

## Participation in rural heritage within landscape: a systemic approach exploring social and institutional impacts

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### **ABSTRACT**

This paper argues that there is a reciprocal relationship between social and institutional impacts derived from participation in heritage. By reciprocal relationship, we refer to how participation in heritage projects can benefit community wellbeing while leading to improvements in heritage management processes (Smith,2006) and ultimately enhance heritage protection, and the other way around.

More specifically, the paper looks at heritage participation in rural landscapes through an in-depth case study of participation in Scapa Flow Landscape Partnership scheme, a Heritage Lottery Fund (HLF) supported scheme (2009-12), realized in Orkney islands, Scotland, UK.

42 semi-structured interviews were conducted with local inhabitants, including 17 heritage professionals and 25 community members who were involved in the projects. The qualitative data were analyzed to detect perceived social impacts on community level and impacts on institutional functions through both perspectives. In order to understand how impacts are interrelated we employed using causal loop diagrams, a tool from system dynamics to illustrate causal relationships between variables and understand how participation has contributed to output and finally impact formation.

One of the key causal interrelationships observed is that increased social capital at community level also reinforces engagement with heritage and its protection, where one seemed to reinforce the other in the long run. The creation of new social networks around heritage lead to reinforcing sense of place and community awareness of rural heritage.

The paper suggests a novel approach for complex heritage project evaluation for improving processes of participatory project delivery and enhancing partnerships between community and institutions.

*Key words; participation, engagement, rural landscapes, social impacts, heritage for sustainable development, institutional impacts, reciprocity*

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## **Biographical notes**

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## **Introduction**

This paper argues that there is a reciprocal relationship between social and institutional impacts derived from participation in heritage. Although there has been recently increased interest between researchers and policy makers in defining social impact and value of heritage projects (Jones, 2017; Dümcke & Gnedovsky, 2013), the interrelation between social and institutional impacts of participatory heritage projects has not yet been explored in recent research.

By institutional impacts we refer to change in internal processes, from value assessment to project planning and delivery, as well as creation of partnerships and networks. By reciprocal relationship, we refer on how community participation in heritage projects can affect both community wellbeing and support institutional functions and impacts on one can trigger impacts on the other as well, as community's behavior affects professional practices and vice-versa,. For example institutions by beneficially transforming processes of heritage management (Smith,2006) in terms of inclusiveness they can fulfil their role, increase effectiveness, enhance community contribution to safeguarding heritage and thus, ultimately achieve a *sustainable management* approach in the long run. Therefore, the notion of reciprocity implies that community and institutions are interlinked through participation; positive benefits in one of the two may affect the other as well in the long term.

More specifically, the paper looks at heritage participation in rural landscapes, a rather under-examined context for studying community projects, and analyses community and experts input via 42 semi-structured interviews focusing on perceived wellbeing impacts and institutional impacts that can support a sustainable heritage management. In a UK context, heritage trusts usually act as *informal heritage institutions*, actively involved in heritage management processes and thus dealing with tangible and intangible heritage protection.

By combining thematic analysis (Braun and Clark, 2006) with causal loop diagram analysis, (Kim and Andersen, 2012) the research provides a framework for analysis of community/institutions interrelationships at a systemic level. It suggests a novel, holistic approach for complex heritage project evaluation for improving processes of participatory project delivery and enhancing partnerships between community and institutions.

### Background and researcher's assumptions

Reflecting on Waterton's and Smith's rightful critique on the misuse of word *community* within heritage studies (2010; pp.5-6), we choose to adopt a rather pragmatic -and to a certain degree restrained- definition of it here: looking at communities of place (local residents) and communities of interest (members of heritage trusts and associations), based on a geographical area of residence -that of Orkney islands in Scotland for the case study chosen. This choice allows us to focus on bottom-up, community-produced definitions of wellbeing adjacent to contextual characteristics of a specific place, a rural and remote island context.

The concept of reciprocity is also acting as our theoretical framework –the term borrowed from social psychology conceptualizes participation as a process of social exchange between institutions and community members :one's behavior towards another is mediated through trust, sanctions and norms of social life, while each actor/ social agent influences each other's behavior.

Some background assumptions that form the base of the research are presented here:

#### *Heritage as a process and participation as bridging the gap between experts-non experts*

Firstly by viewing participation as a process, we reflect on the critical heritage body of claims (Smith,2006; Waterton 2017: 4-16; Appadurai 2004: 59) that advocates for looking into heritage making (Adell et al, 2016) , interpretation and valorization, as a process rather than product.

This way, we negate any simply output-based approach to evaluation that a focus on material conservation may encourage, that poses principal focus on material outputs. Instead, we set a new focus: to understand impact as change rather than as material output, and in that sense understand it more holistically through studying interactions between social, spatial and institutional changes as results of participation in heritage management.

The research brings together opinions on perceived impacts by both professionals and local residents, specifically belonging to three groups; professionals -managers and planners and participants. This specific research design aims at merging the gap between *experts and non-experts* (Sorensen & Carman, 2009; L.J. Smith 2006; Waterton 2005); in understanding of the scope, objectives and outcomes of community-based heritage projects. It also aspires to unravel how they can best be related to social wellbeing in a rural context.

#### *Heritage institutions as social organizations: from theoretical to operational definition of impacts*

The paper is based on a theoretical conceptualization of heritage as a social practice (Auclair and Fairclough 2015; Smith 2006; Harrison 2013) and a public good: heritage organizations are conceptualized as comprised of a community (or a distinct social group) of experts/heritage professionals while having social responsibility towards delivering heritage conservation, interpretation and documentation projects while utilising public funding. Using these resources they should aim at alleviating and improving social issues prevalent in the context where they work and contributing to social wellbeing (NEF, 2009). Several evaluation reports and relevant

studies in the UK have been advocating for the role of heritage participation to support social and individual wellbeing, defining aspects of impact (Clark and Maeer, 2008; Maeer and Fawcett, 2011; BOP Consulting, 2011; Maeer et al, 2016).

The process of participation is in the centre of the core role of institutions (part of their existential purpose we could argue) as it enables communication, identification of communities needs but also greater prospects for inclusiveness and efficient project design that can respond to those needs.

#### *Heritage Institutional impacts and towards sustainable management*

Furthermore, we consider local long term, post –project engagement with heritage and social approval of projects as main factors for assisting in sustainable heritage management (Unesco, 2010) and governance at local level, as well as long term safeguarding of heritage. Those can be considered factors with high leverage in remote and resource restricted contexts, which rely heavily on traditional approaches (*gatekeepers*) to ensure long-term protection (see Ostrom; 2002 and Pretty; 2003 based on natural resource management). Under this light, the leverage of participation for altering the distribution of material resources and balance between material/human resources within heritage institutions is also considered crucial for achieving goals of project management.

#### *Heritage, communities and place: conceptualizing impacts for heritage and rural landscape protection*

While the concept of reciprocity guided initially our research question towards a “socially-driven conceptualization of wellbeing”, viewed through the concept of social capital (Bourdieu 1984, Putnam 2001) the first on-site interviews revealed early on, that this conceptualization had to be considered in parallel with the effect of spatial and contextual elements on the behavior of research participants. The concept of sense of place seemed more intertwined as exploring their stance towards institutions contains stance towards heritage and place itself.

Sense of place, is actually a concept under scrutiny in heritage studies lately, specifically in relation to engagement with heritage and public participation (English Heritage, 2015; Graham et al. 2009; Hawke, 2011); and rightfully enough we would say as it enables study of intangible connections (Swensen et al. 2012: 214) with heritage, making it a valuable tool for research around landscape qualities and their perceptions from communities.

### **Case study and sample**

The paper develops around an in-depth case study, representative of heritage participation in a rural and remote context, looking at rural landscapes on the Orkney islands, Scotland, UK.

The analysis looks at interviews with participants who took part in volunteering and community-led heritage projects realized within the Scapa Flow Landscape Partnership scheme<sup>1</sup>, a Heritage Lottery Fund (HLF)<sup>2</sup> supported scheme realized between 2009-12, looking at rural landscape as the bearer of meaning and heritage connections for the local community .

While the scheme included 44 small projects, five core projects were identified as most participatory and including activities around a diverse array of heritage assets representative of the rich rural landscape in the context of Orkney. These cover: a. Neolithic archaeological sites' excavation with the community, b. Second World War site restoration by a group of volunteers, c. historic boats restoration by volunteers within a local museum d. A vernacular “crofter’s” house restoration and reuse as a museum (Rackwick *Craa’s Nest*), self-initiated and e. a parish church community -led reuse and interpretation project in Hoy (Hoy Kirk).

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<sup>1</sup> <http://www.scapaflow.co/>

<sup>2</sup> <https://www.hlf.org.uk/looking-funding/our-grant-programmes/landscape-partnerships>

All those do not refer to the same level or type of involvement: engagement with the first three refers to participation described as volunteering and including the relevant project design/delivery process, while the last two clearly describe community-led generated and developed projects where professionals (heritage officers) contributed as facilitators in the delivery stage. This coverage allowed multiple typologies of participation to be represented (within the broad spectrum of community engagement ) and also allowed comparisons between respective impacts stemming from different processes.

Heritage institutions managing heritage in Orkney fall under three main categories; local museum and visitors centres under the supervision and managed by the Orkney Islands council, called 'Orkney Heritage', (archaeological or historic) sites/visitor centres functioning under the auspices of Historic Environment Scotland (HES) and a number of independent museums run by a board of trustees, usually under the constitution of charitable trusts. The project's chosen represent most of the practices applied by all those, thus providing a realistic picture of current challenges and work of professionals in the context under various institutional structures.

#### *Social and institutional characteristics of the case*

Orkney is actually an archipelago of 20 inhabited islands (and another 50 uninhabited) off the north-eastern coast of Scotland, featuring a rich rural landscape. The research specifically focuses on local communities residing in the mainland and two of the adjacent connected islands (Hoy and South Ronaldsay), around the area of Scapa Flow, hosting a population of around 500 and 900 people and respectively.

Orkney's island communities comprise of a total of 20,110 people (Census, 2011), with almost half of it residing in the mainland (Kirkwall). Pilot field work confirmed that Orkney faces some issues common for most rural and remote contexts; seasonality combined with a certain lack of (physical) accessibility especially the winter months, which may escalate physical and social isolation for its residents, exacerbating physical distance effects, inherent to landscape features. Restricted resources and scale (a geographically bounded small area) also suggest restricted life development opportunities for local people that subsequently encourage increased outward migration and lead to a rather ageing population trend (Census 2011). A recent population increase is only attributed to high in-migration, an important attribute affecting communities' social cohesion.

#### *Sample identity*

We performed 42, semi-structured interviews carried out with community members (25) and heritage managers (10) as well as local authority representatives /planners (7) in Spring 2016 and Spring 2017 representing the five heritage projects, revolving around sites and their surrounding landscape.

Local population representatives in the mainland area of Scapa Flow (including the islands of Hoy and South Ronaldsay parishes/communities) were sampled using the snowball method (Biernacki and Waldorf, 1981; Bernard & Bernard, 2012; 97), whereby local managers acted as starting contacts. Some of the participants may have been residing on mainland (Kirkwall or around) but were selected on the grounds of their links/level of engagement with the projects or the area.

### Conceptualization of social wellbeing impacts, changes in institutional practices and criteria for mapping change

The analysis of data aimed initially to identify:

a. Social impacts and changes through processes of creating bonding, bridging and linking social capital (Gittel and Vidal, 1998) and networks. The direct (individual level)/indirect (collective-community level) impacts on wellbeing that this process generates are in focus.

b1. processes of change in institutional behaviors and practices, instigated through local community's input and reactive changes in management practices. From a social capital perspective, these can be divided in internal (project delivery and institutional strategies-related changes) and external processes (changes affecting higher level management and strategic planning within heritage institutions). They are often related with their relationships with audiences, other institutions and social actors or networks (Woolcock, 2001), cooperation and partnerships.

b2. heritage related impacts are mapped to understand how human interactions and behaviors affect heritage protection processes-eg. lead to changes in material state of conservation or attitudes towards appreciating heritage elements in the landscape (eg. awareness and significance attribution, expressed through safeguarding actions).

The interrelation between those types of behaviors and impacts they brought could show were reciprocal or other types of connecting links was present.

### Methodology of analysis and use of systemic analysis with CL diagrams

The methodology followed for the analysis combines two qualitative methods/stages:

Firstly we performed thematic analysis, facilitated by the use of the qualitative software NVivo in two stages- including both open and axial coding. This enabled the inductive formation of a linear, descriptive set of variables under social wellbeing impacts and under institutional impacts (divided in internal, within institutional processes and external relating relationships /networks between and more/other institutions) that could be grouped in certain core typologies of impacts. The axial coding phase, enabled a development of more complex, explanatory/analytical themes referring to the interrelation between impacts (that may or not be reciprocal). Due to the size of this paper, we decided not to provide detailed findings of this phase here but will focus on the causal loops design as a novel analytical tool for impact evaluation and mapping of causal relationships.

Secondly we coded again the transcripts, following a cause-effect pattern for codes (between behavior leading to perceived impacts), in order to be able to map clearly causal interrelationships between the codes/variables. Keeping memos and notes in Nvivo, assisted us to utilise already noted associations in this process following methodological suggestion by Eker and Zimmerman (2016) on how to use QADAS in linking causal links with causal loop diagram information.

The identification of the cause and effect variables provides the basis for creating a causal loop diagram. A causal loop diagram visualizes the feedback loops that 'are assumed to have caused the reference mode' i.e. the behavior of key variables over time (Randers 1980, 119).

Using these causal links, we created causal loop diagrams, using in Vensim software, depicting causal interrelationships between social-institutional and heritage /spatial impacts of participatory projects following principally the methodology applied by Kim and Andersen (2012), to translate effectively textual data (qualitative datasets) into cause-effect variables, that form the base for developing CL diagrams Coding resulted in tables of variables categorized as cause and effect codes (see Table 1).

Following, relationships between the variables were identified: either positive (reinforcing) (e.g. the more...the more) or negative (balancing) (e.g. the more...the less) (see Sterman, 2000; 155) (see application in figures 1-3). The data were afterwards transferred to Vensim, a program enabling modelling of causal relationships at systemic level and causal loops design (figures 1-3).

Finally, looking at the series of cause-effect relationships between variables again, we merged and renamed several codes to reflect, well-structured and more abstract variables that can allow to see repetitive patterns of behavior while being reflective of terms referred in the theoretical framework described earlier: the final variables describe parameters of social wellbeing/social capital, sense of place, landscape heritage protection outputs and institutional processes (internal and external).

The method enabled the production of independently read loops (per participant) that were afterwards grouped and partly merged with loops of managers to reflect recurring patterns of behavior that were evident in the data for both groups, offering the opportunity of triangulation.

#### Findings from causal diagrams

We will use here the analysis of behavior of a set of participants, C22, C23 corroborated with interviews by managers M4 and M11 who collaborated with them in a community-led project (see projects d and e of the Scheme, as referred earlier), to show how results evolved through the analysis of individual loops. The participants C22, C23 were chosen as representative for perceived impacts generated -they are a retired couple, holding a prominent role in the genesis of a heritage trust on the island of Hoy.

They were initially involved in a five year-long process of safeguarding a local parish church, undertaking the management and guardianship of it, supported through change of its use. Following, between 2009 and 2012 they were involved in a series of short term community led interpretation activities on the island of Hoy, within the newly reused Hoy Kirk, covering multiple aspects of social history of the island and its built and natural heritage: activities from collecting archival material to digitizing and creating exhibition material to share it widely. The heritage officer (participant M11) assisted them during the process of delivering projects, while M4 overviewed the process and dealt with distributing funds. During this process, they engaged with many cultural and heritage institutions in mainland Orkney.

All three diagrams from the analysis of the transcript C22/ 23 led to the formation of 3 groups of loops, each of which refers to a theme developed in the sections that follow, showing social, institutional, or place -related impacts of the community's engagement with the projects and connections between them.

The loops cover different levels of analysis in terms of looking at the effect of impacts:

(1) When and which part of the process? (2) For whom and to what level?

→impacts to participants-social and managers practices of project delivery (observed during delivery period 2009-2011 mostly)

→Impacts to wider community/ies of place (by use of project outputs or further adoption of practices, eg. development of models)/to institutions as partnerships with communities or other institutions later on (developed post-project period 2012-now)

## 1. Impacts of heritage participation for sustaining community and place

Figure 1 (figure1 ,theme 1) shows how community through their initiative and aiming at protecting heritage , safeguarded community identity, and sustained identity of place that was at imminent risk, due to depopulation of the rural island of Hoy.

Participants C22, 23 responding to the imminent *risk of loss of a communal asset (parish church)* after it has fallen in non-use state *by developers 'who were speculating the area'*, decided to act and gain its *ownership*.

Together with a group of local people in the island of Hoy, *established a heritage trust/formal charity*, aiming initially at *protecting the local parish church*: by achieving the *change of ownership* (with a minimal payment to the Church of Scotland) and thus be able to *buy the church*.

By *reusing the church as a community and cultural heritage space* they revive the sense of belonging to community to the few, younger members (*reinforcing loop R7+*).

Reuse acts in a balancing way towards *safeguarding history and identity of the place* (as a communal living place (*balancing loop B1, reinforcing loop R6+*), with a crofters community settlement), but also as an approach to development of their place: the trust opposed the trend of transforming the traditional buildings in the area (like for example the neighboring Rackwick cottages<sup>3</sup>) into holiday homes that suggest use of place primarily by 'non-locals'.

The same Figure 1, shows how community's actions towards sustaining the church and transforming it to a community centre, contributed to sustaining community in place by restituting lacking social infrastructure. The church's designated new function, supports equally social gathering and community-build up between the few residents of Hoy, empowering them to develop more common activities together: the continuous use of it provided a new social hub for the community to gather. Parallel its new functions, required main jobs for maintenance, providing jobs locally (part time roles), including skilled jobs for incomers and young people (*reinforcing loop R9+*). In this case sustaining both heritage and community in place is observed (*balancing loop B0-*): the new hub actually has some potential to counteract the effects of depopulation/ demographic transformation (uneven distribution of age groups, within a significantly higher percentage of ageing community). It was evident from the interviewees comments that it triggered an increase in perceived standards of livability in the area, providing motivations for younger people to stay or re-connect with the area.

*"Interviewer: Since you remade the church into a heritage Centre how did it work? is a meeting point ..It has received lot of interest for people who have gone away and they come back..so it's not just visitor, they come back to holiday or they have families, grandparents that lived years ago here,..they just have a look at the place. We try to hold various events, around the year.."*  
(Quote form Transcript by interviewees C22, C23)

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<sup>3</sup> <https://hoyorkney.com/visiting/accommodation/>



## 2. Impacts of heritage participation for connecting communities and institutions towards safeguarding heritage

Figure 2 shows how participation leads to creation of institutional networks and supports capacities for community-led projects' that can be sustained through partnerships. This is achieved through four pathways, showing strategies in different phases of the projects life (asset ownership/management, functions/program planning, interpretation project delivery and safeguarding outputs of conservation and interpretation projects) :

1. Firstly the members of the trust, provided clear pathways to sustaining the heritage trust and managing the church as an asset, through their vision to provide *financial self - sufficiency* to the church/community centre and economic benefit returning to the local community, supporting local livelihoods. Translating the vision into strategic actions, led them to pursue and establish a *community turbine* scheme to sustain the running costs of restoration works within the church in collaboration with the Local Hoy Development Trust (linking social capital), that delegates with the Orkney Council and shares funding opportunities with them. Fig.1(*Reinforcing loop R6+*)

2. *Regarding supporting programming and delivering projects of the trust*, the leading members strategically started looking for *capacity and resources support through collaborations and securing funding from external sources, primarily relying upon their own social and cultural networks*. The leading members' cultural interests and social networks (via *civic participation and membership in local cultural groups*) coupled with the interest of local festival organizers, led to supporting a network of patrons for assisting *financial sustainability* Fig.2 (*Reinforcing loop R3+*) later on but also brought in their networks with artists to continue realizing events in the church (programmatic planning)- that sustained local participation and interest.

The collaboration between professionals and non-experts was also reinforced as the norm of reciprocity sanctions the exchanges: the professional heritage manager (M4) working closely with the heritage trust members acted as facilitator, creating links with other professionals and outsourcing capacities from other institutions (Orkney library and archive, as viewed in Fig.2 (*Reinforcing loop R2+*) to support the the ongoing maintenance of the outputs [recording and archiving project, run by local community members]. This increased satisfaction in trust members and ensured collaboration with the experts continued after the end of the funding, sustaining capacity building and capacity exchange (knowledge and material resources/infrastructure).

*"We did a bit of training with them.... So it has been a long project to get that info [referring to family histories and social history data gathered by locals] into that heritage system, to get that digital information. That's in recognition that we cannot have physical artefacts, but we want to encourage people to have access.. It is to be available and also be accessible!"*

*(Quote from transcript with manager M11)*

Increased visibility of community -achieved outputs that attracted institutional interest in the trust's work -for example archeologists from the local University of Highlands and Islands (UHI) approached them for further projects (linking social capital). Through the process of creating a project together with local volunteers, the professionals involved contributed to co-defining values of landscape and plan new projects that fit within locals' heritage interests Fig.2 (*Reinforcing loop R4+*).

### 3. Impact of engaging communities in all phases of projects for socially impactful and sustainable projects

Figure 3 depicts many social and heritage impacts as a result of the approach to management and regulation/access followed presented in detail in Figure 2. Reinforcing loop R1 (fig 2) shows how adopting an organic approach to co-creating interpretation, with the heritage officer (M4) holding a facilitating role, enhanced satisfaction while increased community's commitment and contribution to project outputs, M4 hold the role of sharing roles between members, allowed them freedom to select what they were more closely related to (fig. 2 *reinforcing loop R1+*).

*Community members not only took pride in and, endorsed in the results but also were empowered through this process, and continued managing the outputs themselves: The exhibition of the research projects and the film projection and events in the church, (primary outputs of the process) functioned also as commemoration and sharing activities that enabled intangible elements of heritage values related to landscape to come to surface.*

Community ideals and approach to regulating use and access of heritage assets/resources, ensuring protection by inspiring responsibility towards heritage and place (Figure 3). The trust members belief in community spirit combined with their willingness to share it outside of their own close community limits, suggested a gatekeepers' approach to managing the church: allowing open access to the church, while keeping a visitor book for gathering comments (*Reinforcing loop R12+*) That, inspired *responsible behavior* of visitors and locals: as a response, undertook actions for a self-regulation of the space of church to prevent vandalisms and guaranteed the *non-alteration of its physical characteristics*.

Similarly to physical access, the members have continued to shape their approach towards offering online *open digital access (reinforcing loop R16+)* to the archive they collated, through the core -interpretation projects. They relied on the heritage officer, to *liaise and collaborate with Orkney library officials* in the mainland, and supported fundraising for a role of a *skilled digital archivist* (incomer) and a young local apprentice that devoted long hours working on the material since 2012, through both a part-time contract and volunteering time.

This compensated for the lack of local skills in the depopulated locality of North Hoy: the incomer's skills and knowledge this way supported the project (acceptance of new knowledge) and the community's vision for the archive and enhanced social integration of immigrants, supported intergenerational links between young and older, while offered even opportunities for improved livelihoods to sustain young population in place.

*" When you come from somewhere like that [referring to the city] you think its bit lonely, but no she loves it! You know the hustle and bustle, you couldn't get anywhere, you crawl along in a vehicle, even public transport..depending on time of day..she just came back.. Interviewer: Are there or more like her form other parts of the island?  
oh yes, it s good, ;cause they bring their skills in..it helps rejuvenate the place..They combine skills with what people here know anyway!" (Quote from Transcript by interviewees C22, C23)*

Discussion: the leverage of participation for *Community cohesion and empowering communities to protect their rural heritage*

The particularities of rural communities (facing issues due to insularity and remoteness) exacerbate social problems like social isolation and while high percentages of ageing population reinforces the slow depopulation of rural areas.

The loops corroborated findings of thematic analysis, indicating a crucial role for heritage to affect social wellbeing and social capital in a rural context, by (i) affecting processes of social integration of incomers, (ii) supporting cohesion between parishes but also (iii) bonding between local community members experienced both at individual and at a group/community level through reinforcing sense of community and sense of place.

(i) Many of the incomers who live now locally, found roles within paid or voluntary tasks with the trust activities, allowing them to be smoothly integrated in the local community while counter-acting for skills/expertise missing locally and supporting the common goals while understanding more about the place's identity (fig. 3 *reinforcing loop R14+ and R8+*). This enhanced common definition of heritage values and enabled sustained activities in the heritage/community center that valorized rural heritage.

(ii) and (iii): One of the key causal interrelationships observed, is that people's interactions with the church (a rural heritage asset) and intangible heritage commemorated through I, thanks to open access and sharing (fig.3 *Reinforcing loop R12+*), lead to increase of social capital in two levels: linking individuals to their local community, assisting people to *create networks* and *fight social isolation (bonding)*, and linking communities of place, creating *social networks between neighboring parishes /communities (bridging)* and balancing loose social cohesion at an island level, by increasing communication and exchanges (fig. 3 *balancing loops B10-, B11-*). Our results in that sense are aligning with previous heritage research findings on the subject; Lewicka 2005, 2008; Murzyn-Kupisz & Działek 2013; Wiesinger 2007; Mihaylov and Perkins 2013), showing how people's association with rural elements of the historic environment increase aspects of social capital and reinforcing sense of place.

Existing research on social capital in rural contexts, has identified even potentially negative (counter-productive) effects of bonding on bridging social capital (see Granovetter, 1973) (i.e. too much introvert bonding impeding linking with other communities), reinforced by the idea of celebrating a unique local identity that may separate groups between different parishes. An effect like that is observed in heritage-related studies like the one by Murzyn-Kupisz and Działek (2013). In the Hoy case, those negative impacts are counter-acted by the effects of success of the project as a community venture that can support local livelihoods while promoting local identity: in fact other parishes approached the leading group, asking for advice and reproduced the heritage trust model instead of separating themselves further (fig. 3 *reinforcing loop R13*).

#### *Conclusions: reciprocity and synergy*

Reciprocal and synergetic effects were manifested in our analysis of participatory projects, through two possible pathways:

- Participation triggering social change that subsequently triggered further engagement with heritage or further socio-economic support for communities or
- Participation supporting heritage management goals (and common definition of values, within or outside institutional frames), leading to social wellbeing benefits for local communities and enhanced long-term involvement in heritage which supports safeguarding.

Reciprocity is observed in cases where participation allowed for social integration and this enhanced also knowledge exchanges and enabled efficient approaches to heritage safeguarding (Appendix, eg fig.3 *loops R8+ and R14+*).

Most evidently reciprocity was observed when:

(i) heritage projects served a primary social function (social and spatial infrastructure) or  
(ii) addressed social needs (beign relevnt to community eg. fig 1, *Loops R6 and R7*) that as a consequence increased local engagement and ensured sustaining of heritage interpretation and making activities. These led to increasingly important heritage benefits, that extended reciprocal volunteering/increased sense of place to touch community action and regulation of heritage resources and place-making.

(iii) Heritage was sustained through knowledge exchange: this suggests that capital transformation is present- knowledge is transformed to capacity to act and exchanges between communities and institutions include both material and immaterial resources. (eg. knowledge exchange has led them to achieve financial sustainability and access material resources). This is concurrent with Bourdieu's analysis on how social capital is being exchanged with various forms of capital (human, throughout the processes of social exchange. (see also Siisiäinen, 2000).

In most cases simultaneous or synergetic benefits (but not reciprocal) were observed- both institutions and communities would benefit for the process. However those benefits do not always trigger long term changes through reciprocal exchanges [that imply mutually reinforcing conditions that continue interacting in time).

Many simultaneous benefits were observed where project outputs or processes, enhanced local socio-economic sustainability, see for example loops: R1, R13, R14, R16, R5 (see Table 2, Appendix). Financial support through job creations constitutes the base for sustaining people in place and creating a more stable social network, given the imminent risk of depopulation.

#### *Closing remarks : A new tool for mapping change and accounting for heritage impacts*

Although some of aforementioned social impacts from participation and institutional practices have been discussed in the literature (Murzyn-Kupisz & Działek 2013; Addell et al, 2015; Swensen et al, 2012:1-19), the exact pathway and how one reinforces the other has not yet been researched and evidenced. This renders the research original and suggests that looking at relations between social and institutional impacts is crucial for heritage organizations to define better their contribution to societal impact and their internal changes.

This paper provides the first systemic attempt to illustrate the causal interrelationships between impacts by offering a novel methodological approach applicable to complex heritage systems such as community interactions with rural heritage landscapes.

Causal loop (CL) diagrams, a single tool from systems thinking enabled a mapping of the heritage-community-place interactive behaviors within a certain period of time, representing in our case project planning, delivery and post-project phases.

We showcased here the application of a method for mapping causal effects of participation in heritage for both heritage institutions and communities. The tool can be particularly useful when adopting a qualitative or mixed method approach for impact evaluation as a response to a systematic and yet non-indicator oriented approach to evaluation.

We hope that this approach will inspire academics and practitioners, dealing with heritage management, to think "beyond boundaries" of specific sites (Ackerman, 2014), understanding further the complex socio-spatial associations between communities and their heritage. Moreover, by showcasing the interrelationships with managers behaviors and roles, we aspire

to enable practitioners see the wider heritage field within which they operate from a fresh and holistic perspective.

Finally we consider that the systemic analysis findings can be informative not only for improving management practices, but also for policy level decision-making, enabling interdisciplinary communication and common goals for communities and institutions to be formed that would better integrate heritage within local sustainable development plans and support social sustainability.

Table 1: Coding chart showing cause -effect variable creation for transcript of C22-23- and how by defining behaviours, we start creating the base of a main Causal diagram. Positive and negatives are shown with -+ arrows in the diagrams, while the sequence of interconnected variables, creates the loops.

Speaker name: C22, C23	Transcript page: 2					
Main argument: the role of in -migrants in turning around demographic issue /interaction between heritage charity job creation and place sustainability						
Causal Structures	Cause variable:	In migration (and new skills coming in)	Depopulation (ageing community)	Create network of patrons	Heritage centre sustained job posts	Place rejuvenated*
	Effect variable:	Depopulation	Risk of loss of place	Heritage centre sustained job posts	(Existing )local job offers	Risk of loss of place
	Relationship type:	Negative	Positive	Positive	Negative	Negative
Variable behavior	Cause variable:	Increase	Slowly increased	Increase	stable to increase	Slowly changes
	Effect variable:	Slowly decrease (depends on children/young ration)	Quick increase	Stable-sustained	Increase	Slowly counter-acted
*via heritage/community centre, definition of socio-cultural values to preserve and follow-up changes in interest for place						

Table 2 (Appendix): List of loops in all three thematic sections of the analysis and reciprocal relationships observed

Section	Loop name	Description	Reciprocity
1	Balancing loop B0	sustain people in place	
2	Reinforcing loop R1	organic evolution of project	
2	Reinforcing loop R2	institution-trust network-linking Social capital	
2	Reinforcing loop R3	networks sustain trust and support socializing new functions	Yes
2	Reinforcing loop R4	co defined and re-defined values	

1	Reinforcing loop R5	immigrants sustain trust and share skills (indirectly reinforce rejuvenation)	Yes (simultaneous)
1	Reinforcing loop R6	function as community centre-protects character of place	Yes, R6 with R7
1	Reinforcing loop R7	asset to community protection	
3	Reinforcing loop R8	immigrants skills enable heritage bequest	yes with R14
3	Reinforcing loop R9	heritage/ social hub centre triggers participation	Yes with R13
3	Balancing loop B10	participation balancing intra-island divisions	
3	Balancing loop B11	bonding and bridging social capital	
2	Reinforcing loop R12	open physical access approach reinforces trust , which increases guardianship)	Yes – with R15
3	Reinforcing loop R13	adoption by neighboring communities	Yes, (Simultaneous)
3	Reinforcing loop R14	immigrants involvement enables social integration	Yes with R8- (simultaneous)
2	Balancing loop R15	lack of trust to professionals allows heritage fabric neglected, focuses on intangible	
2	Reinforcing loop R16	digital access approach increase participation from other communities	Yes- (simultaneous)

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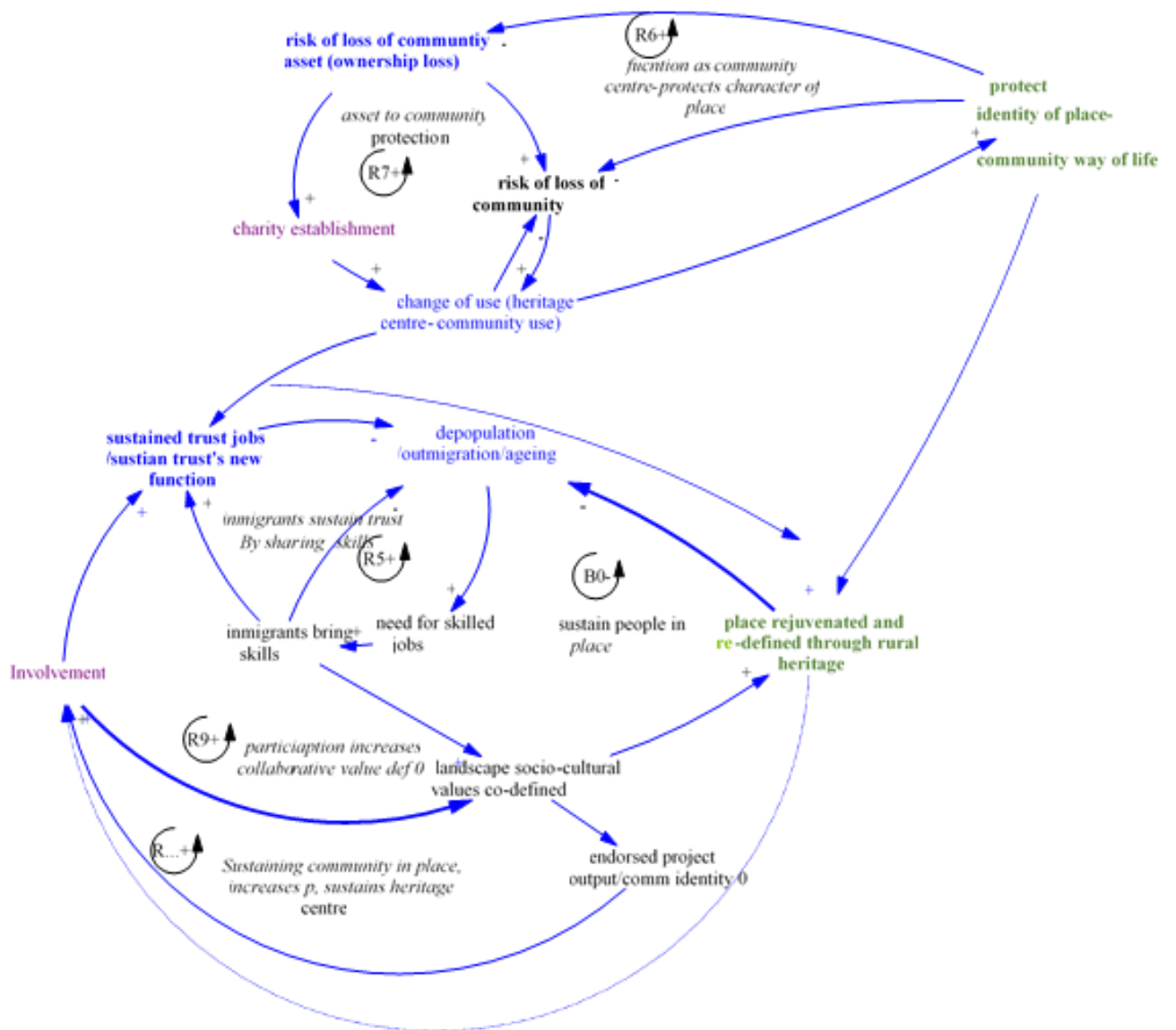


Figure 1: Theme 1, impacts of heritage participation for sustaining community and rural place

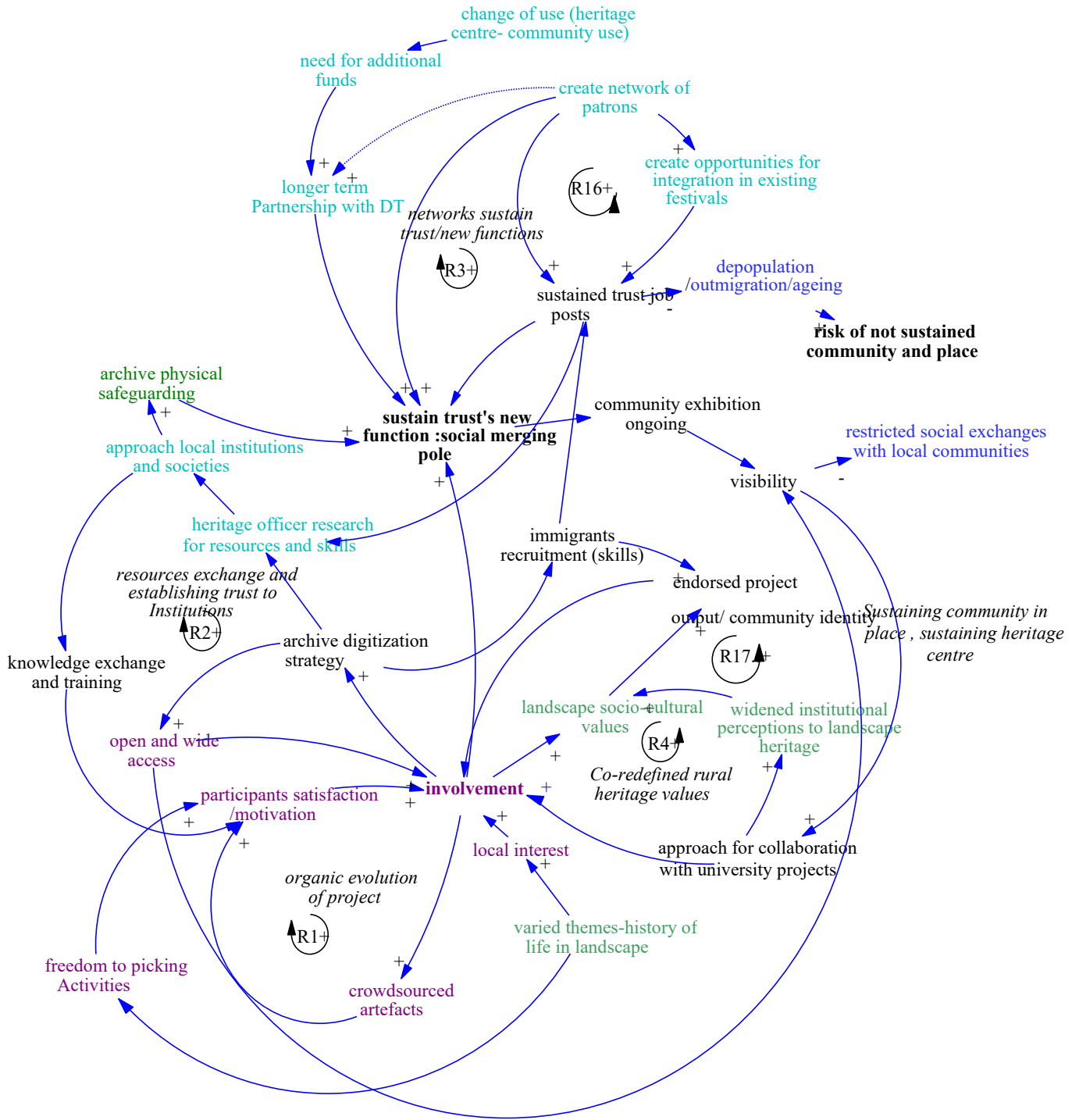


Figure 2: Theme 2, participation leads to creation of community-institutional networks and sustains community-led projects

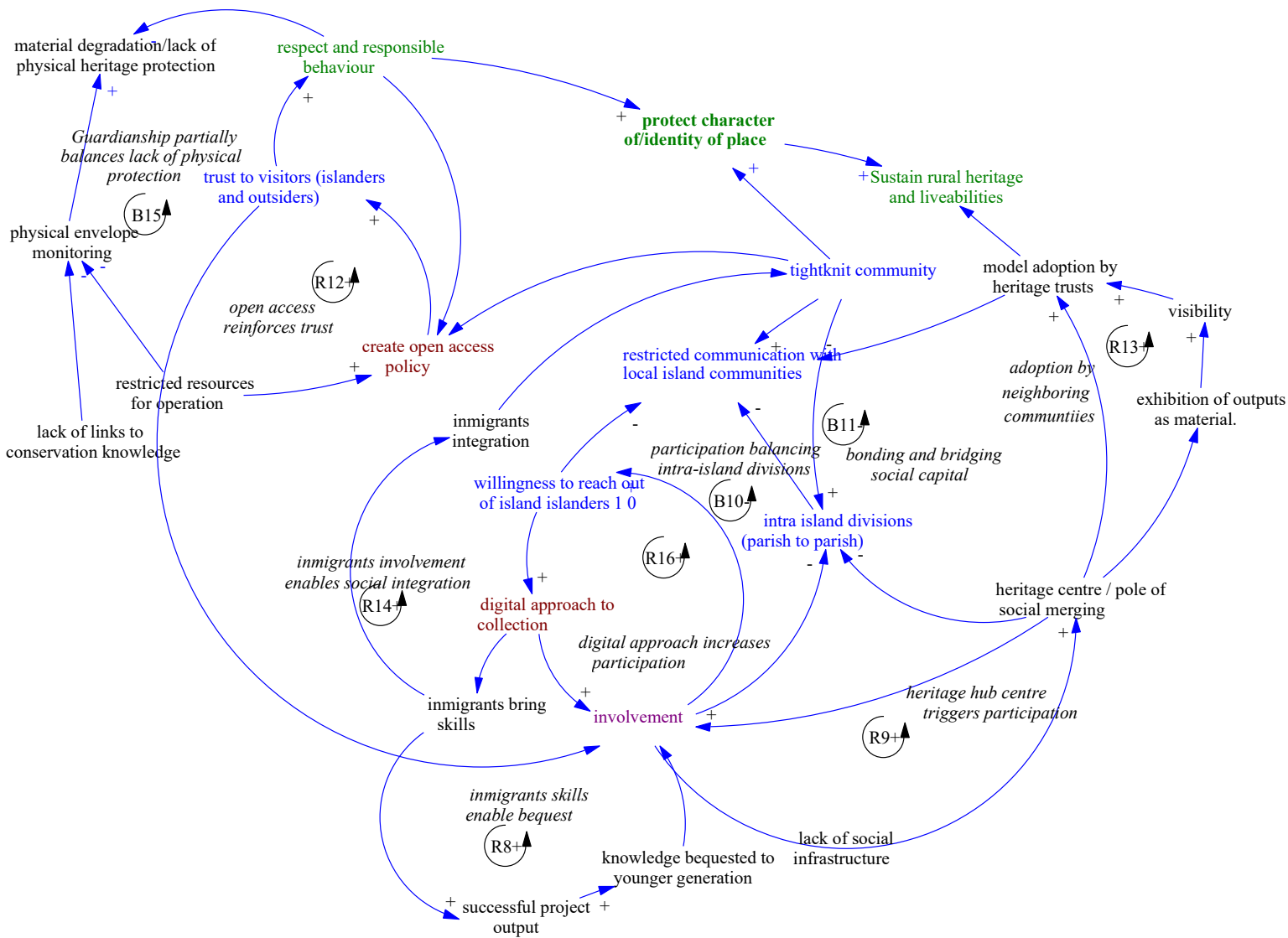


Figure 3: Theme 3, social and heritage impacts as a result of the approach to management and regulation/access