

Summary

1. The Inside-Outside Model Animating the Muses for Cultural Transformation Amid the Climate Crisis
2. Museums Planning for Cultural impacts. The case study of Parabiago ecomuseum (Italy)

by Douglas Worts and Raul Dal Santo

1. The Inside-Outside Model Animating the Muses for Cultural Transformation Amid the Climate Crisis

Douglas Worts and Raul Dal Santo

Introduction

As human beings living on planet Earth in 2022, finding one's bearings is not for the faint of heart. Global culture, including all of its regional variants, is in disarray (Homer-Dixon, 2006). From escalating human-caused climate change to deepening trends of systemic inequity, the relative stability of human and environmental systems in recent millennia is being dramatically eroded. Each day, new crises seem to destabilise the world ever more (AtKisson, 2010). This moment offers a critical time for humanity to transform its relationships, both to itself and to Nature's complex systems, upon which humans rely. Essentially, the challenge and opportunity of our time revolves around the need for fundamental cultural transformation if Earth's natural systems are to re-establish a balance that includes humanity. But what mechanisms do humans have for adapting the living culture so it aligns with our changing world?

Massive networks of cultural organisations, including museums and ecomuseums, do exist around the planet, but it is unclear what roles these entities might be able to play in fostering meaningful change (Worts, 2003). Most traditional cultural organisations, such as museums, operate as destinations for leisure time activities – often with specialized focuses, like art, history, science, and more. Historically, such museums have not oriented their public engagement to address the issues and forces that shape the living culture. However, it is a worthwhile question whether museums have the capacity to become catalytic agents, capable of fostering the requisite levels of public reflection, dialogue and action required to bring about meaningful cultural change. While traditional museums tend to operate as purveyors of edutainment experiences in the leisure-time economy, it is worth noting that 'ecomuseums' and some 'community museums' have

been designed to be significantly engaged with the living pulse of the local culture (Riva, 2017; Sutter, 2016). Ecomuseums may offer insights to traditional museums about how best to embrace the role of ‘cultural catalysts’ in the face of today’s crisis (Riva, 2021). This chapter discusses essential issues, factors and possibilities related to how existing cultural organisations can embrace this challenge/opportunity. It will also introduce readers to a planning tool for museums, called the ‘Inside-Outside Model: Museums Planning for Cultural Impacts’. The I-O Model aims to orient public dimension activities of museums towards fostering cultural impacts at a range of levels.

In this chapter, and in Dal Santo and Worts (chapter 1, this volume), the authors will:

- provide commentary on the implications of the changing context for human life;
- reflect on the challenges and opportunities that our moment in time present for humanity, its culture(s), behaviours, values and systems;
- consider how museums and ecomuseums can become catalysts of cultural adaptation and transformation, not simply within the frames of institutionalized culture, but rather across the living culture;
- discuss some of the major issues and forces that need to be engaged;
- introduce and discuss the “Inside-Outside Model: Museums Planning for Cultural Impacts” as a potentially useful tool for museums as they embark on their own transformation processes.

CONTEXT: Challenges

We live in a time of unique challenges, and opportunities. Never before has a single species pushed the Earth beyond its ability to regenerate itself. Never before has a single species dominated, and often damaged, so many other species and their habitats. However, on the other hand, never before have we seen the kind of creativity and problem-solving in any species, other than

humans. And yet, the strategies that humans have developed to realize their visions, and to solve big challenges, have ultimately failed us. Systems of governance, economics, technology, religion and more have largely proven inadequate over time, especially when scaled to global levels. The living culture is multi-levelled, timely, archetypal, contradictory, affirming, messy, creative, always changing, partly conscious and partly unconscious. In many ways, living culture is the opposite of the tidy explanations that are so often the mainstay activities of traditional museums.

For many years, power over how humanity has evolved was largely in the hands of governments, business, religions and powerful individuals. The result has been massive growth in global population, inequality, migration, urbanization, industrialization, pluralization, globalization and more. Sadly, the population growth of our species has not been guided by the necessary wisdom to ensure that human life remains within the balances required by Earth's natural systems. Creating human systems that increasingly upset planetary balance is a perilous path. In the past, cultures were often reasonably successful at assessing negative impacts on local ecosystems, which in turn enabled communities to adapt. However, in more recent times, we have witnessed the expansion and relocation of industrial production to parts of the world in which business goals of 'economies of scale' production, reduced costs and fewer regulations all contributed to the lure of increased profits and the collateral damage of the environment. At the heart of this phenomenon is an economic system that demands endless growth in resource consumption and the centralization of wealth, which have ultimately presented us with existential threats to humanity's own wellbeing, as well as that of other species.

Human survival, and even thriving, remains possible. However, such potential demands adaptation of current systems in order to create balance in the larger world (Sutter, 2017). For humans to remain on our current path is to risk losing everything. The following is a list of some of the major trends that define our time, and which must be redirected towards a safe harbour, if our future prospects are to improve.

The Anthropocene:

Approximately 75 years ago, humanity entered a new geological period – informally known as the Anthropocene. The name and exact start date of this period is not yet finalised;

however a global team of geologists is currently considering these details. There seems to be agreement that the Anthropocene will be an “epoch” which indicates that it is less than a “period”, but more than an “Age”. The significance of this new epoch is that it is characterised by humanity having become the largest single factor in how planetary systems are changing (Koster, 2020). The Anthropocene signals that the context for human life on Earth has taken a fundamental turn.

For the past 12,000 years or so, humans were able to exploit the wealth of nature without causing more than local disruptions to natural systems. This relatively stable period is known as the Holocene, which followed the last Ice Age.¹ However, in the middle of the 20th century, exponential growth in human population, coupled with the ballooning scale of our resource consumption, and vast waste production, have all meant that our species has become the number one force shaping nature and creating monumental perils.

Global/Local Culture versus Planetary Boundaries

For a very long time, humans have been creative forces that have used the resources of nature to address their needs and wants. Humans have analyzed situations and found ways to exploit available resources. There have always been unexpected impacts of this enterprising spirit – but often, these took the form of acceptable and manageable risks and bi-products. Bringing wood burning inside buildings, for heat and cooking, did produce problems with smoke. However, it wasn’t long before venting smoke outside led to the old adage “dilution is the solution to pollution”. Until recently, our planet has had a massive capacity to regenerate itself and to reprocess pollution into useful materials. However, the sad truth is, the planet’s regeneration ability is not limitless. From the mid-20th century onwards, humanity has been systematically violating the ‘planetary boundaries’.² These boundaries involve large, dynamic systems that require relative balances to be maintained if there is to be overall planetary stability and health.

¹ See <https://en.wikipedia.org/wiki/Holocene>

² Planetary Boundaries were developed at the Stockholm Resilience Institute, in 2009. https://en.wikipedia.org/wiki/Planetary_boundaries

If these boundaries are not kept within prescribed limits, then planetary systems shift. For example, climate change is one such boundary. The point here is that it is the largely unconscious behaviours and systems of cultures that are generating the activity that is violating 'planetary boundaries', while human feedback systems are failing to prompt adaptive changes. Given this dire situation, important questions need to be asked. Can museums transform themselves sufficiently to become catalysts of reflection, dialogue and co-creative action in the living culture? To what extent do the legal parameters of incorporated museums prevent the museum field from transforming itself so that it plays a more productive and urgently needed cultural role? What new roles could museums develop to improve the relationships humans have with both humanity and planetary systems? What are the opportunity costs of museums trying to address climate change primarily through operational efficiency measures, without prioritizing and optimizing their potential for generating meaningful impacts across the living culture?

Politics and Business at Odds with Adaptive Cultural Change:

If we scan the world for examples of where political and business actions are creatively addressing our multiple planetary crises, there are few convincing heroes bursting onto the scene. However, there are areas of inspiration that warrant examination. The field of economics has produced some very enlightened people who are leading inspired projects. One is Kate Raworth, a UK economist who developed something called the Doughnut Economics Model – which imagines replacing the traditional economic focus on continuous financial growth (Gross Domestic Product) with a commitment to using 'systems thinking' to generate net-positive value generation across social, environmental and economic domains (Raworth, 2018).³ Raworth's revolutionary approach has also nurtured a global research and development think-tank, called Doughnut Economics Action Lab (DEAL), which is conducting projects in many parts of the world to help clarify what it means to

³"Doughnut Economics" is a macroeconomic framework, developed by UK economist Kate Raworth, who published a book with the same name see www.kateraworth.com

build a 'wellbeing economy'.⁴ There are also many businesses that are committed to building enterprises that aim to generate social, environmental value within a viable economic operating framework (Klomp, 2021).⁵ And, inspiringly, New Zealand's Prime Minister, Jacinda Ardern, led her government to declare that it would shift its national budgeting process away from GDP and towards a focus on environmental and human wellbeing.

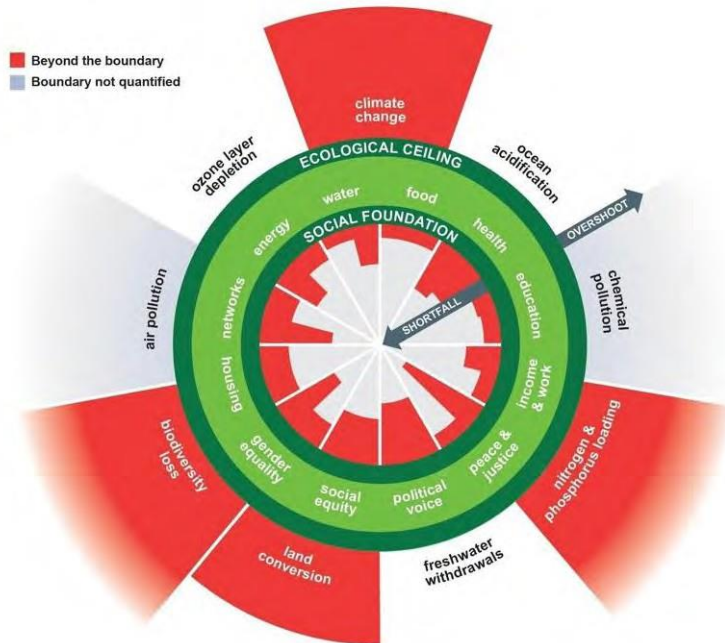


Fig. 1. Doughnut Economics Model, by Kate Raworth economy that operates between a social foundation and an ecological ceiling. <<https://commons.wikimedia.org/wiki/File:Doughnut-transgressing.jpg>>.

⁴ Doughnut Economics Action Lab (DEAL) see <https://doughnuteconomics.org/>

⁵ For example, the B Corp Movement https://bcorporation.eu/country_partner/italy/

CONTEXT: Opportunities

Humanity needs foundational cultural change to thrive, or even survive but we don't have agreement on what such a culture looks like. Ecomuseums are somewhat oriented to moving communities towards individual and collective wellbeing, often within a defined region. By comparison, traditional museums have tended to focus on objects and telling stories to those who visit. Imagining how museums could evolve their practice in order to be effective catalysts of cultural change and adaptation – especially in the Anthropocene is a good question (Worts, 2017). One vital aspect of how museums can catalyse change is through the co-creative partnerships that they forge (Koster, 2020).

Co-creativity is a powerful process that many museum professionals already understand well. Educators are perhaps most familiar with the process, because education is always co-creative whenever a teacher fosters in students the ability to 'make meaning' that draws on their own personal experiences, vision and associations. When there is a trusting bond between teacher and student, the latter's creativity is unleashed in new and often unexpected ways. It often results in new learning for both teacher and student. If a museum partners with a vision/values-aligned organisation, and if there is a trusting, collaborative bond established, then the synergy can produce ideas, visions, insights and idea-generating tools intended to challenge current thinking patterns. In the event that such an approach was focused on the issues of our day (i.e. issues of the Anthropocene), then measurable impacts can conceivably be produced within the living culture. The significant point, however, is that if museums are to become catalysts of cultural change, their measures of success would need to be oriented to changes within the larger, living culture – not simply within museum buildings.

It is vital to remember that many museums have built great expertise in very specific areas of concern – history, science, art, etc. While expertise is a potent building block of human development, it may have come at a high cost – the loss of wisdom. While expertise uses narrow and deep focus to master the inner workings of things, wisdom involves the ability to step back and integrate knowledge and understanding from a wide range of experience. Expertise tends to be authoritative, while wisdom is more humble and open.

Both are required however, wisdom now seems to play second fiddle to expertise. The goal of expertise is control, while the goal of wisdom is wellbeing. Museums have the potential to facilitate the intersection of wisdom and expertise. Through such integration museums can help cultures imagine flourishing, inclusive futures.

In 1972 a combination of expertise and wisdom was offered up to humanity through a 1972 book entitled *Limits to Growth*, which was commissioned by the Club of Rome. In it, a group of scientists analyzed population, consumption and environmental trends that anticipated the crises we see today, including climate change (Meadows, et al, 1972 & 2004). Their projected image of planetary system's degeneration and collapse was about as sobering as one can imagine. And yet, even when presented with accurate insights into threats associated with 'business as usual' approaches, governments, economists and business leaders were dismissive of the warnings. In our current era of misinformation and conspiracy theories, we have learned that science and facts are not enough for humans to act responsibly, courageously and with the interests of everyone in mind. When wisdom helps to marshal expert insights and shape them into visions of viable and ethical futures, it is an essential process. When wisdom has no place, chaos soon emerges.

What if one or more major museum had collaborated with the *Limits to Growth* authors, as well as some other influential, vision/values-aligned partners, to bring the insights of this watershed work into the living culture? And if this was done in collaborative and co-creative ways that generated leverage for societal change, what might have been the effect? Nobody knows for certain. We only know that the inertia of the status quo is a formidable force – especially when that status quo is generated by incomplete and misguided views of complex systems that produce massive societal and environmental damage. There are many ways to bring about systems change – and if museums are to become catalysts of cultural adaptation, they will need to become very familiar with such processes, beyond their special expertise in traditional academic disciplines.

What may lie at the heart of 'culture', especially in the Anthropocene, is finding new ways to ensure that the wellbeing of the entire planet and all of its inhabitants remains the overarching vision of humanity. Figuring out how museums need to change in order to help realize such a vision will be a challenge – but what are the alternatives?

One of the central opportunities for any museum that intends to become a cultural catalyst, is to expand its focus from generating cultural outputs for public consumption (e.g. exhibits, programs, publications, etc.), to facilitating processes of public engagement and co-creation that have meaningful outcomes/ impacts on individuals, groups, communities, organisations and more. Needless to say, this amounts to a sea-change in the vision and practice of museums in society. Accordingly, it will require the self-selecting few museums to begin working in new ways and then assess and report their impacts widely.

Luckily, there are already models of this approach within the museum world. Specifically, ecomuseums were conceived to serve the wellbeing of humans living within a region (Davis, P, 2011). Many contributors to this volume have written of the myriad ways in which ecomuseums have courageously set out to engage local populations in processes of cultural adaptation.

It is within this thought about museums becoming catalysts of adaptation in the living culture that the *Inside-Outside Model: Museums Planning for Cultural Impacts* (I-O Model), was created (see Fig 2).

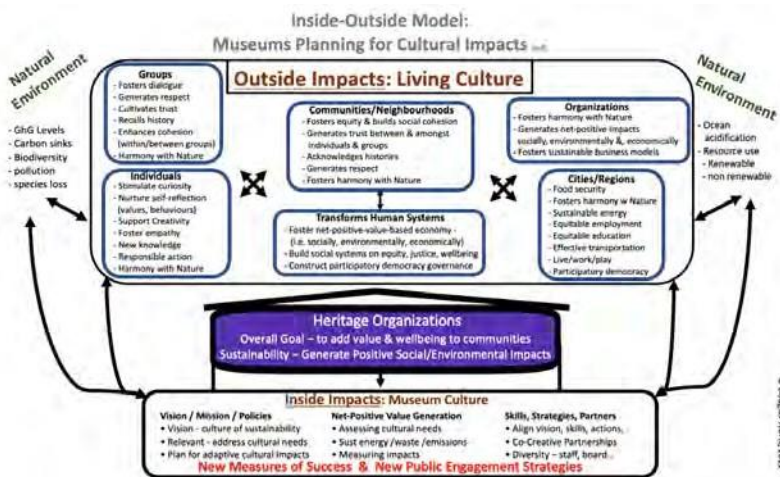


Fig. 2. The Inside-Outside Model: Museums Planning for Cultural Impacts, by D. Worts. <<https://sites.google.com/view/drops-platform/tools/books/climate-action-book/io-impacts-model>> (courtesy of author).

Douglas Worts developed the model in 2019, initially to help guide conversations within the Sustainability Task Force of the American Association for State and Local History. AASLH aimed to foster museum awareness, engagement and action related to sustainability (Worts, 2019). The I-O Model was created to help manage two competing notions of sustainability. The first was ‘sustainability’ as a holistic balancing of multiple, interdependent, complex systems, that currently are collapsing. The second was sustainability as ‘greening’ – which involves making the status quo ‘less bad’.

In the following introduction to the I-O Model, there are two fundamental component parts. The first is the ‘Inside’ dimension, which focuses on the physical manifestation of the museum and its contents, as well as the governance, skills, knowledge, wisdom, processes, and passion that are held by its staff (both paid and volunteer). The second dimension of the model is the ‘Outside’, which involves all of the component parts of our living culture people, community, place, processes, values, goals, behaviours, systems, trends and more. Culture, in all of its forms and manifestations, lives throughout the ‘outside’ dimension.

The purpose of the model is to suggest ways that museums can leverage inside assets and processes, in order to support the complex, co-creative, cultural transformation needed to adapt in a changing world. With this goal in mind, the process is ever evolving. It requires humility to understand that cultural adaptation can’t be controlled as a top-down, mechanistic process. To better ensure that people don’t feel left out, it is best to design inclusive and supportive processes. Needless to say, this task is not easy.

The contents of boxes are suggestive and designed to spur conversation and customization. They are not intended to be prescriptive or complete. Let’s begin by examining the museum itself. (See Fig 3 – I-O Model-Inside Dimension)



Fig. 3. I-O Model Inside Dimension (within the museum)

In the most generic sense, public cultural organisations exist to serve the public good, in ways that add value and quality of life to their community⁶. Not all museums fall into this category, but most seem to. Surprisingly, museums are often vague about the ways that value is added and community wellbeing is re-enforced. Ideally, when cultural organisations aim to focus on sustainability, the impacts should be seen as adaptive change to both social and environmental aspects of the community.

The Inside dimension of museums is a highly organised, and often hierarchical, environment. Often adopting a corporate form (usually non-profit), it normally is guided by a vision and mission, as well as its stated values and policies. In addition, people with specific sets of skills are engaged to carry out what is normally considered core activities of these organisations. The privileged skill-sets – including: discipline-based expertise related to collections; educational processes; public program development; partnerships; conservation of collections; organisation and management; marketing; needs and impact assessment; and more can all help to design the Inside dimension in ways that optimise desired impacts in the Outside Dimension (Hirzy, 1992). If the goal is to foster an adaptive living culture that is aligned with the vision of a sustainable future, it will require astute use of the Inside resources and processes. Also necessary will be adept approaches to forging creative, vision/ values-aligned partnerships with entities in the Outside dimension; along with ensuring that multiple feedback loops are in place so the museum can monitor public engagement and impacts.

What is perhaps most novel about the Inside-Outside Model, is that it acknowledges that public cultural organisations are most effective when they respond to the changing trends and needs of the culture, in ways that generate adaptive impacts on that culture. This takes nothing away from collections and discipline-based expertise, but it does focus on impacts beyond those involving individual visitors.

Since humans first walked on Earth, culture has always been in a state of change. Such changes can either be adaptive (moving towards stability and balance) or maladaptive (moving towards instability and imbalance), within their ever-

⁶ The term 'community' is complex, involving individuals and a wide range of collectives (e.g. families, groups, neighbourhoods, etc.) that share some experiences, and do not share others. Community is a sense of connection that is continuously being renegotiated.

evolving contexts. Change has also been a characteristic of museums. However, museum change may be less focused on changes in how such organisations relate to the living culture, and more focused on changes related to academic disciplines, collectors, markets, donors, government funders and so on. The idea of museums as catalysts of adaptive cultural change is relatively rare in the museum world, with the exception of ecomuseology. Before moving to the Outside dimension of the model, it seems important to acknowledge that museums have largely been instruments of colonial thinking and acting. It is widely known that many museums acquired collections that were taken from marginalized and/or oppressed people. There are also museum stories and histories that have mistreated non-dominant cultures by omitting perspectives, erasure of histories and by using stereotypes to perpetuate public misunderstandings and lies. Accordingly, when museums decide to embrace new potential public functions, like becoming catalysts of cultural change, it requires concerted efforts to acknowledge, own and then dismantle residual elements of its own cultural past. Currently, many museums around the world have embarked on processes of rectifying racist parts of their own past. This is vital work in the Inside Dimension – and is necessary for museums to generate credibility as convenors and facilitators of public engagement on cultural issues.

It is important to add that these issues of systemic inequity continue to be deeply problematic within the living culture. As sustainability-engaged museums expand their commitment to addressing environmental crises (both inside and outside the museum), it is vital that they also address the social injustices, especially related to systemic inequity (again, both inside and outside the museum).

Accordingly, the next section will address different facets of the Outside dimension.

The most encompassing aspect of the world outside the museum is Nature. The natural environment contains everything required to support human life and humanity relies on it for its very existence. For that reason, the health and well-being of the environment should be of paramount concern for humanity. It is imperative that humanity remain in a functional, dynamic balance with nature. When the relatively stable balance of Earth's climate over recent millennia was knocked off kilter by the onset of the Anthropocene,

all life that depends on natural systems must either adapt, or deal with the consequences. So, in Fig 4, a small sampling of the elements that make up nature's complex systems and that should concern humanity are identified.

Pictured here, within the framework of Earth's Natural Environment, is human Society; within that, the human-made Economy. Museums are shown as being a subset contained within the economy and society, enveloped by Nature. Since the deteriorating state of Nature's systems is being driven by humanity's outsized impacts, it is only changes to humanity's way of relating to Nature that can hope to reclaim some sense of relative balance. For addressing the cultural issues of our time, museums will need intelligence, creativity, compassion and leverage. Mobilizing in this way will require courage.



Fig. 4. I-O Model Situating Museums within the Outside Dimension of Nature, Society and Economy

Humanity interacts with the natural environment at absolutely every turn, because without natural systems, we are deprived of the essentials of life. It is humbling indeed to take full stock of this reality. Despite all of humanity's skills and ingenuity, our species would simply cease to be without the natural systems that we have relied upon for our existence since the human story began. However it takes more than simply acknowledging this relationship to rescue it from the brink of planetary systems collapse (Diamond, 2005). Humanity needs to grasp what scientists understand about rising greenhouse gas (GHG) emissions and the deadly levels that are approaching (Janes, 2009). For a museum to be engaged in reducing their own GHG emissions is all well and good, but it is not nearly enough. The promise of museums is not contained in the promise of more efficient and less polluting versions of themselves. Rather the promise of museums is that they can become catalysts of cultural change across the entire living culture.

And for that, a museum needs to know how it will monitor the essential feedback loops associated with the change it hopes to catalyse. At one level this requires an understanding of the trends in global concentrations of greenhouse gas emissions (causes, impacts, etc.). At another level, it means helping to ensure the public is aware, engaged and creatively active at dramatically reducing these emissions – helping people and organisations to make different decisions and to act with sustainability and wellbeing in mind. Museums can plan to engage the living culture in processes of acquiring and privileging new skills, knowledge and behaviours that address the trends of our time.

If museums aim to become catalysts of adaptive cultures, it is important to consider how different functional units of humanity play different roles in securing a sustainable future. For example, perhaps the most basic unit of the living culture is the individual person. Everyone has the ability to take stock of their world (through cognitive, affective, social, imaginal and behavioural processes). Each person can engage in ways that help meet their needs, and make decisions about how our species can live indefinitely on this planet. To this end, it makes sense that museums understand how individuals interact with Nature and with society, if they hope to play a catalytic role in fostering humanity's approach to sustainability.

In some regards, individuals are quite familiar to museums. Museum visitors are made up of a subset of individuals, some of whom reside in the community, and others who do not. When aggregated, visitors make up an extremely important aspect of museums – attendance revenue. Much of museum planning and economics revolves around these folks even though attendance is insufficient to address the cultural issues, needs, opportunities or trends of the larger community. While museums may know something about the leisure-time preferences of their visitors, there remains much to learn about how different people fit into the patterns and trends that define the larger living culture. If museums decide that they want to foster meaningful relationships that reach into all corners of community and culture, then forging deeper connections to individuals, groups, neighbourhoods, cities and so on, will be needed.

Museum staff that develop public programs may have a more nuanced understanding about the potential for fostering public engagement and impact goals, than those in non-public

programming parts of these organisations, however museum planning is frequently designed to serve the occasional visitor to a site. Planning museum experiences for tourists and occasional local visitors is very different from fostering relationships with individuals that evolve over time. New approaches are needed for museums to effectively support communities to address vital issues in ways that are relevant, build social cohesion and foster a shared vision of the future. (Worts, 2012). (See Fig 5 – I-O Model – Outside Impacts – Individuals)

Outside Impacts: Living Culture



Fig. 5. I-O Model Outside Impacts Individuals

It can be extremely helpful when museums understand how well their public engagement strategies actually have measurable impacts on individuals – and conversely, how individual perspectives and experiences can have significant impacts on museums. Although there is a long list of possible impacts of museums on individuals, some of the core ones are listed in Fig 5. When museums create ways of identifying and naming impacts, (e.g. the examples in Fig 5), they generate feedback loops that help guide assessments of how well visitors are motivated and supported in becoming co-creators of meaning. Museums can aim to support individuals who are inspired to understand the issues and forces that are shaping their culture – both intentionally and unintentionally. Such understanding can lead people to act in ways that fosters wellbeing in themselves, their families, communities, cities, bioregions, and social systems. These impacts can contribute to a healthy, engaged, democratic and sustainable culture.

When museums relate to people with respect, honesty, compassion and trust, members of the public can become more cohesive and motivated to engage in the living culture. It is not that museums should tell individuals what to think or do about the issues of the day, but rather a museum's power is to invite the public into processes of reflection, discussion and action that are timely and relevant. This approach to museology is more securely established within ecomuseums than in traditional collection-based museums (De Varine, 2017).

Traditional museums are often designed to welcome visitors who either: a) live away, and happen to be visiting in the role of tourists, or b) appeal to local people who visit occasionally, often for a special exhibit or to entertain out-of-town visitors. In both cases, the opportunity to actually build ongoing relationships with these occasional visitors is extremely limited.

However, if museums could develop strategies that prioritise the building of relationships with local citizens, around contemporary issue-focuses, the potential for more cultural involvement and cohesion can be created. Museums could help support individuals, and groups for that matter, as they: engage with both historical and contemporary issues/materials; connect with wide-ranging visions of proposed futures (from the viable to the non-viable); and exchange perspectives with others about overlapping interests. Such activities can lead to new potential cultural impacts. But such an approach to facilitating new forms of cultural dynamics will require museums to experiment with new public involvement strategies – and assess how visitors actually engage (Worts, 2016).

Outside Impacts: Living Culture



Fig. 6. I-O Model Outside Impacts Groups

Beyond individuals, museums can connect with groups in meaningful ways (Fig.6). Individuals spend a lot of their lives in relationships with groups of one sort or another, including groups related to: a common heritage; special interests; a shared neighbourhood; and more. Perhaps the most common example of a group is the family. It is within families that many people learn the basics of how to interact with others, as they gain understanding of how to navigate the needs and opportunities presented by doing things with others. Many mainstream museums have already developed strategies to engage with families – for which there is an extensive museological literature. It is unclear whether family-oriented, or other types of groupbased museum programs, have ventured into the sustainability realm. However it is potentially fertile ground for opening up dialogues around issues of values-based decisions, the implications of scaling common practices, assumptions about the future we imagine we are headed towards, and data on where current trends are actually taking us.

For groups to function well there must be trust and respect and a sense of shared values. Interacting with historical topics and materials is a rich way for individuals to explore, understand and ultimately nurture shared visions of the future, ethical ways to live meaningful lives and more.

Outside Impacts: Living Culture



Fig. 7. -I-O Model Outside Impacts Communities

While groups are often brought together by meaningful common ground, communities and neighborhoods (Fig.7) are often characterized by some degree of common interest, but as often as not, considerable differences. Communities can contain much complexity, and once you live in one, then there is a need to work through the challenges that are produced in the course of life.

Most museums exist to serve communities, but not all have strong relationships with them. And if museums always aim to define their relationship to a community only within the context of people visiting the museum building, the relationship can be seen as lop-sided, and more transactional in nature, rather than being relational. Since mainstream museums are built on the notion of audience transactions, as opposed to growing, evolving relationships, they often have difficulty expanding their reach beyond those willing to visit the museum property. If a museum's intended audience is tourists, then often little energy is put into the community, except to manage/minimize local problems. Some museums are designed specifically to build bridges to local communities and neighbourhoods, while others may involve the complexity of multiple neighbourhoods, or even regions. These approaches are often true for ecomuseums and some community museums.⁷

⁷For example: the Derby Museums, in the UK, <https://www.derbymuseums.org/>; many museums within the International Coalition of Sites of Conscience; www.sitesofconscience.org; museums involved in the Happy Museum Project, <https://happymuseumproject.org/>.

For museums that attempt to address issues that define our time in meaningful ways, issues of systemic and historical inequity can pose significant challenges. It is common for inequities to surface in ways that make working together more complicated. It takes a skilled, sensitive and compassionate hand to create space for different groups to come together in meaningful and constructive ways. Some museums have developed such skills, but for many that aspire to do this culture and sustainability work will need to develop them.

One of the big questions that museums must grapple with is ‘how can museums play the role of cultural catalyst, without being manipulative’? Another is ‘how do museums support the creative interactions of elements making up communities, without making themselves an integral, ongoing part of the dynamic’? These are relatively new skills for museums, so much experimentation, assessment and adjustments will be necessary.

Once again, ecomuseums may have much to share with mainstream museums.

Outside Impacts: Living Culture

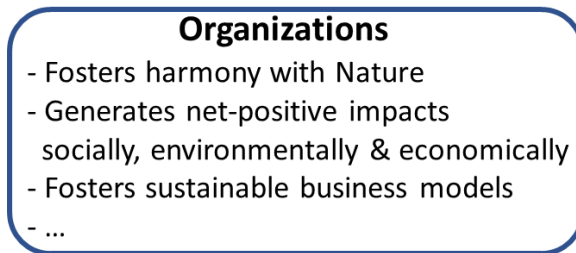


Fig. 8. I-O Model Outside Impacts Organisations

Organisations are building blocks of societal systems. Currently they play a wide range of roles, as: for-profits (free-market); non-profits; governments; educational systems and more. Organisations are designed to help achieve goals within cultures (Fig.8). For over a century, corporations have been given various sorts of powers, through laws and conventions, that are built on assumptions, principles and trust. For example, for-profit corporations were historically designed to efficiently deliver a product or service.

Building and operating railways is an example. So too was generating energy, mining, manufacturing and so on. Society envisioned a for-profit sector that effectively generated financial wealth as it delivered material goods and services, while providing jobs. The non-profit sector was largely geared to helping society manage the unintended consequences produced by the for-profit sector (e.g. cleaning up negative environmental and social impacts that needed to be addressed). Charities offered a way to move money and services from those with money to those without. Government was designed to look after societal wellbeing (especially police, hospitals, schools), to ensure democratic governance, as well as address problems that were unanticipated (e.g. disasters). But many organisations that work well at one point, do not necessarily continue to do so over time, unless they adapt to changing circumstances. For-profit organisations that were designed to generate financial wealth, specifically through production and consumption of goods and services, are now facing a rude awakening the Anthropocene. So-called “for-profit” organisations, for example, have long operated with a false sense that they pay the costs of doing business. However, historically, many costs have been externalized like pollution and loss of biodiversity. Now, with the Planetary Boundaries exceeded – these organisations must be held to account. Also, systems of competition systematically produce inequality and need to be rethought.

The point here is that status-quo organisations cannot be considered sacrosanct in a world that is fundamentally changing. If humanity’s ultimate goal is to retain a healthy balance within planetary systems, over time, then the governing systems for organisations must always be part of the mix as adaptive change is being ever-cultivated. Building agreements on the overarching principles for the living culture, over time, is also part of the ongoing challenge. Museums can play important roles in such processes, because they can engage the public in thoughtful reflection, dialogue and co-creative action.

Outside Impacts: Living Culture



Fig. 9. I-O Model Outside Impacts Cities/Regions

Cities and regions are made up of all the components discussed up to now, including the bioregions in which they are located. Cities/regions have a vital role to play in forging cultures that meet the needs of both present and future populations (see Fig 9). In fact they may become more vital than ever, because of the Anthropocene. Cities/regions are perhaps the largest or highest level of organisation that is capable of understanding, and relating to, all of the other levels individuals, groups, organisations, communities, natural systems, and more. As time goes on, there may be increasing pressure to organize human settlements around bioregions, because, in today's world, the vast majority of materials originate beyond the locality where they are consumed. Shipping goods and materials around the world is exceedingly problematic, not because of the monetary cost, but because of how our economic and business systems have 'externalized' so many real costs—leaving nobody accountable for the damage that is done. So, becoming food secure within bioregions makes a huge amount of sense. Agriculture needs to be reconceived so that local produce feeds local populations, by reducing 'food miles', as well as by embracing regenerative farming practices. Governments that are organized to manage bioregions, not simply politically defined spaces we call cities/towns, may help to plan effectively for balanced approaches to environmentally/scientifically viable and ethically desirable human settlements.

Such an approach could also help connect meaningfully to higher levels of governance (e.g. nations, global), in which the wellbeing of global systems (both human and natural) also must be kept in mind.

It has been a common phenomenon for cities to experience exponential population growth, which necessitates the provision of ever-increasing housing, food, and a host of services.

Much of the housing in our culture is considered a market commodity, and a vehicle for individuals and corporations to make huge amounts of money. Sadly, the pursuit of profit has devastated large amounts of prime agricultural land in the rush to build urban and suburban sprawl. With the loss of open land, both agricultural and 'wild', the human/Nature relationship is threatened. Local populations become more disconnected from a reliable source of food, since local farming is unable to produce sufficient food to meet local demand. The result of that is increased pressure on food production using high-intensity agricultural techniques that erode soil health, and then shipping food around the world, with massive carbon footprints (Rees, 1995).

Cultures that lose their ability to be adaptive in our fast-changing world, risk having Nature rebalance its own systems, with no concern for the wellbeing of any particular species (i.e. humans). As a result, regional approaches to culture could help generate viable, shared visions of the future, monitor current trends, and develop new strategies that ensure wellbeing for all stakeholders within a healthy, conscious and adaptive region.

Beyond the level of city/region, it is clear that national governments play an important role, especially if humanity is to be able to 'think globally and act locally'. It is important to remember, however, that governments that are most distant from their constituents are those at the national level. It makes a lot of sense to enable lower levels of government to address needs and opportunities within a region. National governments, at least in theory, exist to ensure that equity and wellbeing are foundational parts of a population that stretches over multiple regions. They also connect with and help to harmonise realities in other nations and parts of the world.

To reach one step higher and to imagine how global governance might better operate, it is worth looking at existing models. The United Nations is an example of how challenging it is to bring the world's countries together in an effort to agree on a common future. Through the Sustainable Development Goals (SDGs), a consensus plan was developed and agreed in 2015.⁸ Using an understanding that all of the world's systems are interdependent, the SDGs tease out 17 goals, which are both unique and entirely interdependent. Each country has agreed

⁸ <https://sdgs.un.org/goals>

to, (but is not legally bound to), address the SDGs in ways that are appropriate for their country. These goals are not a perfect solution, but rather a framework for each country to: a) clarify the nature of the challenge/opportunity in their jurisdiction, and b) develop its own approach to a sustainability vision and plan. Each country feels a sense of ownership for its challenges and solutions. The SDGs provide a useful tool to help guide cultural organisations towards meaningful cultural impacts. (see McGhie, chapter 1, <https://www.ledipublishing.com/book/9788855268387/ecomuseums-and-climate-change/>).

The high level of systemic inequality (both social and economic) that exists around our globalized and interdependent world, makes it difficult to design a future that treats everyone fairly, and sustainably. Great economic wealth and power exists in some places and not others, all based on values, systems and behaviours that are not possible to sustain. As a result, it is vital that the foundation of an emerging, globalized future acknowledge and honour its multifaceted past. Equally important is that the future is based on a truly level playing field based on equity, justice and living within the Planetary Boundaries. This brings us to perhaps the most challenging part of humanity’s future – to transform systems that have evolved over millennia. (See Fig 10)

Outside Impacts: Living Culture

Transform Human Systems

- Foster net-positive-value-based economy - (i.e. socially, environmentally, economically)
- Social systems - equity, justice, etc
- Governance - participatory democracy
- ...

Fig 10. I-O Model Outside Impacts Human Systems

Unless humanity can alter many of the systems associated with the accumulation of power and wealth, it is hard to imagine how there is a future for humans on Earth – certainly not a future of wellbeing. Essential for wellbeing is that we live within the biophysical limits of the planet. And arguably, we cannot continue without systems that ensure equity for all. This means that we need to develop and employ economic and governance systems that are designed to achieve these results. There are no quick fixes for systems change. Nonetheless, transforming foundational systems of value-generation, governance and

societal equity are part of the adaptive cultural change that museums can help nurture, as they foster local/global cultures of sustainability.

In order to bring us back down from the stratosphere of puzzling over how best to design sustainable global systems, it is worth returning to the inside dimension of the Inside-Outside Model (Fig. 11). It is here that we must remember that, if museums are to become catalysts of cultural adaptation and transformation, they will need to create 'New Public Engagement Strategies' and 'New Measures of Success'. These are natural byproducts of thinking more holistically. It is the only way we can break out of the cycle of doing what we've



always done.

Fig. 11. I-O Model Inside Dimension Revisited

The Inside-Outside Model is a relatively simple tool that was designed to help map a very complex set of dynamics related to the living culture, sustainability and museums/ecomuseums. It does not contain answers to the question of 'what should museums do to have meaningful cultural impacts?', however, it does offer a framework for designing public engagement strategies that have the ability to catalyse inclusive and transformative change.

In chapter 2 the authors continue this theme of museums as catalysts of cultural adaptation and provide examples of how the Inside-Outside Model has been used over the past few years, by the Parabiago Ecomuseum, in Italy.

References

- AtKisson, Alan, *Believing Cassandra: How to be an Optimist in a Pessimist's World*, Routledge: 2010
- De Varine, Hugues, *L'écomusée singulier et pluriel: Un Témoignage*

- Sur Cinquante Ans De Muséologie Communautaire Dans Le Monde*, L'Harmattan, 2017
- Davis, Peter, *Ecomuseum: a sense of place*. Continuum: 2011
- Diamond, Jerod, *Collapse: How Societies Choose to Fail or Succeed*, Viking: 2005
- DROPS website, the World Platform for Ecomuseums and Community Museums, Managed by Raul Dal Santo <<https://sites.google.com/view/drops-platform/home>>
- Hirzy, Ellen (ed), *Excellence and Equity: Education and the Public Dimension of Museums*, AAM: 1992
- Homer-Dixon, Thomas, *The Up-Side of Down: Catastrophe, Creativity and the Renewal of Civilization*, Vintage: 2006
- Janes, Robert, *Museums in a Troubled World*, Routledge: 2009
- Klomp, Kees & Shinta Oosterwaal, *Thrive: Fundamentals of a New Economy*, Atlas Contact, Uitgeverij, 2021
- Koster, Emlyn, "Relevance of Museums to the Anthropocene", *Informal Learning Review*, No. 161 , Informal Learning Experiences, Inc: May/June 2020
- Meadows, Donella, Dennis Meadows and Jorgen Randers, *Limits to Growth the Thirty Year Update*, Chelsea Green: 2004
- Meadows, Donella, Dennis Meadows, Jørgen Randers, William W. Behrens III, *Limits to Growth*, Potomac Associates, 1972
- Raworth, K, *Doughnut Economics : Seven Ways to Think Like a 21st-Century Economist*, Cornerstone 2018
- Riva, R., *Ecomuseums and cultural landscapes. State of the art and future prospects*. Maggioli Editore, 2017.
- Riva, R., Aldovini, G., & Dal Santo, R. (2022). Managing the eco-social transition: communities in action to build possible futures. *TECHNE Journal of Technology for Architecture and Environment*, (23), 6268.
- Sutter, Glenn and Lynne Teather, "Getting to the Core: Can Ecomuseums Foster Cultures of Sustainability", in Raffaella Riva (ed) *Ecomuseums and Cultural Landscapes: State of the Art and Future Prospects*, Maggioli Editore, 2017.
- Sutter, Glenn, Tobias Sperlich, Douglas Worts, René Rivard and Lynne Teather, "Fostering Cultures of Sustainability through Community Engaged Museums: The History and Re-Emergence of Ecomuseums in Canada and the USA", *Sustainability*, 2016 #8, 1310
- Sutter, Glenn and Douglas Worts, "Negotiating a Sustainable Path: Museums & Societal Therapy", *Looking Reality in the Eye: Museums & Social Responsibility*, R. Janes & G.C. Contay (eds.), U of Calgary Press, 2005
- Worts, Douglas, "Museums: Fostering a Culture of 'Flourishing'", *Curator: the Museum Journal*, Vol 59, No 3, 2016, pp 209-218
- Worts, Douglas, "Heritage Planning for Sustainable Cultural Impacts",

AASLH Blog Post: 2019 <https://aaslh.org/sustainable-cultural-impacts/> (last checked Sept 12, 2022)

Worts, Douglas, "Planning for Cultural Relevance: A Systems Workshop at the Georgia O'Keeffe Museum", in *Systems Thinking in Museums: Theory and Practice*, Roman & Littlefield: 2017

Worts, Douglas, "Culture and Museums in the Winds of Change", republished in *Reinventing the Museum: The Evolving Conversation on the Paradigm Shift*, Gail Anderson (editor), Alta Mira: 2011

Worts, Douglas, "Transformational Encounters: Reflections on Cultural Participation and Ecomuseology", in *Canadian Journal of Communication*, vol. 31, Spring 2006, pp. 127-145.

Worts, Douglas, "On the Brink of Irrelevance?: Art Museums in Contemporary Society", *Researching Visual Arts Education in Museums and Galleries: An International Reader*, Les Tickle, Maria Xanthoudaki (eds), Dordrecht: Kluwer Publishers, 2003

Worts, Douglas, "On Museums, Culture and Sustainable Development", chapter in *Museums and Sustainable Communities: A Canadian Perspective*, Quebec City: ICOM Canada, 1998

2. Museums Planning for Cultural impacts. The case study of Parabiago ecomuseum (Italy)

Raul Dal Santo and Douglas Worts

Introduction

This chapter offers a practical glimpse into how one ecomuseum in Italy has used the Inside-Outside Model (See Worts and Dal Santo, chapter 1 this volume) to help guide its work toward sustainability-based, co-creative impacts, across its region.

When a cultural organisation embraces the role of ‘cultural catalyst’, especially in an unsustainable world, its planning processes must be based on the needs of the present and future, while being informed and guided by insights from the past. Such organisations also need to focus on creating impacts in the living culture, not simply generating organisational outputs for local consumption (e.g. through exhibitions and educational programs).

Cultural adaptation occurs locally, with evidence of emergent issues being successfully addressed. However, global populations and systems have scaled far beyond the capacity of the planet to maintain a regenerative balance between people and nature (Wackernagel, 2005). Accordingly, when individual communities plan their futures, they need to keep a close eye on both local and global trends, modifying their plans as needed.

Figure 1 – Culture is Relationships provides a rudimentary sense of the complexities involved in human/planet interactions. As a result of exponential growth of human populations on a planet with biophysical limits, the relationships of humans to everything else has shifted.

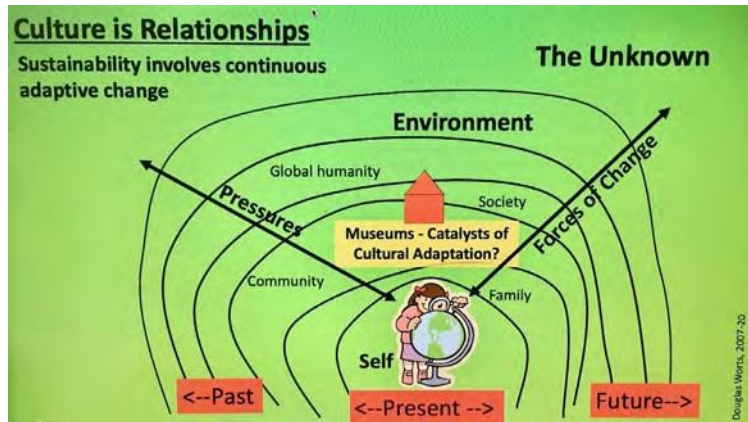


Fig. 1. *Culture is Relationships* (courtesy Douglas Worts).

The mid-20th century heralded the beginning of the Anthropocene – the newest geological epoch (Koster, 2020). With it came the reality that humans are now the single-most potent force affecting the Earth’s natural systems. The implication is that either humans as a whole must alter the scale and form of how they inhabit the Earth, or our planet’s natural systems will begin to collapse and reinvent themselves in new ways (Peterson, 2013) The latter will either radically transform how humans live, or eliminate humanity entirely from Earth.

We collectively stand at a cross-road. The wellbeing of humanity depends on our global culture becoming rooted in conscious and responsible relationships to ourselves and to all of nature. Being aware of this precarious moment in time, as well as the accumulated insights and wisdom from the past and the vast creativity of humanity today, the potential to chart a course towards a flourishing future is within our grasp.

Physical museums have not always been part of human culture. Nonetheless, the idea of invoking creativity, insight and meaning, through reflection and imagination (i.e. the muses), has been vital to human development. In this sense, museums can be seen, not simply as particular physical places, but rather as processes designed to foster reflection, understanding and creative action. More than ever, humanity needs effective mechanisms to help it adapt to the changing world.

Accordingly, at the centre of Fig. 1 is a suggestion that museums can design themselves to be catalysts of cultural adaptation in our ever-changing world. This potential would draw heavily on

many existing skills and assets which museums hold – especially the stories and creative products of our amazing world. However, new skills, relationships, activities, knowledge, visions, values, goals and priorities will be needed to ensure that museums are, first and foremost, addressing the cultural issues of our times and focusing on change processes that must occur beyond museum walls, in the heart of the living culture (Worts, 1998).

If humanity aims to have some control over its own destiny, it needs a vision of what a sustainable future for our species might look like – which means building a consensus vision that people will embrace. This will involve becoming clear about how people can thrive in nature's complex world of materials, lifeforms and systems, not to mention human diversity and diverse lifestyles around the globe. What museums do currently was never designed to facilitate cultural change/adaptation, so there is no reason to believe that exhibits in leisure time will address the goal. It will demand thinking 'outside the box' with novel strategies, partners, settings and performance measures. This work is tricky because museums can't, and shouldn't, set their sights on changing living cultural values in specific ways. Museums can help convene and facilitate public processes for generating visions of the future that are both scientifically viable and ethically desirable, all within regional contexts.

Convening diverse stakeholder discussions about viable futures requires insights that come from an array of perspectives that must be grounded variously in the issues of our day, but also in the changing circumstances that connect the past, present and future. These kinds of insights exist throughout society, and include scientists, artists, historians, storytellers, city-builders, farmers, engineers, economists and much more. These inclusive and creative discussions are required to build and refresh societal cohesion. Undoubtedly, some will be contentious.

For example, we might well ask ourselves whether the value of "competition" as a driver of the economy and our governance systems, should be replaced by "collaboration", or another alternative? How can humans envision, and then transition to, a system of equity that treats everyone as a valued and equal member of communities? How can we shed our colonial traditions that have been proven to be utterly unacceptable? It won't be easy for museums, because these are not the questions that museums have traditionally had to deal with.

Nonetheless, culture is what connects humanity to its past, present and future. Culture also provides the values foundation (both conscious and unconscious values) that enables human civilization to operate day-to-day. Being able to address the issues, needs and opportunities of our time requires deep reflection, meaningful dialogue and co-creative action. Can museums step into that space and begin to function as catalysts of cultural transformation? The answer to these questions is likely a resounding... 'not unless many things change within museums.' Luckily, there are some precedents that may be very helpful especially from the field of ecomuseology.

The Inside-Outside Model in Practice

Parabiago is a town of about 30,000 inhabitants, near the City of Milan, in the Lombardy Region of Italy (see map, Fig.2). Since the 1950s, the surrounding landscape has become severely degraded because of industrialisation, urbanisation and the growing infrastructure. It suffers from the loss of many local species and essential biodiversity. Gone too is ecosystem integrity and resilience after the encroachment of humans on natural spaces. These are just some of the symptoms of this neglected landscape that seem to have become invisible to local populations.



Fig. 2. Parabiago is in northern Italy (base map by <https://www.naturalearth-data.com/>)

What seems especially sad is that inhabitants no longer appreciate the living heritage of this bioregion. For centuries, locals felt a deep sense of connection between the land and their lives. The land contained social relationships, guided by customs and traditions that helped define the meanings of places and the resources they contained. There were rules and procedures for cohabitation between humans and the land. In our contemporary world, there are still opportunities to nurture vital relationships between community and the land upon which it relies. However, as the world changes, so too do the relationships hopefully informed by the wisdom that has been generated by residents over the years. The possibility exists for banishing the sense of placelessness that has evolved in recent times and generate a collective vision for a healthy community that thrives within a flourishing landscape. It will take effort, commitment and a shift in priorities of residents to realize such a vision.

The landscape ecomuseum of Parabiago was established in 2008 to address the environmental degradation described above. It is a cultural institution that was created within the local Agenda 21¹ project, a voluntary process started by the Municipality of Parabiago in 2002. The ecomuseum is managed by the Municipality of Parabiago. It was accredited by the Lombardy Region, according to regional regulation (Dal Santo, 2009).

Issues

Like many places in the world over the past few years, Italy has suffered from the COVID 19 pandemic. Over 170,000 people in Italy died, with the elderly being especially hard hit. As COVID was knocking public health off balance, Italy has also been struggling to deal with the economic slowdown from the pandemic, a war in Europe that broke out in early 2022 and the massive uncertainty driven by the gathering storm of climate change.

While governments do provide services, they also exist to foster a consensus vision of a future of wellbeing for both people and the natural world upon which humanity depends. They

¹ Agenda 21 is an action plan to foster sustainable development. It was approved in the 1992 UN Earth Summit in Rio de Janeiro.

also need to constantly be engaged in building meaningful public relationships that nurture cohesion, trust and respect. In the metropolitan area of Milan governments at various levels (municipalities, regions, provinces) have been too quick to adopt corporate mindsets that focus too much on issues of legal control rather than on collaborative, participatory democracy. Rebalancing this relationship is one of the main opportunities of ecomuseums.

Strategies

The Parabiago ecomuseum has developed a set of strategies for engaging many community stakeholders in discussions about the nature of the community's ever-changing needs and how best to meet them. By taking a holistic approach, the ecomuseum is operating indirectly on the sick state of the physical landscape (e.g. loss of biodiversity, water pollution and inappropriate development), through direct interventions into the causes of the dysfunction that are crippling the landscape and rendering the problem largely invisible to the community (e.g. a growing lack of awareness of how human behaviour is degrading natural systems). By addressing the anthropogenic forces that are degrading local environmental systems, the ecomuseum builds community relationships, fosters common vision, builds cohesion, and cultivates a sense of empowerment to help secure the wellbeing of the region. (Dal Santo, 2017). The ecomuseum is part of, and in some cases is coordinating, co-creative processes within local, regional, national and international networks.

Heritage

The Ecomuseum of Parabiago empowers the community in the adaptive and sustainable use of the living heritage. The ecomuseum's projects and activities are shaped by many forces and factors, including personal and collective values, morals and principles that guide choices. It is our beliefs that help bridge the gaps we encounter with the unknown, our connections to nature and to our fellow humans; our relationship with the past, present and future; as well as our rituals, routines, aspirations, creativity, customs, skills, fears, and more. According to

Hugues de Varine, the living heritage is the humus, the breeding ground, and the root of the future. Everyone should take charge of it, through an effective governance process of cultural, social and economic change, rooted in living heritage, with the prospect of sustainable local development (Varine, 2005).

Participation

The Ecomuseum of Parabiago was designed to operate outside traditional museum logic. Specifically, this means planning and working *with*, as opposed to *for*, the community. Often, traditional museums attempt to generate material for the public that they believe will be of interest and value, but which commonly excludes the community from the planning, design and decision-making processes. The purpose, process and planning of the work of this ecomuseum is oriented towards working “with” the community, according to the logic of participatory planning and active citizenship. A public forum of participation was first created in 2007, and such forums continue to be organised to address community issues and futures. Owners of land and the cultural heritage, municipalities, museums, parishes, water treatment companies, associations, farmers, traders and artisans, public and private educational institutions, as well as individual citizens, are all encouraged to attend such forums. The stated goal of our ecomuseum is to engage citizens and local organisations in the issues and forces that are shaping their community. Public meetings are designed to ensure that participants become informed about how the ecomuseum can help citizens shape and respond to the issues and trends affecting Parabiago. Central to the whole idea is that citizens and local interests participate in co-creative processes of planning and implementing long term action plans that activate and utilize their local heritage resources, knowledge and skills to realise the planned actions (Fig 3).

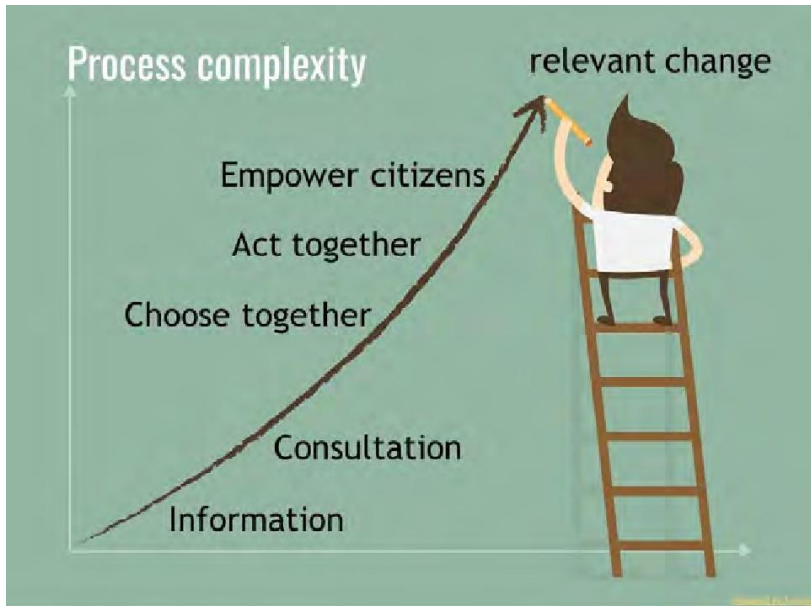


Fig. 3. *The stair of participation (courtesy of Parabiago Ecomuseum)*

For the Ecomuseum of Parabiago, the co-creative and participatory processes are at least as important as the results and the outcomes of the planned actions. In fact, the interactions of the local actors are essential in order to create a sense of place and community, while maximizing impacts. The aim is not only the realisation of participatory activities, but also to trigger cooperation agreements with citizens, for the care, management, and regeneration of the cultural heritage and the landscape, in accordance with Article 118 of the Italian Constitution.² In this way, the ecomuseum becomes a facilitator that enables people to apply their creative and physical energies, while sharing resources inside the community itself all for the general interest and to produce and develop common goods and wellbeing. The agreements that were concluded over the years have been both formal and informal, following a careful process. (Fig. 4).

²Comma 4 art. 118: "The State, regions, metropolitan cities, provinces and municipalities shall promote the autonomous initiatives of citizens, both as individuals and as members of associations, relating to activities of general interest, on the basis of the principle of subsidiarity". This principle consists in identifying the right actors and the best level for action that is consistent with the issues resolution



Fig. 4. The workflow for a cooperation agreement (courtesy of Parabiago Ecomuseum)

Climate action and 2030 UN SDGs³

Since 2019, working within the international museum movement, the Parabiago ecomuseum has been actively nurturing the potential role of museums in achieving the UN 2030 Sustainable Development Goals (SDGs). Specifically, climate action projects have played an important role in helping generate meaningful impacts in this region.

³ <https://sdgs.un.org/goals>

The results of these initiatives are reported elsewhere in this volume (Pigozzi et al, chapter 3, <https://www.ledipublishing.com/book/9788855268387/ecomuseums-and-climate-change/>).

Through relationships with engaged community stakeholders, the Parabiago ecomuseum is helping to visualize the ‘sustainable future’ that the region plans to build.

Parabiago Ecomuseum: Short Term Plan⁴

In 2020, the Parabiago Ecomuseum and the local ecomuseum network proposed that the Lombardy region incorporate the SDGs as new requirements that ecomuseums must commit to in order to be officially recognised. The proposal was accepted, and the Parabiago Ecomuseum developed its short-term plan, based on the SDGs.

For example, the ecomuseum’s short-term plan, Action #6, starts with the premise that local cultural practitioners can play an important role in biodiversity conservation, specifically through a focus on community-based projects and “citizen science” initiatives. The notion of ‘cultural practitioners’ is used in a very inclusive sense, including: artists, craftspeople, arts and heritage professionals, as well as governments, business, teachers, farmers and every citizen. For this reason the Parabiago ecomuseum planned to engage, promote and achieve the 17 United Nations Sustainable Development Goals, using participatory processes, by 2030, monitoring results annually and assessing process impacts within the planning process.

The Ecomuseum promotes collaborations between many types of organisations and individuals. These are carried out, not only in relationship to the SDGs most closely linked to culture, (e.g. SDG 4, focused on ‘quality education’), but also on the others. For example, SDG 11 “Making cities and human settlements inclusive, safe, lasting and sustainable” and SDG 13 “Adopting urgent measures to combat climate change and its consequences”. All of the goals are entirely interdependent.

The Ecomuseum is committed to developing the role of cultural organisations, specifically in relationship to addressing climate change and building cultures of resilience. This commitment can be broken down into several functions, including:

⁴ A English version of the ecomuseum short term program is available at http://ecomuseo.comune.parabiago.mi.it/ecomuseo/risorse/piano_operativo2022_24_eng.pdf

1. building staff and public (meaning citizens, organisations, communities, and more) awareness of how our changing climate is but one manifestation of how culture and human behaviour have inadvertently knocked planetary systems off balance;
2. supporting local actors in raising public awareness of the need for mitigating the causes of climate change;
3. mobilizing cultural workers as empathetic, and co-creative cohesion-builders in the public discourse on climate change;
4. positioning cultural organisations to lead by example, providing tools and resources to do so.

In the coming years, the Ecomuseum plans to work in participatory ways with cultural heritage management institutions, as well as other partners in the community, for the implementation of sustainable strategies and practices at all levels of society. The overall goal is to both envision and then realize relevant and resilient cultural organisations that act as catalysts for resilient communities.

Ecomuseum impacts

The ecomuseum adopted the Inside/Outside cultural impacts model, by Douglas Worts, when it was first shared through the international ecomuseum DROPS platform, in 2019.⁵ What follows is a reflection on how the Inside-Outside Model (see Worts and Dal Santo, chapter no. 1, this volume) led the Parabiago Ecomuseum to think differently about the various internal and external aspects of being a catalyst of cultural adaptation.

Inside Impacts Museum culture

Vision / Mission / Policies

We began with a review of our vision, mission and policies.

⁵International online platform for Ecomuseums and Community Museums, known as DROPS, can be found at <https://sites.google.com/view/drops-platform/home>

- *Vision* culture of sustainability

We affirmed that our vision was to achieve a ‘culture of sustainability’ for the community a vision that already had a history. The Parabiago ecomuseum was established as part of a local ‘Agenda 21’ process.⁶ In 2002 the Municipality of Parabiago developed its strategy, aimed at fostering sustainable local development, based upon active participation of citizens, policy integration and measurability of results. In 2004, the City of Parabiago signed the Aalborg Commitments⁷, (the goals of the European cities to achieve sustainable development of their communities) and started a long-term process to integrate the commitments of sustainability into municipal politics and practices. This was a cooperative and co-creative learning process that has empowered the Ecomuseum since 2008. The expectation was that such a process would lead to change in the internal culture and thinking processes of the municipality. Many felt that new skills would be developed, enabling more effective identification of stakeholders, conducting community needs assessments, developing new forms of policies and new working relationships with local and regional governance bodies and institutions (e.g. schools). Ultimately, there were ambitious hopes that this approach would, develop new types of vision/values-aligned partnerships and projects.

- *Relevant* address cultural needs

We asked ourselves if the ecomuseum was ‘relevant’ and oriented to addressing community needs. The answer was that the Municipality, and the ecomuseum itself, had experienced an internal culture change in recent years, so that now it is better able to identify and address local cultural needs. We are also better positioned to interact with the entire community, as a ‘living museum and a ‘living culture’.

- *Plan for adaptive cultural impacts*

We also affirmed that the Ecomuseum’s intent is to foster adaptive cultural actions and impacts. The Ecomuseum participated extensively in the regional planning process (i.e. the Strategic Plan of the Olona River basin, the landscape regional plan) promoted by Lombardy Region. In 2019 the Parabiago

⁶ For information on the Parabiago Agenda 21 initiative http://ecomuseo.comune.parabiago.mi.it/INDEX_ev.html

⁷ <https://sustainablecities.eu/the-aalborg-commitments/>

ecomuseum, within the Lombardy Ecomuseums Network, inspired the Lombardy Region Council to adopt a new model for monitoring ecomuseums that will also evaluate their impacts (see Pigozzi et al, chapter 3, <https://www.ledipublishing.com/book/9788855268387/ecomuseums-and-climate-change/>).

Net-Positive Value Generation

We were intrigued when we asked ourselves whether the museum facilitated net-positive value generation in its operations and the community, because we hadn't thought this way about our impacts before. We had thought about our own waste and about our energy use, but considering an overall assessment of both negative and positive value created was a challenge especially when we thought about whether the museum was fostering net-positive value across the entire community.

- *Sustainable energy /waste /emissions*

The Ecomuseum, as part of the Parabiago Municipality, contributed to developing actions in according to the EU green new deal policies for example:

- Efficiency (Inside: thermal insulation of building, LED lighting)
- Reduction of carbon emissions (Inside: solar energy production on the museum roof use of bicycles by employees and volunteers)
- Waste management, energy use reduction campaigns (Inside: by employees)
- Digitization / documental dematerialization / informatization

- *Assessing cultural needs*

The Ecomuseum had developed several strategies for assessing the cultural needs of the community both long and shortterm needs.

- *Measuring impacts*

The integration of policies and processes related to community-engagement and impact-assessment is still rudimentary, but evolving. For this reason, the Parabiago ecomuseum took part in regional and international networking to improve our measuring and monitoring skills. The Ecomuseum is part of:

1. the steering committee of DROPS, the international platform for ecomuseums and community museums, which is addressing the issues of monitoring and measuring impacts.
2. The Ecoheritage Consortium, founded by EU ERASMUS+ programme (Ecoheritage) is designing a tool for auto-monitoring and developing a training module for the European context that considers cultural impacts (see Pigozzi et al, chapter 3, <https://www.ledipublishing.com/book/9788855268387/ecomuseums-and-climate-change/>).
3. the Lombardy Ecomuseums Network suggested that the Lombardy Region consider cultural impacts as legal requirements in the ecomuseums monitoring system. The Region accepted the proposal and approved the new requirements.

Skills, Strategies, Partners

- Align vision, skills, actions, • Co-Creative Partnerships • Diversity – staff, board

In the late 2000s the Ecomuseum hired experts and acquired new skills in participatory and co-creative learning as well as stakeholder engagement.

Through these participatory processes, and enhanced skills, knowledge and resources, for use both inside and outside the institution, the Ecomuseum has expanded its capacity for nurturing meaningful impacts. The ecomuseum was able to take over the role of facilitator of a complex network of actors (institutional, economic, non-profit sector, and individual citizens) to empower a co-creative partnership with a wide convergence of stakeholders.

Outside impacts living Culture

Individuals

The I-O Model (See Worts and Dal Santo, chapter 1, this volume) suggests that some of the central impacts of museums involve and depend upon individuals. From visitors to collaborators, the museum always works with individuals. And when individuals are engaged in ways that have the potential to advance the goal of sustainability, it is aided by the museum's commitment to: stimulate curiosity; nurture self-reflection (of one's values and behaviours); support creativity; foster empathy; encourage the acquisition of new knowledge; foster responsible action; and build harmony with nature.

While engaging individuals has always been an important goal for the Ecomuseum, the idea of measuring actual impacts was a more challenging concept.

Numerous projects included in the Ecomuseum's long-term plans aim to foster individual empowerment and inspiration to learn how local heritage and contemporary issues forge the living culture.⁸ Since cultural heritage provides the roots of the future (De Varine, 2017) the ecomuseum helps people to know and draw insights from the past, to better inhabit the present and forge a flourishing future. To do this, the "memory bank"⁹ was published online and is being continuously updated in participatory ways. The database is composed of pictures, eBooks, maps, video interviews, educational video clips, exhibitions, conferences, and more. Most of the "bank" is composed of material provided by the local population and the informatics community (e.g. through Wikipedia) and was digitized and made publicly available, to enable everyone to interpret it. Some elderly people who collaborated on the project later died and the memory bank preserves their memories. The ecomuseum carries out research and produces materials for the public to better know and understand their local heritage (in particular issues related to landscape and nature), as well as, global issues, such as the need for climate justice¹⁰.

The open-source licence of most of the memory bank material permits people to share, copy and redistribute it, transform and build upon it for any purpose, even commercial. In this way, the memory bank enables authors to add value to existing material, including attribution of authorship to the new contributors, while distributing the work under the same license as the original.

The momentum of the memory bank project has slowed in recent years, but its impact was high during the pandemic lockdown times, when people searched online for cultural products with which to engage.

⁸ link to the Ecomuseum's Long-term plan http://ecomuseo.comune.para-biagio.mi.it/ecomuseo/risorse/piano_operativo2022_24_eng.pdf

⁹ the "Memory bank" is an online collection of photographs, videos, interviews, soundscape recordings, ebooks, maps, exhibitions and thesis on material and immaterial heritage. It is available at: http://ecomuseo.comune.para-biagio.mi.it/ecomuseo/BANCA_DELLA_MEMORIA.htm

¹⁰ The climate justice campaign is a joint venture with the Mulini natural Park and is available at: <https://sites.google.com/view/parcodeimulini/partecipazione/cambia-il-clima>

The Ecomuseum promoted the memory bank material through social media networks, resulting in a significant increase in accesses, compared to the pre-pandemic period.

Groups and Communities

Beyond a focus on individuals, museums can engage with groups in order to expand the kind of impact it wants to generate. When museums are able to engage groups in ways that fosters dialogue, or generates trust and respect, then meaningful change can be nurtured. Many of the impacts that are required to build a sustainable world require momentum at collective levels and groups are one of those levels. When groups and other collectives begin to focus on relevant societal issues and forces, with the intent of shaping wellbeing, then the collective thinks somewhat differently than one does as an individual. Groups are able to help explore issues thoroughly and build momentum for cultural transformation. And when museums manage to foster dialogue between groups, then it builds the kind of cohesion within and between groups that can produce a shared vision for the future.

From 2017 to 2022 the ecomuseum facilitated the creation of 39 cooperation agreements or pacts with community groups to develop projects (see Fig. 4 and the “Participation” paragraph). One example is a group of volunteers who organized visits to the Madonna di Dio’l Sà Church, a national monument that was closed due to the lack of priests who celebrate masses.

Other examples are more complex and collaborative, including the Olona River Pact and the

Agriculture Pact. These groups are working together with a specific focus on the river basin management and the agroecosystems regeneration. The ecomuseum supported cohesion within and between collectives that in the past were not used to working together. Through this kind of collaborative work, impacts have been felt as transformations both in a cultural sense (the cooperative way that work is done) and in a physical sense (how the health of the landscape has improved).

When increasing public participation combines with increasing process complexity, the results can include meaningful change in the local living culture. All of these agreements are monitored and some projects are renewed. Also, new projects have emerged from ongoing dialogue with community stakeholders. Accordingly, the flow chart in Fig. 4 should be re-envisioned in a circular way.

In fact, the monitoring of each concluded agreement gives essential feedback to better design new agreements.

Communities / Neighbourhoods / Town

Within the framework of the I-O Model, neighbourhoods are larger units than groups, but smaller units than communities. Creating ways to engage effectively with these types of collectives will likely take experimentation. The goal is ultimately quite similar across these collectives to build cohesion around a vision of the future that people can embrace, or at least agree to. It requires an inclusive process that discusses the assumptions that underpin various approaches to the future, and working through how well those approaches meet the needs of everyone for a safe, nurturing, satisfying life, within an environmental system that has biophysical limits. Being able to identify stakeholders, not only as individuals, but also as groups, neighbourhoods, communities and organisations, is a big step. This work also lays the foundation of communication and co-creativity that can build cohesion related to a viable, desirable vision of a sustainable future.

The Ecomuseum and its partners have succeeded in documenting and mapping the living heritage and assessing cultural needs of the four neighbourhoods that make up the Parabiago community. This process began in 2007, with the creation of a parish map. In fact, this map was the first programmed action contributing to the long-term planning of the ecomuseum. It involved a participatory process, resulting in a permanent and updatable “archive” of the tangible and intangible heritage of this territory. Other parish maps were also realized in 2011, 2017 and 2018 (Dal Santo, 2020). These maps help build trust between individuals and groups, as well as help to identify emerging visions of the future. To update and implement map contents, a multimedia map was realised inside the Memory bank. This later map contains earlier parish maps of Parabiago, with more recent updates layered in.¹¹ The maps and participatory mapping processes also inspired thematic, cultural and natural routes through the community, both on foot and cycling, which encourage individuals to explore their community in new and thoughtful ways. During the COVID pandemic lockdown times a great number of people did a lot of walking and cycling – these cultural routes continue to be used today.

¹¹ <http://ecomuseo.comune.parabiago.mi.it/ecomuseo/MAPPE.htm>

Transforms Human Systems

- economy - net-positive value (social, environment, economic)
- social systems-equity, justice, etc.
- governance participatory democracy

Now that human activities and impacts are destabilizing Earth's natural systems (i.e. the epoch of the Anthropocene is upon us), the I-O Model identifies 'human systems' as important factors in both understanding and addressing humanity's existential predicament. For over 50 years humans have pushed our planet beyond its ability to regenerate itself. Being able to visualise a scientifically viable and ethically desirable future is essential. Current systems of economics, business, governance and laws have enabled humans to wield powers that are not guided by wisdom, justice or ethics. Unless current trends in population growth, consumption, waste-generation, governance, well-being and stewardship of the environment are redirected, Nature will establish a new world order, Systems that have driven wealth and power generation now provide the inertia that is propelling humanity, and earth systems, into collapse. While a small town in Italy cannot itself change these systems, collections of small towns do have the ability to be catalysts for systemic change. Catalysts don't have to do the heavy lifting of systems change but they can develop the understanding of how to exert influence in ways that bring about necessary change. The ecomuseum of Parabiago has coordinated, facilitated and empowered the work of a wide network of stakeholders (individuals, groups, public institutions, businesses and traders, non-profit sector) to address the problems facing the landscape that had become invisible to most local people, and which needs to come back into view. This network was able to engage the local culture to map the geography, along with the heritage, then diagnose what was making the landscape sick and devise ways to restore it to health. Along the way, the community has considered how best to manage the wellbeing of the land, while regenerating it. Forums and working groups that meet periodically has considered and chose design options.

It was determined that a change in the model of governance of the ecomuseum was required to address and integrate physical, managerial and procedural aspects, and to bridge the public interests with interests of the private sector. In fact, in the beginning, the ecomuseum worked more closely with the traditional logic of administration management where the bureaucratic power has control over decisions.

However, over the years, it has increasingly embraced the shared management of the common goods.

The results can be read in relation to the changes and impacts that have been produced or triggered: changes in the way work is done, cultural changes, in particular linked to the relational and social dimension. Such changes, in turn, contributed to produce physical impacts in particular the improving landscape.

What happened in the area along the Olona River gives an example of these kinds of transformations that the ecomuseum called “river renaissance” (Fanzini, 2019). In 2013, the Mulini natural Park and its partners, (including the Ecomuseum, the owners of the land and numerous individual citizens), signed the *Pact for the Olona River*, which contains general system objectives for the entire Park and studies of feasibility for the territorial redevelopment of suburban areas. In 2016, the stakeholder network also promoted the Pact for the care and enhancement of agroecosystems along the Olona river and the Villoresi canal and the supply of local products (Fig. 5). This is an initiative that affects a wider area in the upper plain of Milan. As part of the Pact, the signatories (agricultural companies united in the Valle Olona agricultural district, institutions and associations), undertook to ensure that, through their actions, the agroecosystems are redesigned to carry out their interdependent ecological, economic and cultural functions. In 2017, the cooperation agreement called the *Olona Charter* was signed, which extends the contents of the Pact to the entire catchment area of the river, expanding its territorial scope and contents. This Charter reflected the awareness that, in order to resolve complex issues in a lasting way, it is necessary to develop synergies, especially at the level of the catchment area.

The projects envisaged by the Olona Charter have been included in the Action Plan of the Olona, Bozzente, Lura and Lambro Meridionale River Contract, approved in 2017 by the Lombardy Region Council. It defines the system objectives and four sub-actions: a. coordination of activities defined locally with the planning of the entire basin; b. use; c. maintenance; and d. ecological connections. This charter as the Olona river pact developed yearly processes for results monitoring. The impact assessment was addressed only in 2022 with the “Strategic Project” (called PSS) of the basin of rivers Olona, Bozzente, Lura, Southern

with vision-aligned and values-aligned organisations, they will gain new leverage for fostering a sustainable future.

Circular economy

Farming is not the main economic activity in Parabiago, but agricultural land is a very important feature of its landscape and a vital link between humans and nature. The Ecomuseum has been exploring the potential of embracing the principles of a 'circular economy'. In this approach there are three basic principles: to eliminate waste/pollution; ensure materials and products can be reused/reprocessed; and that nature is regenerated in the process. Circularity, undoubtedly, must be a feature of a sustainable future. In 2015, the Ecomuseum proposed a project to the local community, for the Milan EXPO "Feeding the planet, Energy for life!". This project focused on the production of bread, using an entirely local supply chain, including local grains, local processing and local markets with strict attention paid to waste along the value chain. There were many local partners involved, including farmers, bakers, retailers and consumers. (Dal Santo, 2020).

In a circular economy, the life cycle of materials and products are extended. Circularity means that waste is always treated as a new input that has value and is continuously being recycled. Essentially this is the foundational process of Earth's biological systems. Embracing circularity requires a shift in the traditional take-make-waste approach that has become a prevalent part of modern consumer society. The Parabiago Ecomuseum has been working with its partners to develop examples of circular approaches within its local economy, (Fig 6). The goal is that material inputs (new and recycled materials), are efficiently processed to create goods that meet the needs of people, while waste products become new inputs in ongoing processes. The result is that natural and human made materials continue to circulate in the economy without generating large quantities of waste. Parabiago is advanced in waste and water management, handcraft and trade, but much less in energy and food production. For this reason the ecomuseum assessed that the greatest gains that could be made are in landscape regeneration. The Parabiago Ecomuseum is helping farmers draw on local heritage insights, especially cultural landscape knowledge, to adapt agricultural practices so they better meet the evolving needs of the present and the future for example through agriculture practices with low carbon emissions and for high biodiversity landscape. It is vital that local stakeholders feel empowered to work and live in balance with nature.

However, the interactions of the Parabiago community with other parts of Italy and the world remain largely tied to the intractable methods of our unsustainable global market for goods. Ideally, people in a region can meet their needs through their reliance on local natural resources and systems, while dramatically reducing reliance on goods that originate in distant lands. The Ecomuseum established a dialogue with local farmers, retailers and citizens to experiment with a more sustainable approach to food production, designed to meet local demand.

In embracing the principles of a circular economy, the ecomuseum affirms that it is possible to significantly decouple carbon emissions, and other forms of waste, from economic growth. However, the goal of sustainability will be undermined as long as market economies rely on long and complicated supply chains for their goods. This traditional approach to global goods is entirely dependent on relatively cheap and polluting transportation, and is driven by corporate and societal demand for maximizing GDP, even at the expense of eroding the Earth's natural systems. With the reality of a globalized economic system that externalizes massive real costs that it doesn't want to be responsible for, it will take great courage for communities to live locally. The more that ecomuseums, and traditional museums, can become catalysts for localizing economies and fostering principles of circularity, the faster humanity can breathe a sigh of relief.

Pursuing a 'circular economy' is a challenging path. It requires that stakeholders across entire supply chains are committed to understanding the science of making products, as well as all of the impacts involved in packaging, transporting and recycling those products. The search for new and sustainable ways to do things will often threaten those engaged in practices that have become normalized. In Parabiago, a controversy erupted when the media reported that the local bread initiative was using local wheat, that was grown with damaging chemical fertilizers. Almost instantly, the project was threatened, with bakers pulling out. Even a small amount of doubt in the media can undermine progressive work. And in today's world, the rush to judgement is a knee-jerk reaction, rather than taking the time to truly understand the underlying issues. It was later made clear that there was no problem with the fertilizers used and the media reported the news. However, it is important to remember that for ecomuseums embracing their role

as catalyst of cultural adaptation, this can be a tricky, but vitally important one.

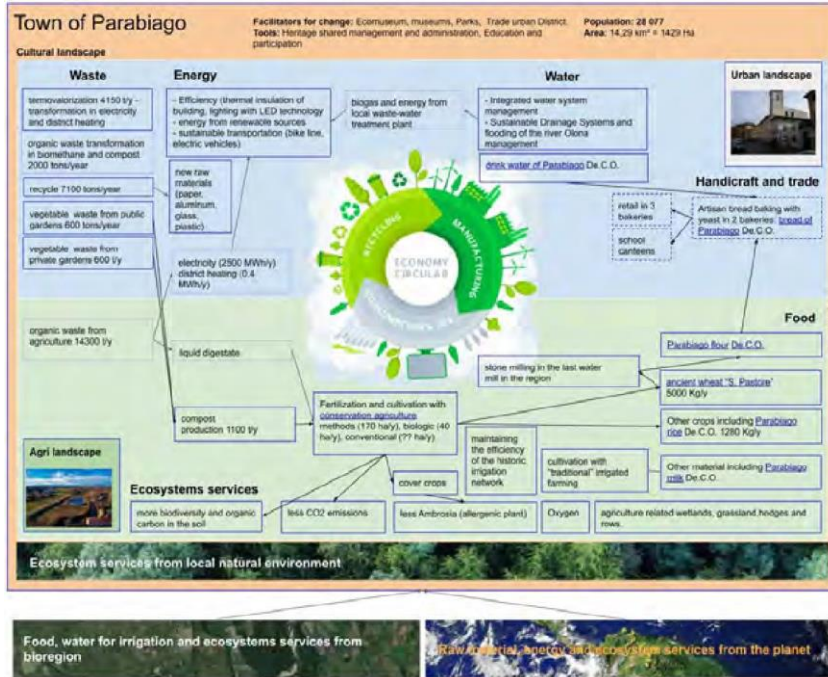


Fig. 6. Circular economies in Parabiago (courtesy of Parabiago Ecomuseum)

Cities/Regions

Cities are perhaps the most practical level at which systems, organisations, various collectives and individuals can generate a scientifically viable and ethically desirable vision of the future. Existing governance structures may be inadequate to rise to this challenge, however, cities represent the level of governance that is closest to the daily life of people and connected to the realities of a natural world that is in steep decline. Provinces/ states, as well as national governments, are important for knitting together a global shift in cultural values, behaviours and systems, however it is at the local level that these changes need to be most securely grounded. Addressing the issue of 'food security' is a good example of a local issue that must be addressed to ensure the most basic future. Currently, many cities would soon be without food, if the global supply chains of food were to collapse.

In Parabiago, the percentage of food currently coming from the local bioregion is small. For this reason the ecomuseum promotes short supply chain products coming from local suppliers. In many places, the best of local food production is reserved for foreign markets, because those markets are larger and more lucrative.

The bread of Parabiago was the first of many products with a trademark that certifies that the product is made in Parabiago¹². Now there are many local products that have links to local traditions, and which utilize novel innovations that truly embrace the idea of circular design and positive impacts on the natural environment.

It is important to remember that designing a food security system requires a good understanding of both the supply side (i.e., how to grow food sustainably) and the demand side (i.e. what are the needs of the community for food, both in the present and for the future). If citizens feel that their needs are not being recognized, then they will try to meet their needs by using alternatives to local systems (e.g. using the internet to buy foods from elsewhere and have them shipped in). It is a complex process (Fanzini, 2019). However, a suggestion from the ecomuseum led to the adoption of the same strategy for growing local breads by the Municipalities of the Mulini National Park.

Despite clear and positive impacts, these projects related to food production have done little to encourage stakeholders across the community to systematically increase their ability to live within their own bioregion. For this reason the ecomuseum's intent is to continue to cultivate a public vision of a future that prioritizes stability and health from living within the productivity of the bioregion, both for food and for ecosystems services (Fig. 7).

¹² http://ecomuseo.comune.parabiago.mi.it/ecomuseo/deco2_ev.html

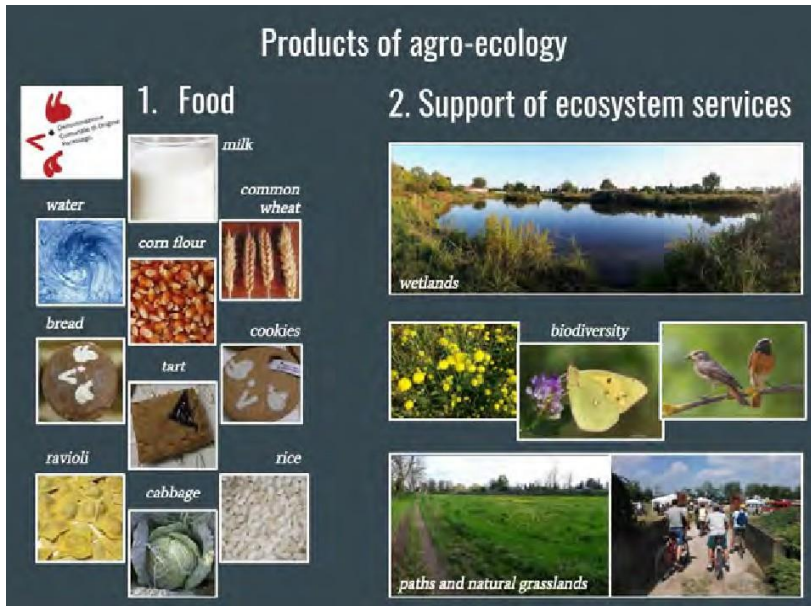


Fig. 7. Products of agro-ecology in Parabiago (courtesy of Parabiago ecomuseum)

Equitable Education

The ecomuseum organizes education programmes for local schools (from kindergarten to high school). Programme goals are for students to observe the landscape closely. This understanding becomes a prerequisite for learning how to act in ways that respect and preserve the landscape, thereby passing on a flourishing, adaptative landscape to future generations.

Landscape education is aimed not only at school children, but also parents and grandparents and, in some cases, acquaintances and the elderly in retirement homes. The ecomuseum hosted internships and degree theses (Fig. 8).

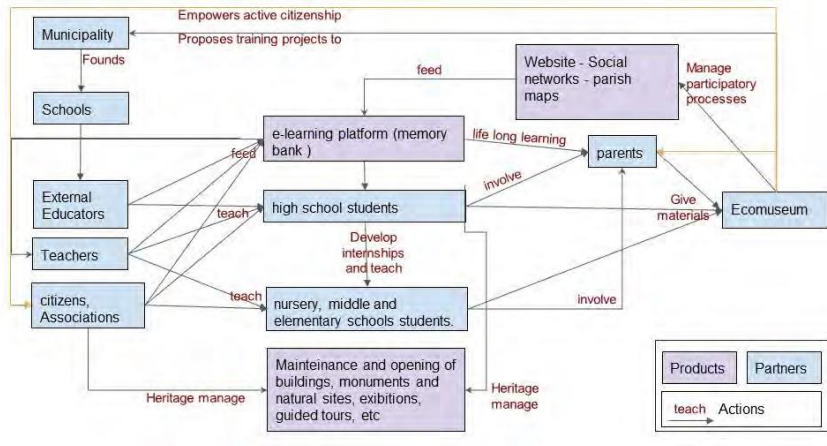


Fig. 8. The training strategy of the ecomuseum (courtesy of Parabiago ecomuseum)

Conclusion

Using the Inside-Outside Model, it is evident that ecomuseums and community museums have an advantage over traditional, collections-based museums in terms of promoting sustainability and encouraging actions to halt climate change. The fact that many ecomuseums focus on a geographic region and are preoccupied with the wellbeing of local inhabitants within their territory, has helped ensure that both inside and outside perspectives are in place and connected in constructiveways.

References

- Dal Santo R., Nádia Helena Oliveira Almeida & Raffaella Riva (2021) Distant but United: A Cooperation Charter between Ecomuseums of Italy and Brazil, *Museum International*, 73:3-4, 54-67, DOI: 10.1080/13500775.2021.2016278
- Dal Santo, R. Vignati, L. (2017). *Inspiring the Future of Cultural Landscape*, into Riva, R. (2017). *Ecomuseums and cultural landscapes. State of the art and future prospects*. Santarcangelo di Romagna: Maggioli.
- Dal Santo, R. (2019). *The contribution of italian ecomuseums to shape the future of landscape*, into Fanzini, D. Tartaglia, A. Riva, R. (2019).

- Project challenges: sustainable development and urban resilience.*
Santarcangelo di Romagna: Maggioli.
Available at: <http://hdl.handle.net/11311/1124833>
- Dal Santo, R. 2020, *Dreams change and landscape*, Actas del Coloquio internacional de Museología social, participativa y critica, pp 243-251. Santiago de Chile, 2020
Available at <https://www.museodelaeducacion.gob.cl/publicaciones/actas-del-coloquio-internacional-de-museologia-social-participativa-y-critica>
- De Varine, Hugues. (2017) *L'écomusée singulier et pluriel: Un Témoignage Sur Cinquante Ans De Muséologie Communautaire Dans Le Monde*, L'Harmattan
- Fanzini, D. Riva, R. Dal Santo, R. (2019). *Pact for the river renaissance of the Olona valley* into Fanzini, D. Riva, R. Dal Santo, R. (2019). *Sustainable mediterranean construction*, n.10/2019.
Available at: http://www.sustainablemediterraneanconstruction.eu/SMC/The%20Magazine_n.10.html
- Koster, Emlyn, "Relevance of Museums to the Anthropocene", *Informal Learning Review*, No. 161, Informal Learning Experiences, Inc: May/June 2020
- Peterson, G, "Connecting the Instability of Markets and Ecosystems – C.S. Holling and Hyman Minsky", *Resilience Science*, Tag Archives: CS Holling (March 7, 2013) <<https://rs.resalliance.org/tag/cs-holling/>>, accessed Oct 12, 2022
- Wackernagel, Rees W. M..(1995) *Our Ecological Footprint*, New Society Publishers.
- Worts, Douglas. (1998) "On Museums, Culture and Sustainable Development", chapter in *Museums and Sustainable Communities: A Canadian Perspective*, Quebec City: ICOM Canada
- _____. (2019) "Heritage Planning for Sustainable Cultural Impacts", AASLH Blog Post: 2019 <https://aaslh.org/sustainable-cultural-impacts/>