptations needed. In Fig.2 we have also indicated the phases where other SIA supported tools, like social needs analysis can inform planning and inputs, even redefine the implementation process itself.

2. Definitions and assumptions

Before starting developing the methodology for applying SIA in heritage projects' evaluation, it is considered necessary first to establish the role of this SIA within practices of management and evaluation within heritage sector. To do this we need first to define:

- a. what does heritage management processes involve and what is the interaction between operational and planning level? What does specifically management within landscapes and management of participatory projects signifies? How does evaluation fit within heritage management processes?
- b. How can these processes contribute to social aspects of sustainability?

2.1 Management of cultural heritage within landscape and impacts assessment

Heritage processes have been widely studied from different perspectives. The stress in moving from an essentialized conception of heritage to a dynamic stance focusing on social change and on the uses of 'heritage' that people put in place has led several authors to think of heritage as a process (Smith 2006; Roigé and Frigolé 2010; among others in Del Marmol et all, 2016). This encourages a processual analysis rather than output analysis, thus differentiating our proposed SIA methodology from existing output/outcome-based evaluations that exist currently in the heritage sector.

A considerably huge body of recent literature on heritage management models, deals with values based approach to management (Demas, 2002; Mason & Avrami, 2002; Mason, 2002; de la Torre et al., 2005b, Mason and Avrami, 2000) (see definition in de la Torre et al., 2005b, p.5). Through this approach, identification of values is attributed through the involvement of stakeholders groups in the process, aiming to let aside self-evident heritage assets, bearing inherent values and opening the way to participatory processes.

Mason (2002, in de la Torre p.6-7) provides a diagrammatic view of value assessment as a process, with tasks including identification, elicitation and ending up with creating

statements of significance, that have then to be integrated by managers to establish relevant policies. This process suggests consultation as the basic starting tool with many methods suggested for managers to use for the phase of elaboration, which are not however clearly prescribed.

Mason (2002) also provides us with a wider framework that shows the role of value assessment within heritage planning processes, that assisted us conceptualize this integration. (as viewed in Fig.3)

Cultural significance or Value assessment (VA) is one of three components necessary for analyzing the context of heritage planning (together with state of conservation and context analysis): whereas an assessment of the social context seems to be implied is not explicitly described within this framework and this is where an integration with SIA can benefit heritage planning processes.

Moreover, within VA as a process, it is suggested that evaluation of information is happening through a participatory process by bringing together all stakeholders' opinions to formulate statements of significance. However, there is not a suggested method to realize that. Especially monitoring, reviewing and revising throughout the whole planning process, seems hard to achieve in practice, considering the static character of other parts of the process, like the production of statements of significance for example.

We argue that SIA, entwined within VA at the stage of project evaluation, can actually not only assist in wider monitoring of impacts but inform values assessment (VA) itself and vice-versa. In fact realizing SIA and VA together as part of project evaluation, provides a good basis for participatory extraction of values and impacts.

Management of heritage projects for the context of the paper, involves complex sociospatial interactions and thus multiple impacts emerging directly or indirectly from all those processes of interpretation, protection, celebration-marketing. By focusing on participation, we view communities' role in each of those. This enables our focus to leave aside *«business as usual»* processes of asset management realized predominantly by experts, but on projects that involve communities as part of their planning and execution.

2.2 Heritage processes and contribution to social sustainability: a conceptual framework for SIA

Multiple academic voices reflected on the role of heritage for sustainable development in various cultural contexts, with latest research reporting socio-economic benefits for communities from involvement in heritage tourism (Liu and Cheung, 2016; Mak et al 2017) and integrative planning strategies but also an increased "sense of place" (Graham et al, 2009).

Understanding how heritage contributes to social sustainability aspects and developing a theoretical and conceptual framework is crucial before entering a process of establishing indicators for evaluation of projects. Rossouw and Malan (2007) have argued that, in the absence of an explicit theoretical framework, social impact monitoring can revert to an implicit and simplistic model of social sustainability. In our case, the adoption of a sociospatial theoretical understanding of impacts combined with aspects of constraints¹ to participation and social life provided a robust base for the analysis of impacts. The approach based on the concepts of social capital and sense of place will be explained shortly after.

Review of previous literature on impacts of heritage projects, included impact assessment studies in heritage and culture sector in UK (Graham et al, 2009; Lehrer, 2010), and research papers and professional reports defining wellbeing related impacts from heritage

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¹ Reflecting some of Moser's (1998) model aspects on constraints to sustainable livelihoods

activities, mostly focusing on urban heritage (Kinghorn and Willis, 2008; Taylor et al 2009; Baker, 2002; Kupisz and Dziajek,2013; Dümcke and Gnedovsky, 2013; Atkins and IFA, 2004; Ashworth and Tunbridge, 2000; Tweed and Sutherland, 2007). Literature on place attachment (and its relation with place identity and dependence as seen in Jorgensen & Stedman, 2001 and relevant body of work) was reviewed as well to uncover effect of heritage places, suggesting that it may predict social wellbeing aspects (Moobela et al, 2009; Lewicka, 2011). What is more, empirical studies have showed that enhancing sense of place is in turn important for socially sustainable development of revitalization projects (Yung, Chan and Xu, 2014 in Liu and Cheung, 2016), making it key element for successful heritage projects with placemaking elements.

The review shows that themes, such as equity, poverty alleviation and livelihoods support, are increasingly complemented by more intangible and less measurable concepts such as identity, sense of place, participation and access, social capital, social cohesion, the benefits of social networks, happiness and quality of life (Polse and Stren, 2000 as in Yung and Chang, 2012). As such, it shows a diverse perspective on social sustainability. Given all these, we argue that social sustainability for rural heritage projects concerns two major aspects: sense of place and quality of life. By viewing quality of life through the angle of social wellbeing (NEF, 2012; Bognar, 2005) we can integrate both individual and communal perceptions of wellbeing in the overall assessment and focus on social and psychological rather than physical health aspects. Social capital has been used as an indicator of social wellbeing (NEF,2012; Graham et al, 2009) accounting for social cohesion and sense of belonging to community.

Some research argues that conservation of historic buildings and places contributes to a higher degree of creativity and economic development as well as a better quality of life **Commented [A3]:** We incorporated some of the suggested references here to support better the review and further discussion

(Ashworth and Tunbridge, 2000; Hall, 2002; Chan and Yung, 2004), suggesting that indirect impacts to wellbeing through impacts to livelihoods have to be considered in similar assessments.

A socio-spatial approach based on the concepts of social wellbeing and sense of place guided the interviews' question design, enabling us to understand the role of proenvironmental (towards physical settings, landscape) and pro-cultural behaviors (towards tangible and intangible heritage) and their interactions to formatting perceived impacts to specific social groups.

Integrating the conceptualization of rural livelihoods enabled us to understand livelihoods dependencies with context: viewing the entirety of impacts both direct and indirect as aimed, as well as interrelations between impact areas. The categorization of impact variables from the assessment towards developing indicators was guided by the same conceptual framework (Table 1).

In other words indicators are based on the conceptualization of social wellbeing impacts as being interdependent with sense of place related impacts.

3. The socio-cultural context of analysis

The researcher is using the case of a landscape partnership heritage scheme -Scapa Flow landscape Partnership², realized 2009-2013 in rural UK, (in the context of Orkney islands, Scotland) and analyzing social impacts of participation in the scheme.

² A review of the projects within the scheme was available until November 2017 through this site: http://www.scapaflow.co.

Orkney, is an archipelago of 20 inhabited islands off the north-eastern coast of Scotland, featuring a rich rural landscape and a total population of 20,110 people (Census, 2011), with almost half of it residing in the mainland (Kirkwall and Stromness). The scheme was realized in the area of Scapa between the mainland and the smaller islands of Hoy, Gramsey, Flotta, South Ronaldsay and Burray, including disperse rural communities, organized around parishes, inhabiting the flat landscape (a maximum 1000 people residing in the adjacent island of Hoy, in the island of Flotta and around 1500 in the connected islands of Burray and South Ronaldsay).

A recent increase in population (OIC,2017) is attributed to high in-migration, an important attribute altering local communities' structure (by changing the percentage of locals or "born and bred" in comparison to incomers that relocate themselves).

The seasonality in most of the commercial activities and professional job offers combined with a certain lack of (physical) accessibility especially the winter months, may escalate issues of physical and social isolation for the residents. Restricted resources and scale (a geographically bounded small area) also suggested restricted opportunities that encourage increased outward migration especially from younger residents and thus increasing numbers of aged population within the permanent residents (ageing data confirmed by 2011 Census³).

3.1 The heritage projects-the landscape scheme

The case of Orkney islands with its Scapa Flow Landscape partnership scheme, used here as a case study, includes a variety of heritage sites, sustaining people's livelihoods and a

³ "Orkney is projected to have an **ageing population** over the next 25 years, with a projected increase of 48% for those aged 65 or over. In contrast, the population aged 16-64 years is projected to fall by 11% between 2014 and 2039." (National records of Scotland, 2017) Accessible at: https://www.nrscotland.gov.uk/files//statistics/demo-cen-profiles/orkney-islands-eea-profiles.pdf

rich biodiversity. At the same time, rich intangible heritage of the area includes traditional dialect, music and customs unique for the locality and the projects within the scheme focus on both tangible and intangible aspects of heritage.

The scheme under focus was realized between 2009-2012, thanks to a fund of £1,355,800 mainly by Heritage Lottery Fund (HLF) and also supported by European Rural Development fund. It included 44 small projects and involved local communities around the parishes of the realized projects in the course of the three years. The whole scheme had a special focus on achieving public engagement, expressed through specific objectives for including communities in projects. Management of projects was realized by the same local institutions that regularly deal with the specific heritage typologies in the area, including: local authority run-museums, local heritage trusts and associations, research centers working with archaeology and Historic Environment Scotland.

3.2 Sampling and interviewing process

The analysis presented here is based on the thematic analysis of 40, semi-structured interviews of around 30-40 minutes each, with 47 adult participants. The participants represented community members/residents who volunteered or got involved in community-led projects (30 interviewees with 5 of them being local professionals who collaborated with them), heritage managers (10) who were involved in delivery of the scheme as well as local authority representatives and professionals involved in planning the scheme (7). Interviews were realized in person, in two phases in Spring 2016 and April 2017 and were accompanied with field visits to the project locations and observations by the researcher. The

Commented [A4]: This section provides a clear overview of the sampling process and characteristics of participants are provided in the relevant table. Relation between projects, and typologies of participation is also provided.

interviews followed a loose structure that enabled themes to appear inductively during conversation.

In the first phase adult, local residents in Scapa flow area were sampled using the snowball method (Biernacki and Waldorf, 1981), whereby local managers acted as starting contacts and assisted to locate a first set of volunteers.

Nine core projects were identified as participatory by interviewees, related to some core heritage assets and their surrounding landscape.

These are: 1. Archaeological excavations and documentation in the islands of Hoy and South Ronaldsay (Iron age/Neolithic), 2. Battery WWII site Restoration project in Stromness, 3. a vernacular "crofter" house restoration and reuse as a museum Rackwick, Hoy, 4. a parish church reuse (Hoy Kirk) into a community center and archive with local history, Hoy 5. a new interpretation wing for a family-run archaeological visitor centre (South Ronaldsay). 6. Intangible heritage festival in South Ronaldsay accompanied with exhibition 7. St Magnus festival celebrating history and heritage 8. Interpretation of wartime heritage, films and archival data, Stromness 9. Boat restoring and traditional boat making, Lyness, Hoy and Stromness

The projects featured different typologies of participation ranging from volunteering and training activities (projects 1,2,8,9,7) to community-led projects facilitated by professionals (projects 3, 4,6,) and even collaboration between family-managed visitor centre with institutions (project 5).

Projects related with built heritage / archaeology (1,2,3,4,5) and projects related to collections management, exhibitions and interpretation were covered through the interviews (3,4,6,7,8,9).

A description of the sample with basic demographic characteristics like sex, age group and provenance (relation with location) is provide in Table 2.

It is important to acknowledge that most of the community-led project participants (especially on Hoy island) were over 50 years old, a sample representative of the majority of the participants in the projects there but also of the existing population on the island. It is also important to notice that the number of women interviewed was almost double of that of men (with a higher number of women being involved in community-led initiatives), but we cannot make generalization claims about the trends for participation per gender for the whole island population in the absence of further statistical data or a bigger sample.

4. Analytical process

Instead of locating potential impacts, SIA principles have been applied in understanding post-project, social impacts conceptualized as changes in societal structures and behaviors reflecting social wellbeing aspects and changes towards aspects of sense of place, (reflected upon perceptions of place identity, dependency and attachment).

Despite the common use of SIA for detecting negative consequences of projects in this case, only positive impacts were identified, based on the hypothesis that engagement with cultural activities can support (rather than inhibit) individual and social wellbeing and connection with place (Moobela et al, 2009; Lewicka, 2011).

Our research suggests an approach that comprises of four stages, connecting data collection and analysis: *Identify project types, participation typologies and map stakeholders, Community profiling and social needs analysis, Identifying heritage values and assess changes and Analyse social impacts and assess significance.* These

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form part of an iterative process, which means that returning to the previous stages is always necessary to corroborate information. (Fig. 4)

Desktop research assisted in creating an initial mapping of project content and typologies within the scheme, an initial stakeholder mapping and establishing a sampling method for the interviews that followed. Thorough understanding of the multiplicity of heritage and community assets in the specific geographic area (Rowan, 2009) allows for development of reliable assessment indicators later on.

Qualitative data were collected through the 40 semi-structured interviews realized during two phases -initially focusing more on baseline data collection in the first phase while focused more on identifying social impacts and their relationship with heritage values in the second.

Through thematic analysis (Braun and Clarke, 2006) of the interview transcripts, using Nvivo software for qualitative analysis (QSR International Pty Ltd. Version 10, 2012), the researcher identified themes that enabled:

- Identifying specific sub-groups consisting the local community and their related social needs realizing at the same time community profiling analysis and a small scale, social needs assessment.
- identifying perceptions of heritage by the research participants, producing a value assessment (referring to the heritage assets involved in the projects)
- identifying perceptions of social impacts of participation on individual and community level and related perception of heritage values/role for local sustainable development.

Regarding to identifying recipients and pathways of impact creation, the methodology followed focuses on systematically diversifying between:

- (i) direct impacts for participants⁴ at an individual level, and
- (ii) knock -on impacts on communities of place (referring to parish level dispersion of impacts through social networks) and communities of interest identified by participants.

4.1 Social and spatial needs for local communities: findings

Social needs and contextual issues were mainly revealed by asking participants to provide some background data about themselves, and their life in Orkney islands in the start of the interviews. Analysis revealed certain inherent vulnerabilities of the context expressing social needs (Figure 5a, b), mapped at different levels:

- at community level related to social cohesion (participants referring to needs associated with non-integrated, migrant groups of "incomers", coming mostly from UK but also to competing local parishes that deal with internal disputes),
- -at individual level related to mental wellbeing (participants referred to needs associated to combatting loneliness, mostly regarding elderly) and few opportunities for personal development regarding young adults existing on the island (attributed also to lack of spatial infrastructure as well as due to shrinking population and the dispersed nature of local parishes, see eg. Figure 6) and

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⁴ This division between direct, in direct impacts (that could be understood as both: difference between attitudes and behaviors at individual level that led indirectly to group/ community level impacts) can be supported by the recent work of Slootweg et al (2001).

-at individual level relating to social wellbeing (participants referred to needs associated to the effect of overlapping and tight social networks that can create social isolation for new members).

4.2 Identifying heritage values

It is crucial at this stage to understand that with evaluating impacts of heritage participation within landscape, we need to trace not only:

- a. perception of intrinsic values towards heritage places or intangible heritage that signify roles of heritage for the lives of community and may affect perceived impacts of participation but also
- b. values ascribed as a result of the activity/process of participation or as a result of use of outputs of this process. These are conceptualized and understood as direct impacts of the process and indirect impacts of interacting with the outputs, respectively.

The open character of interviews and the multiplicity of heritage assets that are relevant with the scheme, suggested choosing a rather open approach to identifying heritage values, not based solely on a predefined framework for mapping values⁵, but instead aimed at covering perceptions relevant to the context (see Table 3a,b).

Intrinsic values were mapped here as perceptions of heritage by the different participants, using questions to elicit discussion, like for example "What is the most important heritage aspects in (area) ..for you? Why?". Participants also provided information on perceptions by referring to the specific projects they participated in,

⁵ An in depth-analysis of heritage value frameworks prevalent in recent heritage research is offered by Fredheim and Khalaf (2015), which cite value categories depending on heritage typologies/categories, for example archaeological and historic objects (Muñoz Viñas 2005, urban and rural landscapes by Massey (2006), Stephenson (2008), Swanwick et al., 2002 or even the framework developed by Holden.

offering more anchored views about specific heritage sites (type of activities, learning outcomes and further engagement with the projects).

4.2.1 Perception of heritage

Local people (see Table -3a) mostly saw (1) heritage as part of their identity, emphasizing on the responsibility to bequest to younger generations and as (2) part of their life experiences as memories, interlinked with experiences of place. Part of the aspects that they aspire to bequest are traditional skills of practicing communities:

"..older folks..only have that sensibility and then perhaps repercussions down to the generations, back to the younger folks.." [13/M3 manager [

"to get traineeships so that someone, a younger person can work alongside
...(name of only left traditional boat builder in that area). So that they can gain the
knowledge and skills.."[I15,C24 community member, volunteer]

Managers and planners (Table 3a) interviewed on the other hand instead
underlined: (1) educational value as predominant tool for change, followed by
ancient traditions and skills that define local (and global) identity. They referred
repeatedly to (2) heritage as an inspiration for creativity, relating it to the rich
cultural context of Orkney and (3) heritage as a secondary public good, pointing out
in issues of inclusion and accessibility to everyone to benefit in terms of knowledge
and personal development.

One of the most important aspects were both groups of participants agreed upon (Table 3b), was viewing heritage as connection between history and place, reinforcing sense of place and distinctiveness of the location and understanding it as as tangible and intangible elements in landscape.

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"..things were worth keeping.. Ness battery is special example, cause its still on the world map, its unique.. [I10/C1 community member-volunteer]
".. was about getting people out to appreciate heritage and then telling the story of the cultural heritage they' d see when they are looking at the landscape, when they experience it ..because that's what landscapes are I guess..natural /cultural influences that make that landscape..[I5/P1 local planning authority officer]

4.2.2 Perceptions of heritage's role for local sustainable development

Aim of the questions was not only to locate heritage values, but also understand heritage potential to assist sustainable development locally and specifically affect community's wellbeing. Wellbeing was in fact broadly defined by most of the research participants (both managers and locals) by socio-economic parameters and related to contextualized socio-spatial needs (ie. lack of provisions for socializing, affected by seasonality, lack of spatial infrastructure on the islands) but also urgent need for supporting livelihoods (through job creation to sustain young population on the islands and reverse trends of ageing communities). **These findings are simply represented in Table 4, identifying three major ways in which heritage assists local wellbeing:**

a. Heritage supporting economic development

"..from council perspective is about enabling communities to do projects..economic development, so improving visitor offer..visiting different parts of Orkney.." [15/P1, local authority officer]

b. Heritage as supporting liveliness and sustaining place (either through attracting tourism but also sustaining small communities in their place):

"..there is real buzz in that island..in that community..they really working hard to make added value to everything they do ..[..] they are utilizing their agricultural heritage.. all of that to attract people to come to their island.. ..and their heritage and culture are key things to bring people here." [19/M9 manager]

c. Heritage as counter acting for lack of social infrastructure, especially in shrinking localities. This was an important function recognized especially by the smaller communities (outside of Kirkwall and Stromness).

4.2.3 Integrating value assessment with identification of variables for SIA in heritage

What makes heritage related social impacts challenging to map (and even more to identify their significance for various community groups), is the fact that the understanding of heritage elements within landscape varies for various respondents and this subsequently affects the way impacts are perceived.

By using values to guide us towards potential and perceived impact identification we managed to create a baseline understanding of the potentials of the projects under evaluation and the relationship communities have with the heritage assets involved.

4.2.4 Heritage participation: from values to impact variables and developing indicators

Perceived impacts of heritage to social sustainability via participation were obtained through questions focusing on: specific changes in social behavior, use of social (infra) structures and civic participation (observed or experienced) realized as a result of participants activity in the project as well as changes in appreciation of heritage places evidenced through interactions with those (engagement in protection processes-including conservation interpretation documentation etc., touristic and social use of heritage sites/use of outputs etc).

To capture indirect impacts to livelihoods, questions captured also perceptions of the role and contribution of heritage for socially sustainable development (referring to interaction of heritage values with sustainable livelihoods), covering social sustainability and extending to values stemming from use of heritage outputs.

The thematic analysis performed on the interview data suggested a primary body of variables/nodes, grouped at a next stage to a list indicators (refined and merged), after considering relevant literature review and reflecting our conceptual framework (see Table 5).

The impact nodes were grouped in three core categories, reflecting different levels of social impacts:

a. Individual level social wellbeing

Volunteering in heritage was pictured by interviewees as providing self-esteem and sense of duty or life orientation to individuals. For example one participants' experience was described as:

"..he says people see him as the minister, they do not see him as the volunteer so when he volunteers he is not just some guy who turned up to work with young people..." [19/ M9, volunteering ranger]

Participation in more informal, group activities was viewed as connecting individuals and their local community:

[Do you think it has changed anything for the lives of people here?]

"Its made people get out and about, sure yes! We used to meet in the old hall and, play darts.. but now people met up there lately.., well, if not a committee meeting, the lecture, ..or something..and everybody meets now..its when we are getting together. .[117/ C6 community -led participant]

Commented [A8]: Introduced here some of the findings, described in Table 5-supported by some quotes to shed light on participants perceptions and provide evidence

b. Community level wellbeing, referring to social cohesion

The core benefit mentioned by many participants, refers to participation acting as social glue and supporting cohesion in mixed communities, where "born and bred" and "incomers" can build a new collective identity.

"Although there's something distinctive about Orcadians, that they're proud of..and which they're changing because a lot of population rise and people start coming in as incomers..which perhaps makes these kind of heritage projects... More important because ..its valuating..they take what is original in the area.!. but often new people coming in are excited in that new area and taking interest ..and it comes as bringing people together.."

c. Heritage sustaining wider community in place

Finally, participating in community-led projects was connected to the function of heritage centers by local trusts and associations as community centres, supporting community needs and in the long run potentially assisting in sustaining population in place:

"..there was all very well having a heritage center it might bring people together a bit, by having heritage events and is good to record the past.. but how is it actually going ..to do anything to reverse the trend of ageing population. and of closing schools, is a bigger story..but.. well, arguably if you like where you live, makes you more comfortable there.." [111/M11, project manager]

The resulting set of nodes/quality indicators developed here through this bottom-up analytical process (Table 5), can be categorized as both descriptive and evaluating, in the sense that they look at quality outputs, providing a way for considering social impacts of projects in contrast to output analysis and quantitative methodologies for assessing impacts that tend to be the only criteria for accounting on projects success.

5. Considerations on methodology and implications

Developing fully the difference between bottom-up and top-down indicator creation process is outside the scope of this paper. Further research should be realized to corroborate findings in similar rural or even urban contexts to validate the indicators suggested here. However, we would like to underline that qualitative analysis holds the strength of locating multiple variables while allowing for corroboration of information by different groups of stakeholders involved in heritage projects, that may "speak different languages". The inductive nature of our process, following a bottom-up, approach for identifying indicators, has offered the flexibility for a genuinely context-relevant framework to analyze impacts through change in variables identified, avoiding "a myopic focus on predetermined themes" (Rossouw and Malan (2007:291).

The qualitative approach we suggest holds potential benefits for informing local level, heritage micro-policy: asking participants to elicit heritage values and project impacts combined with realizing a community profile in the start of the projects allows mapping impacts on specific target groups with greater certainty, instead of simply listing cumulative impacts, generalizing for the whole of local population. Rowan (2009: 185) claims for delineating "the key social receptors and community resources" that may be affected by an intervention. Matching community profiling, social needs analysis with

Commented [A9]: Inserted here a reflection on the inductive approach to evaluation as part of reflections

impact recipients allows for in depth and project specific conclusions for the heritage sector that can lead to institutional level improvements (both in managerial processes and in negotiating translation of planning suggestions into actions).

Looking at institutional and policy level, even despite the declarations of Burra charter (ICOMOS Australia, 1999), today there are few policies to ensure participatory value assessments and fewer recommendations on how participatory/bottom-up inputs can inform policy formation on how heritage is managed and planned. Our paper suggested a methodological tool that can be integrated in existing processes (fig. 3), policies and recommendations for institutions to assist participatory value and impact assessments and enhance collaboration with communities.

We contain that since heritage management on a landscape scale, suggests managing properties of with mixed typologies and values, (comprising of natural and cultural elements) but also their interactions with people, evaluation processes should focus more on processes of participation. The approach and tools suggested here can assist towards this direction.

Looking at implications of our findings for practitioners and planners, we consider that SIA when realized by (relying on the participation of) the same organizations that undertake the initiatives can enable organizations to reflect on the impact of their practices for the communities they serve and achieve an authentically iterative circle between project planning and project evaluation (fig.2), that can link better decision making in higher levels (policy) and practice (project planning and delivery) in the heritage sector.

Commented [A10]: Reinstated the following three paragraphs to showcase implications of research for policy, practice and further research. Specific references to the suggestions for changes in processes of management via he figures is made.

SIA can provide the themes and variables for a sound, community supported and supportive planning and thus successful long term gains by recognizing aspects that existing assessment methodologies within the heritage sector do not cover. Finally, the benefits of new entrepreneurial and innovative management models used in heritage (like Social enterprise or cooperative management see (Ragozino,2016) for local development can be proved and their further application in the sector encouraged through the use of SIA.

6. Conclusion: SIA as a social-centered evaluation tool to inform heritage management

Recapitulating, the scope of the paper was double: delineating the role of SIA as a tool to support socially sustainable management of heritage landscapes in rural context but also establishing a methodological framework to integrate social impact evaluation with value assessment, based on SIA principles, within HM process. In that sense the paper contributes to an underexplored area (that of rural heritage and community-led management), while brings together empirical data and the state-of-the-art in research of heritage processes and methodological tools for heritage practitioners (value assessment, social needs and impact analysis).

By linking values and community groups that represent the bearers of those heritage values, such an approach opens the way for achieving socially relevant project planning and project design in the heritage sector. Further work should focus on incorporating SIA principles and methods within more stages of projects life, like mitigation and social impacts management plans (see Franks and Vanclay 2013) establishment, following recommendations like the innovative framework proposed by Gomez et all (2013).

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Based on findings from the thematic analysis of semi structured interviews the paper indicated how a bottom up approach to developing indicators can be realized effectively, ensuring a contextually relevant assessment of social sustainability for rural heritage projects when combined with heritage value assessment. The paper thus responds to the imminent need for contextually relevant research based on empirical evidence, the importance of which in interdisciplinary research around heritage for sustainable development has been emphasized by Pereira Roders and Van Oers (2014).

The application of SIA principles here has outlined its great potential to capture impacts falling under an enlarged conceptualization of *community wellbeing (Table 1 and 5)*: this goes beyond assessments of impacts on physical health of individuals (perceived as medical, physical assessment of quantifiable individual attributes), to consider mental health and social life of communities' aspects relevant heritage projects, while reflecting also spatial aspects of social life in rural community contexts.

The openness of the process enables, "'softer" social impacts to be considered, such as any detrimental impacts on the culture of the community, which tend to be overlooked due to existing processes focusing on prescribed easy to "count" datasets (Lockie, 2001; Rowan, 2009), while it allowed for capturing unintended (Vanclay, 2009), but still positive social consequences (not expected as part of projects planning), usually missing from outcome based methods for evaluations used in the sector.

The recent recognition of rights of autochthonous populations as "heritage rightful owners/ safe guarders" is suggesting a rather promising role for SIA within heritage practice in the near future. Especially for collaborations between communities and institutions, the latter-through equally integrating the social needs assessments part- can recognize distinguished social groups and their possibly conflicting needs related to land

use, to support equitable and efficient management of resources. Further methods on evaluating potentially uneven spatial distribution of project impacts or negative social impacts like social segregation/disturbed cohesion at community level should be embedded in the evaluation practices and tools currently used (Cervelló-Royo et al, 2012).

In conclusion, the paper advocates for applying SIA in evaluation of different typologies of participatory projects, where the role and agency of experts differs, as it can enable heritage managers and planners to showcase the social impacts of participation in a structured, contextually relevant and evidence-based way while responding to the increasing responsibilities of community groups in heritage management and enabling a truly people-centered approach to management.

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Table 1: Aspects of social wellbeing (in individual and community level) and relevant measures of indicators, applied in developing interviews questions for the qualitative assessment and creating impact categories in the analysis phase. Source: author. Based on synthesis of frameworks by Branch et al, 1984; Reeder,1990; Ramsey and Smit, 2002; NEF, 2009.

Main subject/scale	Central	Measures of indicators
6	concepts/attributes/indicators	
Community social	Individual wellbeing	Behaviors: level of
impact assessment		socializing, civic
(direct)		participation. Perceptions of
		wellbeing
	Community social wellbeing	Perceptions: Sense of
		belonging to community,
		trust and supportive
		relationships with other
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	communities and
		institutions, social cohesion,
	9	social inclusion
	Sense of place -place	Behaviors: Access to
	identity, dependency and	resources, responsibility for
	attachment	caring for place Perceptions:
		Sense of pride, sense of
		belonging to place

Rural	livelihoods	Economic wellbeing	Employment, income,
(indirect)			Touristic development and
			their beneficiaries
		Demographic balance	Balance between ages in one
			location, balance between
Ç			incomers/existing residents

Table 2: Demographic characteristics of the sample (age, sex, provenance and occupation and type of participation)

	Heritage	300	Volunteering	Community-	Local	
	Managers	Planners	participants	participants	collaborators	Total
Males	4	5	4	4	2	16
Females	6	2	6	11	3	31
Total	10	7	10	15	5	47
Age groups						
25-34 yo	0	1	3	0	0	4
35-44 yo	3	2	1	1	0	7
45-54 yo	4	3	1	1	3	12
55-65 yo	2	1	1	3	2	9
65+yo	1	0	4	10	0	15
Total	10	7	10	15	5	47
Provenance					0)	
Orcadians	2	2	5	8	3	20

Non						
Orcadian >5y						
in	8	5	4	6	2	25
Non Orcadian <	5y in		1	1		2

Table 3 a, b: Perceptions of heritage -intrinsic values and potential roles of heritage as defined by managers and project participants and common perceptions (baseline value assessment, as coded in Nvivo)

By managers	By participants
Heritage as ancient traditions and	Heritage (spec. archaeology) as
skills	experiential memory "woven in childhood
	experiences"
Heritage as a secondary public good	Heritage as responsibility to bequest to
	younger generations
Heritage as an inspiration for	
creativity	
Heritage as education, heritage in	
education	

1. Heritage as authenticity in fabric - Musealisation and institutionalized protection of artefacts -superficial -Understanding of heritage as preservation of old only 1. Heritage as history

- -Commemoration of history as heritage at risk
- -Different local priorities in promoting heritage types

2. Heritage as connection between history and place

- -Heritage as natural and cultural references in landscape
- -Sense of place existing strong
- -Heritage as tangible and intangible elements in landscape

3. Heritage as social benefit -heritage centres as community centres

- -Heritage activities as opportunities to deal with mental health
- -Cultural institutions as supporting groups for events

Table 4: Perceptions of the role and contribution of heritage for socially sustainable development

Heritage to support economy based on services and tourism Heritage to tackle issue of seasonality in interests Heritage that can sustain place (intersects both with social and economic aspects) heritage promotion as place branding as a destination heritage interpretation rediscovered personal history and connection with place that sustains population heritage protection as natural environment and landscape protection

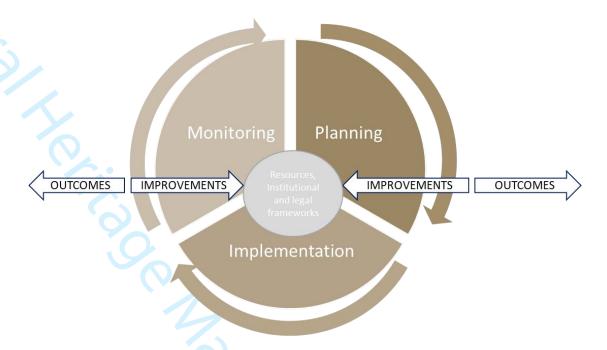
Heritage to support social development and wellbeing	
Skills and educational opportunities for development	
Recreational opportunities and socialization	
Integration opportunities for incomers and isolated individuals	

Table 5: Perceived impacts of heritage to social sustainability, via participation, per level. Suggested impact areas and indicator development on the right column.

	Nvivo inductive list of impact variables	Regrouping of variables into
	related with participation in heritage	thematic groups of
		indicators
a.	Direct impacts individual level: social	Direct impacts: Individual
	wellbeing	level social wellbeing
•	Become part of a social group, belonging	Social capital (bridging
•	Make new friends and socialize	and bonding)
•	Fight isolation and increase mental health	Mental health
•	Skills for daily use-recreation	
•	Increase sense of ownership of place and	Sense of belonging to
	heritage	place/ Sense of identity
•	Skills for job market	Knowledge, education and
•	Create new professional networks	personal development
•	Awareness about historic evolution	
	development	
•	Learn more about heritage-increase	

abilities won Self empowerment and
confidence
for service
Direct impacts: Community
level social wellbeing
rs in Social capital
(Bridging)/Inclusion
ment via Social capital
(Bonding)/Social cohesion
nts Social capital (linking)
ity Collective empowerment
osed groups
inity of place Indirect impacts
nmunity Enhanced sense of
belonging to group
ting access to Enhanced community
and place bonds
ountable to
patial

Increase
recognition Increase sense of ownership through



le: .
.sed on a.
.ne system can Figure 1. Circular heritage management cycle: linking planning, implementation and monitoring phases. Redrawn by author, based on diagram by Wijesuriya et al, 2013, p.99. Suggestions for improvements to the system can come via evaluation

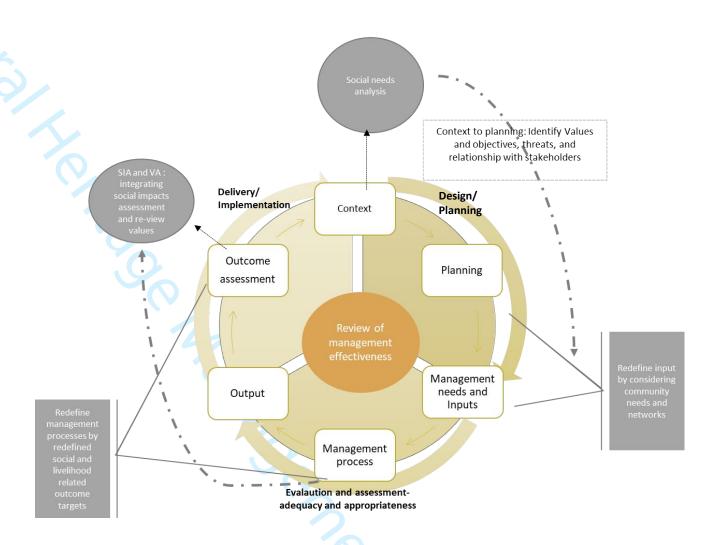


Figure 2. How SIA and VA in evaluation phase can inform heritage management through an adaptive loop.

Author's adaptation of diagram by Hockings et al. (2008), p.12 (Original figure caption: Relationship of tools in the toolkit to the WCPA Management Effectiveness Framework.)

Figure 3: Value assessment as part of planning process in heritage (Author's suggestions, based on Mason, 2002, p.6, Original figure caption: *Planning process methodology*) and proposed integration of SIA by the author (on the right and arrows).

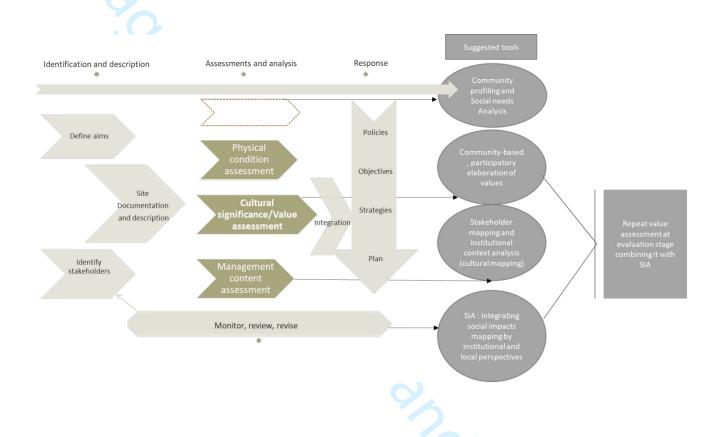


Figure 4. Interlinked stages of the proposed analytical process Source: Authors



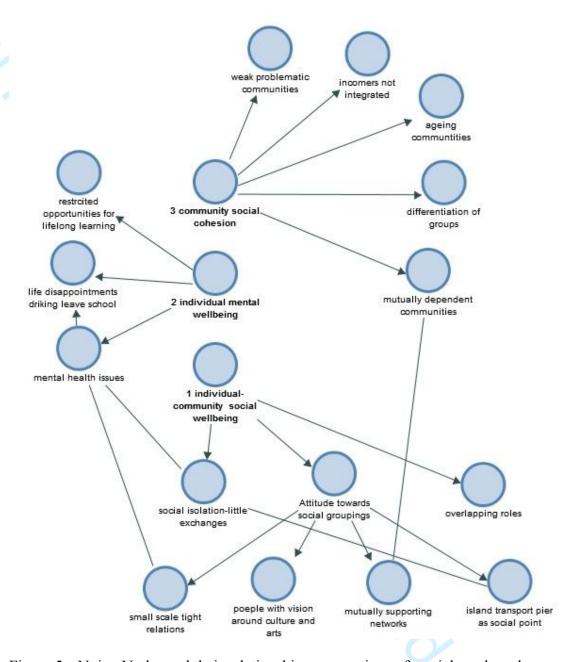


Figure 5a. Nvivo Nodes and their relationships: perceptions of social needs and subthemes in coding

Figure 5b. List of same nodes in Nvivo, categorized in groups that produced the final hierarchical relationship shown in diagram 5a.

A 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1	10	169	
1 individual-community social wellbeing	9	97	
Attitude towards social groupings	9	66	
island spatial dependencies- pier as social point	1	1	
mutually supporting networks	8	24	
personal attribute long lastign personal relation mnetworks poeple with vision around culture and arts	1 3	3	
small scale tight relations	8	22	
	6	3900	
overlapping roles social isolation-little exchanges	7	17	
lack of interests boredom online communication as connectign to outer world	2	2	
online social networks as conencted with orcadians who migrated	1	1	
2 individual mental wellbeing	3	5	
	2		
life disappointments driking leave school mental health issues	1	3	
restricted opportunities for lifelong learning	1	1	
poverty lack of resources	1	1	
3 community social cohesion	10	64	
ageing communitities	4	9	
differentiation of groups	9	29	
differences between neighbor islands inter itra	1	1	
local disputes	5	8	
various foci of projects in specific groups	2	2	
incomers not integrated	3	4	
mutually dependent communities	4	12	
meet your neighboring island initiative	2	2	
weak problematic communities		10	
meet your neighboring island initiative weak problematic communities			

Figure 6. Example of coding stripes in one of the transcripts of participants C3 and C4-colour codes used to identify nodes, merged in themes and subthemes. Social changes and existing needs of the rural, ageing communities where brought up together.

