Rural Community Engagement for Heritage Conservation and Adaptive Renewal

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Abstract

Systems thinking can shed light on important relationships and conditions that affect community engagement activities. While robust tools like the community capitals framework and the sustainable livelihoods approach provide valuable context for engagement projects, additional insights can stem from models that describe the ebb and flow of different types of capital. This paper uses a well-studied ecosystem model called adaptive renewal (AR) to contextualize heritage-related challenges and opportunities in four rural communities on the Canadian prairies. Based on a reflective case-study analysis, we applied the AR model to focus group and semistructured interview data collected as part of a Museums Association of Saskatchewan (MAS) project aimed at using local heritage assets to build sociocultural and environmental capacity and attract investment. The MAS project identified four themes that could be addressed through training and policy changes, including concerns about funding, limited human resources, a lack of public services, and a desire to preserve and build on memories. By mapping each community onto the AR model, we uncovered additional insights about community resilience and other heritage-related challenges and opportunities. The AR model is likely to be a valuable tool for planning or assessing community engagement projects because it reflects the dynamic nature of socioeconomic and cultural relationships that affect community dynamics and local well-being.

Along with climate change and other environmental trends associated with the Anthropocene (unofficial term for the current geological epoch, defined by human activities; Nixon, 2014), corporate agriculture, depopulation, and other localized social and economic processes have disrupted rural communities. Many of these communities are trying to sustain themselves by conserving and building on tangible and intangible aspects of their cultural and natural heritage. The projects that a community takes on, such as collecting and promoting stories about an important local industry (Catherwood, 2017), depend on their capacity, their underlying motivations, and complex and ever-changing relationships that influence critical flows of funding, material, and information. The currencies involved can be viewed as different forms of capital, a term often used in economics, planning, and community development work.

Researchers and community developers use robust models to study the availability and distribution of capital. One of the most common, the community capitals framework (CCF), can be applied by using appreciative inquiry, asset mapping, and other strategies that have an impact on investment decisions. The CCF considers different types of capital—especially human, social, and financial—and tries to encourage an "upward spiral of positive community change" (Mattos, 2015, p. 3). Another model, the sustainable livelihoods approach (SLA), aims to reduce poverty by considering the decisions, opportunities, and local contexts that affect households, including how the availability of different resources is influenced by larger institutions and organizations (Morse & McNamara, 2013). Along with resource management strategies that lead to enhanced levels of income, health, and well-being, SLA projects aim to create resilient communities that are able to weather future stresses and shocks (Gutierrez-Montes et al., 2009).

While some aspects of a community or region can be treated as static assets for planning and assessment purposes (e.g., buildings and landforms), all forms of capital are ultimately dynamic over ecological or geological timescales (Holling, 2001). Also, important relationships link different types of capital together or operate across a range of spatiotemporal scales, creating situations in which small, fast processes disrupt or are constrained by bigger, slower ones (Holling et al., 2002). In this paper, we show how appreciating the variable nature of capital and the potential for cross-scale interactions can provide insights about the local, regional, and global circumstances associated with community engagement work. We

reflect on focus group and interview data collected for a larger study of heritage conservation issues to map selected prairie communities onto a well-studied ecosystem model known as adaptive renewal (AR). While previous AR studies have uncovered important insights about community sustainability, governance, and collaborative learning (Berkes, 2017), the model has not been used to guide or assess engagement strategies aimed at local heritage assets.

To address this gap, we consider what AR can tell us about the history and current state of heritage engagement activities in rural communities based on reflective case-study analysis. The information we draw on was collected during a larger study of heritage conservation issues conducted in partnership with the Museums Association of Saskatchewan (MAS), a provincial member organization that includes many small and struggling community museums. MAS has been encouraging its members to put less focus on collections and narrow, Eurocentric interpretations of history in favor of more dynamic, holistic, and locally relevant approaches to heritage conservation (Holbrow, 2019), including the ecomuseum approach. Often called "museum[s] without walls" (Rivière, 1985, p. 182), the first ecomuseums were established in France in the 1970s, and hundreds now exist around the world (Rivard, 2019). The first Saskatchewan ecomuseum was founded in 2012, and there are now several in the province (Kincaid et al., 2019).

The MAS study was not meant to encourage ecomuseum development; its aim was to examine how community engagement might help democratize all aspects of local culture and heritage conservation and, in so doing, foster creative changes and adaptations that would lead to enhanced personal and collective well-being. The study was also not designed with AR in mind, but we were able to use the model for post hoc assessments as it became clear that our selected communities were at different stages of the AR cycle. Here we provide a detailed description of the AR model followed by details about the MAS study and reflections on the benefits and challenges of applying AR to community engagement work.
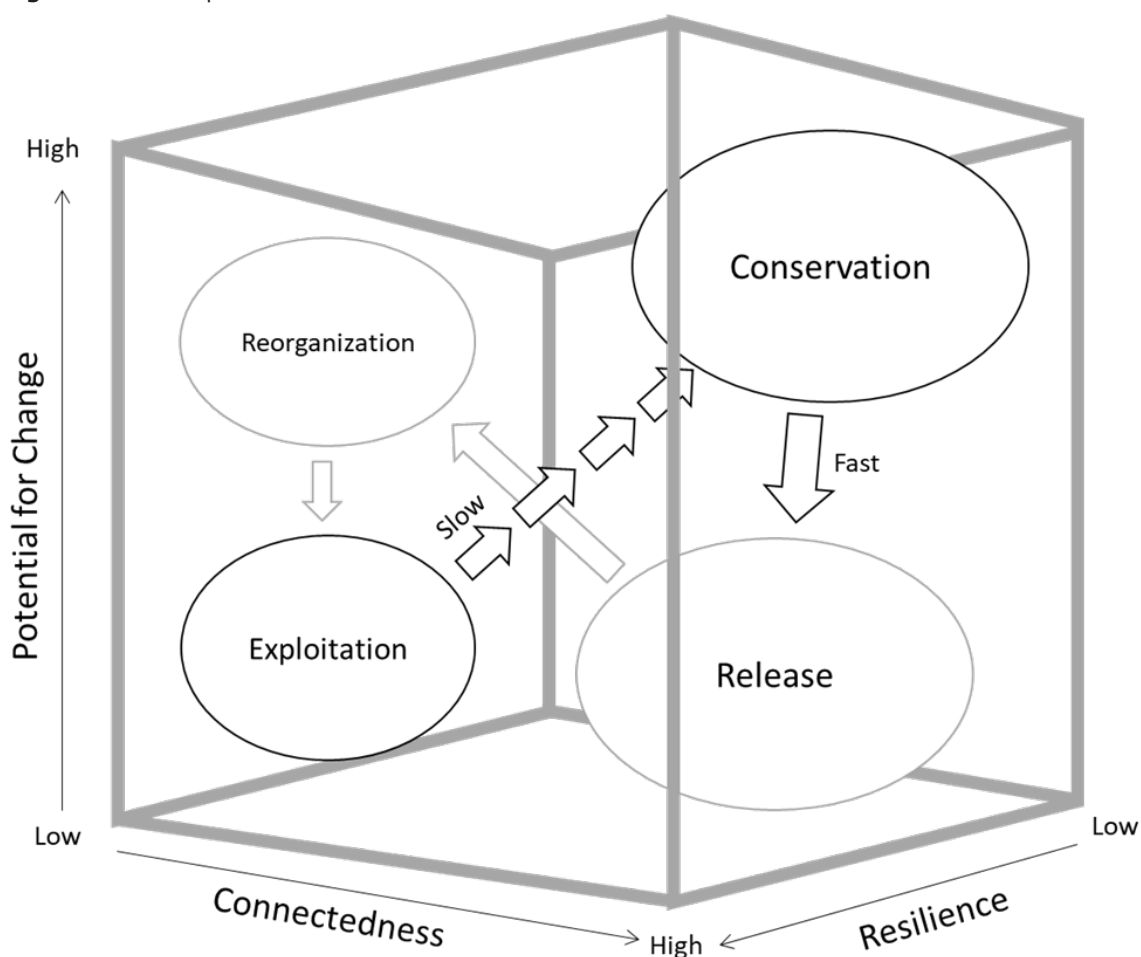
Adaptive Renewal

Initially developed by Holling to describe the dynamic nature of forest ecosystems (Holling, 1973, 1992; Holling & Gunderson, 2002), the AR model includes four phases that operate in a three-dimensional space, where x is connectedness, y is potential, and z is resilience (Figure 1). In the *Release* phase, triggered by some sort of disturbance, stored capital is freed up and redistributed over a relatively short span of time, like a collapsing house of cards. The classic example of a *Release* is a forest fire, which is locally destructive but frees up carbon that has been bound up in plant material and makes it available to other organisms. This sets the stage for a *Reorganization* phase in which small amounts of capital (carbon) are taken up as previous relationships are reestablished or new ones develop. Signs of *Reorganization* include the plants and animals that move into an area after a fire (pioneer species) or the first structures that start a new house of cards. As a system moves into the *Exploitation* phase, relationships get more complex—for instance, other predator or prey species move into the area or the house gets bigger—and capital starts to accumulate. Finally, the system enters the *Conservation* phase and can last a long time as a mature, resilient forest or a big house, until the next *Release* occurs.

Using the adaptive cycle to study system dynamics requires information about relationships that affect the movement and distribution of capital, the history and likelihood of disruptions that affect how and where capital is stored, and the degree of disruption that can happen before important controlling or structuring processes are affected (Holling & Gunderson, 2002). The AR model provides a useful lens for studying community engagement since it applies to all types of capital (financial, human, social, manufactured, cultural, and natural) and to a wide range of socioeconomic and environmental situations. For example, AR shows how events that are undeniably destructive, such as a fire or a recession, can lead to valuable periods of creativity and experimentation (Holling, 1986); how community projects may be contributing or responding to long-wave cycles of financial concentration and redistribution (Goldstein, 1988; Minsky, 1977); and how local knowledge can ebb and flow through constructivist learning experiences (Hein, 2001). Adaptive cycles have also been described across a wide range of spatial and temporal scales, with smaller, faster ones causing a "revolt" in larger ones, and bigger, slower ones causing smaller ones to "remember" how they used to be organized (Gunderson & Holling, 2002, p. 75). The timescales involved may be hard to appreciate in human terms or irrelevant for a given community project, but applying a lens that includes a nested "panarchy" of AR cycles can still be a useful exercise. Appreciating

Figure 1. The Adaptive Renewal Model

Note. In the adaptive renewal model, a complex eco-social system (ovals) moves through four phases based on the abundance and distribution of capital, within a three-dimensional space defined by system resilience, relationship connectedness, and the potential for change. *Adapted from Holling and Gunderson (2002, p. 41)*.

how communities are subject to changes and relationships across a wide range of scales can foster humility, uncover surprises, and shed light on potential tipping points that affect local quality of life and well-being (Gunderson & Holling, 2002; Marten, 2001).

A few rural and urban examples with different forms of capital illustrate how AR might offer insights about community engagement, either on its own or combined with the CCF and SLA tools. In rural areas, concerns about mental health (Michener et al., 2020; Wilson et al., 2015), excessive alcohol consumption (Muturi, 2014) and youth substance abuse (Redmond et al., 2004) are partly a function of social capital and the state of relevant organizations, including schools and health care centers. Assessing these concerns

through an AR lens could help these organizations respond through their programs and resource allocations, perhaps avoiding or minimizing the impacts of future *Releases*. Similarly, for natural and manufactured capital, studying invasive species management (Pagès et al., 2019), farm management practices (Mills et al., 2017), and rural infrastructure projects (Pant & Odame, 2017) through an AR lens could help planners and resource managers identify where the underlying relationships are flexible and adaptive or overly rigid and prone to collapse. Cultural capital can also be studied using the AR model, shedding light on cultural development processes and how they help to mobilize local expertise and foster a sense of rural identity (Vaeliverronen et al., 2017).

Methods

Selected Communities

Based on suggestions from MAS, the larger heritage study focused on four rural Saskatchewan communities ranging from a small village to a small prairie city. These communities (Gravelbourg, Humboldt, Saltcoats, and Wolseley) were selected because of their experience with or enthusiasm for community engagement activities. They were also chosen because they reflect important geographic, demographic, and cultural differences within the province, providing a range of insights about the democratization of heritage. The following descriptions illustrate these differences.

Gravelbourg is a thriving town (pop. ~1000) surrounded by farmlands approximately 200 km southwest of Regina and 150 km north of the East Block of Grasslands National Park. Before the town's foundation around 1906, the area was part of a well-traveled trail for local First Nations and was part of the original Red Coat Trail used by the early North-West Mounted Police. The settlement and development of the area focused on hospitals, religion, and education in the French language. These themes are a staple feature of the town's current heritage projects and work, supported by its slogan "A Touch of Europe on the Prairies." Locally, the town is known for a large Roman Catholic cathedral and convent, French-speaking residents, and mustard. Members of the local heritage community are interested in using the ecomuseum model to foster a sense of civic identity as it relates to francophone culture and historic ecclesiastical and commercial buildings.

Humboldt is a small but rapidly growing city (pop. ~5,700) located 220 km north of Regina. The largest community in the project, it has seen a rise in investment and population as it moves to become an industrial and manufacturing hub in central Saskatchewan. Its heritage offerings include 32 ha of land known as Original Humboldt, historical buildings, and the Humboldt and District Museum, which has recently undertaken successful community engagement projects to draw attention to heritage assets and local Indigenous and Métis cultures. The Museum does not to refer to itself as an ecomuseum, but it uses many ecomuseum principles in its programming and outreach. Compared to other communities, which may work with their respective town councils on heritage projects, Humboldt's heritage is managed by the city with significant support from engaged community members and local industry.

The smallest community in the project, Saltcoats is a parkland village of around 500 people next to a small lake about 250 km northeast of Regina. A former agricultural center, that industry has waned as larger farms have replaced smaller, family-owned ones, and there is a small city (Yorkton) only 15 minutes away that provides public services and contributes to the urban drain problem experienced by many rural locations. Rich in history, Saltcoats began as a town because the railway line ended there. The village has also been home to a highly political population, both through the former agricultural organizations and through former residents and representatives in political legislature. The residents are quick to recognize and proudly display their achievements through monuments, buildings, a graveyard tour, and Scottish street names. There is an ongoing effort to add and maintain historical and informational signage along the town's many walking trails and to revitalize the local park and lake, which is a local hotspot for birds and amphibians, especially tiger salamanders. Local heritage advocates held an "Ecomuseum for a Day" in June 2015 to introduce residents to the ecomuseum concept.

Wolseley is a slightly bigger community (pop. ~850) about 100 km east of Regina on the TransCanada Highway. As a halfway point for many of the smaller towns around it, Wolseley is a homesteading community that began in the 1800s. It is currently geared toward tourism and hosts a highly featured tourist center right off the highway. The town wraps around a small lake where a swinging footbridge serves as a key tourist attraction. This town is also close to two Indigenous communities, with the Sakimay and Cowessess First Nations located about a 30-minute drive away. Currently, the area relies heavily on agriculture and has seen an influx of industry due to oil and gas development. The community has some financial capacity for heritage activities through the Wolseley Heritage Foundation, and past successes include the maintenance and restoration of the swinging bridge, Town Hall, and Opera House. Currently, Wolseley is worried that other historical buildings, including a provincially significant courthouse, will be lost, and it recently had to close its museum due to declines in attendance and limited volunteer support.

Data Collection

The study design and research instruments (consent form, interview script) were approved by the University of Regina Research Ethics Board

(REB# 2018-062). None of the researchers had conflicts of interest or personal connections to the selected communities, so we believe that we were able to apply the following methods objectively and that the project results are free of bias.

Together with researchers from MAS, we collected information about rural heritage needs by holding focus group meetings in our selected communities between March 26 and November 21, 2018. After contacting each community to confirm interest, we sent details about the project and encouraged participation from various sectors, including education, industry, heritage groups, and town offices. At the start of each meeting, we described the project rationale and goals, described the ethical considerations involved, and gave participants time to read over and sign a consent form. All participants agreed to take part and provided signed forms, and none asked to be removed from the project data set.

As part of each focus group session, participants were asked to identify local heritage assets, options for safeguarding them, and roadblocks that their communities were facing around heritage projects. We also discussed what made their community feel like home, current issues impacting each community, different planning models aimed at heritage conservation, relationships with local Indigenous and Métis communities, and the potential for pursuing regional, cross-disciplinary projects.

After the first round of community meetings ended in May 2018, we reviewed the findings, conducted semistructured interviews with selected participants, provided each community with interim reports, including a synthesis of local issues and ideas, and developed plans for follow-up meetings. At this point, Humboldt and Wolseley opted out of the project. For Humboldt, the interim report reflected high levels of local capacity and experience, so additional meetings aimed at project planning and facilitation needs were not seen as worthwhile. In Wolseley, local organizers were primarily interested in attracting financial resources, so there was little appetite for further discussions about project development. In October and November 2018, we held one follow-up meeting in Saltcoats and two in Gravelbourg to discuss the interim reports and emerging project ideas, focusing on what participants saw as probable and preferred futures for their communities. Finally, on May 15, 2019, we presented and discussed a final project report (Sutter et al., 2019) at a windup meeting in Regina.

People from all of the selected communities and other interested organizations were invited to this meeting to offer their perspectives on the project results and recommendations.

Applying an AR Lens

To assess results from the focus groups and interviews through an AR lens, we identified and reflected on local relationships and periods of disruption and/or renewal that were likely to affect different types of capital. We noted where engagement around different types of heritage appeared to help communities build sociocultural and environmental capacity, attract investment, and maintain or move toward higher levels of social cohesion. We then compared what we had learned about each community to our understanding of processes, changes, and relationship states associated with the AR model. For example, a key process during *Reorganization* is experimentation, so as we reviewed the results of each meeting and interview, we took note of heritage-related innovations or situations in which residents had tried different strategies to address local heritage-related issues. Similarly, since the AR model is based on temporal changes in the concentration and redistribution of capital, we noted when communities had experienced periods of significant social, economic, or environmental flux, such as the loss of a heritage-related community organization or a sudden influx of funding. Finally, given that the movement of capital in the AR model depends on the strength and vitality of critical relationships, we noted where participants talked about developing or renewing heritage-based relationships in their community and how well those relationships were working. All of these comparisons were made after the conclusion of the larger heritage project, so we were unable to ask any follow-up questions or probe for additional information.

Results

Community Positions on the AR Cycle

Based on information that participants provided about the history of their regions and local heritage-related needs and aspirations, our selected communities appeared to be at different stages of AR. In Wolseley, discussions focused on concerns about funding and recent challenges around built heritage projects. This suggested a heritage community in *Reorganization*, in which working relationships need to be revived or new ones developed so people can start experimenting

with their ideas. Having recently adopted the ecomuseum model, Gravelbourg appeared to be exploring new working relationships, implying that their heritage community was in an *Exploitation* phase. Residents of Saltcoats had been considering the ecomuseum model a while longer and had used it to hold a successful event, putting them further into *Exploitation* or possibly at the start of a *Conservation* phase. In contrast, the resilience and complexity of relationships in Humboldt pointed to a heritage community well into the *Conservation* phase and equipped with the social, economic, and cultural capital needed to foster a strong sense of local identity (Vaeliverronene et al., 2017).

These positions within the AR model are speculations based on brief responses to questions about assets and projects associated with local heritage. It is possible that other parts of these communities were going through other phases of the AR cycle. During the course of our study, for example, the Saltcoats economy experienced a sudden *Release* when a major business moved away, disrupting key relationships within and beyond the village. We are also not suggesting that all aspects of heritage work in a given community were experiencing a certain phase of AR. As noted below, responses about local Indigenous heritage suggested that three of the communities were in the *Reorganization* phase around that aspect of heritage work.

Resilience, Releases, and Reorganization

In all communities, we found evidence of local identity, pride of place, and other aspects of social and cultural capital that could add to the resilience of a community. Participants in Gravelbourg remarked:

> When you're in the city you're just going miles a minute; you don't care about your next-door neighbor. Here you can strike up a conversation with most people. [This is] a place where everybody knows each other.

> There's a rich history here. Anybody who's been here long can talk about the history because there's somebody they know what was here and the impact of it.

> Been away 23 years and coming back, it's still there—where in some other communities it's been kind of lost. You

come to this community you can sense the culture is still here. Not all communities have that identity.

Other respondents spoke about past experiences with *Release* phases. A Saltcoats participant described a *Release* that occurred when they had to shutter an organization that had been serving the community for many years:

> It was clear [the local Agricultural Society] no longer met the needs of the community. Interest had fallen away considerably. We'd gone through the phase of how to involve the younger people, how do we develop a new vision for who we're going to be. We'd come to a place where we knew that wasn't happening and it wasn't going to happen. We decided that what we needed to do was [say], "Okay, we've done some of the grieving; we now need to celebrate who we are and who we've been so the closing doesn't look in any sense like a failure but it really looks back and says these people built this and they participated in the community."

Respondents also talked about experiences with *Reorganization*, including moments of innovative experimentation. A participant in Gravelbourg noted:

> We're working hard [on the elevator project] and have some great plans. One of the ideas is to take one of the bins and make a spiral stairway so you can go up, because nowadays people want to do something, not just look. I think people would see it as a really interesting place to go.

Similarly, a Saltcoats interviewee talked about how to approach local decision-makers:

> What you need to do is identify who has control here, how committed are they to this, and how likely are they going to be to commit to it. Are they going to be excited or are they going to see all the problems? … Make sure the council knows we're generating ideas, so by the time it goes [to] them you basically have a proposal that you're sure will fly, will have community support, and that you've got the people who will do the work.

Aspects of *Reorganization* were also evident during discussions about links to local Indigenous and Métis heritage. Participants in Saltcoats, Gravelbourg, and Wolseley were receptive to the idea of building these connections, even where relationships with Indigenous or Métis cultures were limited or nonexistent. One participant noted, "It would certainly be interesting to find out what the history is because I've lived here all my life and I don't really know the history of the First Nations here. … It's a big blank [that] should be researched." These participants were also sensitive to the steps involved in connecting to local Indigenous and Métis communities, including the need to avoid tokenizing Indigenous connections to the land or interpreting local history from selected and mostly Eurocentric memories.

Exploitation and Conservation

Other participants talked about building and maintaining the sorts of relationships that underpin the *Exploitation* and *Conservation* phases. A Saltcoats interviewee emphasized the importance of trust, noting that the heritage leaders who staged their "Ecomuseum for a Day" had helped build "a level of trust with their community and … convince community members that cultural and heritage projects were relevant." This respondent also spoke about the different stages and skills involved in relationship development. As projects get started:

> You always have to look for ways to bring in parts of the community [that] might be least likely involved. You have to identify your core group first, but you want others to be informed and to get some sense they can be involved and that there's benefit to them.

If people raise concerns or express contrary views:

> Wherever you can, you make it clear that you're not denigrating in any way what people have done. And … there will always be those who raise the monetary things. That means you need to avoid pie-in-the-sky thinking [and] to realize that there's very little criticism you can't learn from. For some big projects, you have to realize so-and-so is going to be a hard sell and yet they're an important part of the community, so who is the best person to go and talk to them? There will also be people who never want to be involved.

If tensions get to point where they cause conflict:

> You need to work in the best way you can to avoid it, to name and try to address it, and sometimes to recognize that this is not going to change … Sometimes you can't figure out where that sort of thing comes from … I try not to dwell on this too much.

And finally, during a *Conservation* phase, when relationships need to be maintained for years or across generations:

> [Planning for succession means] criticizing as little as possible and encouraging as much as possible. Avoiding anything that says I or we would have done it right and recognizing that anyone who's picking up on anything in [the] community will make mistakes and learn from that, just as we did.

Participants in Humboldt also spoke to the long-term relationships associated with a *Conservation* phase, pointing to successful efforts to bring Indigenous cultures into local heritage activities and noting how important it was for heritage proponents to maintain a strong connection to the municipal government. According to one respondent, a key guiding principle for building these connections is to approach government officials "without a specific agenda, include multiple voices in gathering community support, and be open to listening without having a preconceived notion of the outcome." This person added that their success with local building restorations involved "harnessing the power of their respective communities … through fundraising and donations."

Discussion

During the course of a larger study on rural heritage needs, we observed that our selected communities appeared to be in different stages of the AR cycle. Post hoc assessments based on the AR model revealed community features (e.g., the nature and status of key relationships that operate within or impact a community) that may be less apparent than when the CCF or SLA are used to plan or assess community engagement projects. Our results suggest that applying AR in combination with these other tools can provide a more fulsome sense of the social dynamics that affect how a community operates and how it may

be affected by larger government or corporate decisions. Our findings also confirm that a range of AR cycles need to be considered simultaneously, since communities are constantly being affected by cycles that operate within different sectors, such as the civic, business, environmental, and cultural sectors, and across different spatiotemporal scales (Berkes, 2017).

Different aspects of AR became clear as respondents touched on different types of capital. When asked about local issues and opportunities around heritage, all communities talked about the importance of funding, human resources, public services, and memories (Sutter et al., 2019). Concerns about financial capital, both the amount available and assistance with funding requests, are expected when communities are in *Reorganization* or *Exploitation*; in these stages, people may not be sure how to develop key relationships, with funders in this case, or may have limited wherewithal to pursue or experiment with new ideas. At the same time, the fact that Humboldt and Wolseley both voiced concerns about financial constraints suggests that funding is a perennial challenge in rural areas. Humboldt's success with fundraising also points to one of the benefits of the *Conservation* stage: Having personnel with well-developed working relationships makes it easier to attract financial support.

The importance of volunteer or paid staff (human capital) was mentioned at every meeting, but Saltcoats was exceptional on this front. Despite a population with the highest percentage of retirees, Saltcoats reported the highest levels of engagement during previous heritage projects. This is most likely due to the town's small size, where a relatively modest turnout represents a good percentage of the community, but it may also reflect the fact that past programs were closely associated with the local school. As strong local symbols and places for sports, drama, and other activities, schools help to create and reinforce social capital, impacting the vitality of a community, local traditions, and other aspects well beyond their neighborhoods (Chung, 2002; Lyson, 2005)

The two other prominent themes—access to public services and memory—suggest that cultural relationships are especially important as a community goes through AR. Every community except Humboldt spoke about the need for access to medical services, reflecting the importance of that sector in daily life. Concerns about health care are predictable where populations are aging and people have strong memories about droughts,

economic downturns, and other factors that can spark a *Release* phase.

Presumably, reflecting on the past can help groups move from one phase of AR to another. As Humboldt moved into a *Conservation* phase, for example, heritage leaders used past experiences to create a museum that plays a significant a role in municipal heritage governance. This involved a different sort of approach to collecting and interpreting local heritage items. Instead of the museum deciding what was important and how it should be presented on its own, it repeatedly asked the community, "What do you value?"

Cultural considerations were also evident when our community meetings explored the importance of local Indigenous heritage. All communities recognized the benefits and potential hurdles around bringing Indigenous perspectives into their heritage work, suggesting that there is much potential on this front. The main hurdle is that some communities do not have a tradition of working with Indigenous communities to fall back on, so basic steps would be needed, including training about protocols, to foster cross-cultural relationships. Resource materials would be helpful in this light, such as the guiding documents that MAS has developed in collaboration with Indigenous communities (Phillips, 2017).

There are several limitations to this study. AR was not mentioned during the community meetings or the interviews, so participants had no context for thinking about the AR cycles that might be affecting their communities or framing their responses with that in mind. For studies that are set up to examine aspects of a community or heritage project through an AR lens, the model needs to be introduced and described before data are collected, and participants need to be able to discuss how it might pertain to heritage-related activities in their communities. Rather than relying on qualitative insights, researchers or planners should also be equipped with or be prepared to develop measurable indicators that will give them a sense of where communities or projects fall along the three AR axes (see Figure 1).

Our study was also limited by the fact that our selected communities differed in size and in the state of their local economies, making comparisons difficult. Humboldt stood out as larger and more economically stable, with heritage employees who are city employees and highly specialized in their fields. The Humboldt heritage community has also taken innovative steps aimed at community engagement. This is consistent with a group in

the *Conservation* phase, where close, effective relationships can be called on to influence the ebb and flow of political, social, economic, human, and financial capital. Humboldt's success also implies that the community has learned from past activities and gained experience that has helped it examine and respond to current or emerging issues.

Comparisons between communities were also difficult because the people who took part in our focus groups differed in their priorities. For example, while all participants seemed to appreciate cultural or living heritage as a concept, some were less inclined to make it the focus of their work. Rather than reflecting on the potential for living heritage to be a catalyst for community development, the people in Wolseley were mostly concerned about the care of local archives, which they had recently moved to a small building when their museum closed. By comparison, prominent themes that came up in the other communities included the cultural uses of natural heritage near Saltcoats, the Indigenous and regional identities around Humboldt, and the francophone, farming, and religious influences in Gravelbourg. In each community, participants described successful projects that picked up on these themes, suggesting that culture and place can be effective springboards for heritage-related projects.

Conclusion

The AR model provides a valuable lens for sustainability research since it applies to all types of capital, including financial, human, social, manufactured, and natural capital. This paper considers how an AR lens can be used to plan or assess community engagement projects from a heritage perspective. The AR cycle revolves around relationships that operate as "arrangements capable of adapting to rapid change and frequent surprises" (Berkes, 2017, p. 2). Our findings suggest that communities can be mapped onto the model, depending on the state of key relationships and local circumstances, and the results can provide additional insights about heritage-related challenges, opportunities, and needs. Communities that appear to be in a *Conservation* phase, like Humboldt, already have positive experiences and a range of effective relationships to draw on for developing and undertaking projects. Where they may need support is around identifying local or external issues that may bring on a *Release* or larger pressures (e.g., provincial policies) that may affect the things they want to do. Communities that are in the midst of a *Release*, like the economic shock

Saltcoats experienced, may need processes that help them come to terms with their losses and develop a new vision that can guide future work. And finally, communities that are in *Reorganization* or the early stages of *Exploitation* may need support and latitude to experiment with different ideas and strengthen the relationships that produce the desired results.

Our use of the AR model to reflect on heritage-related work warrants more study, since the information we drew on was collected for other purposes and our assessments are based on speculative, post hoc analysis. Presumably, future applications of the AR concept should introduce the model at the outset and give communities a chance to determine where they are in the cycle based on bottom-up processes and situated indicators. This sort of mapping exercise is likely to shed light on relationships and social dynamics that influence all aspects of project planning and implementation, making AR a valuable lens for community engagement work.

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