

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

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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 lev-

els 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 x, 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.

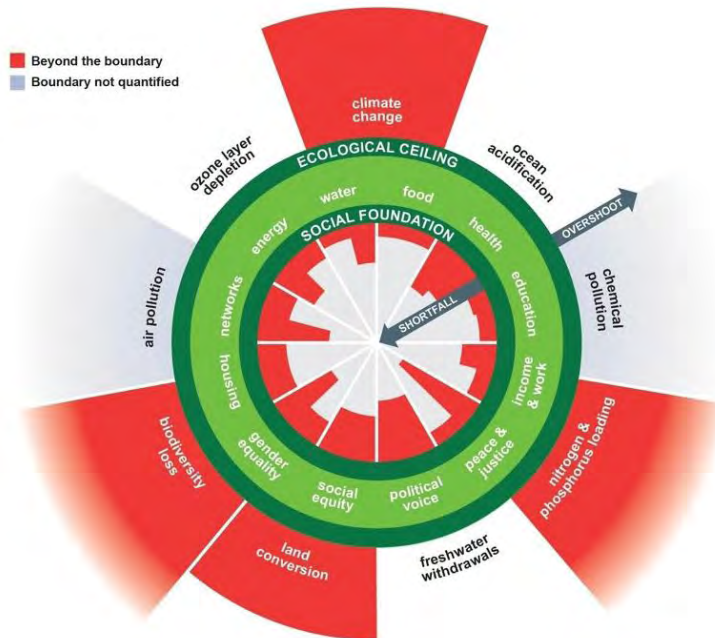


Fig. 1. Doughnut Economics Model, by Kate Raworth - economy that operates between a social foundation and an ecological ceiling. <<https://commons.wikimedia.org/wiki/File:Doughnut-transgressing.jpg>>

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).

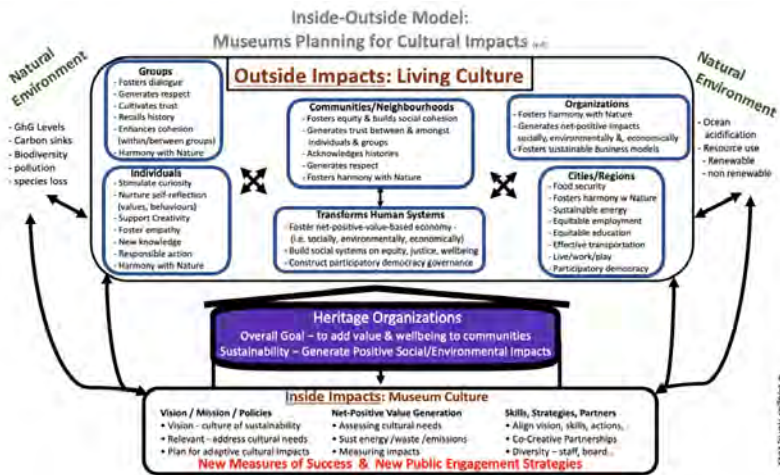


Fig. 2. The Inside-Outside Model: Museums Planning for Cultural Impacts, by D. Worts. <<https://sites.google.com/view/drops-platform/tools/books/climate-action-book/io-impacts-model>>

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 (mov-

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.

ing towards stability and balance) or maladaptive (moving towards instability and imbalance), within their ever-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 group-based 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 neighbourhoods (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

⁷ For 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 Muse-

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

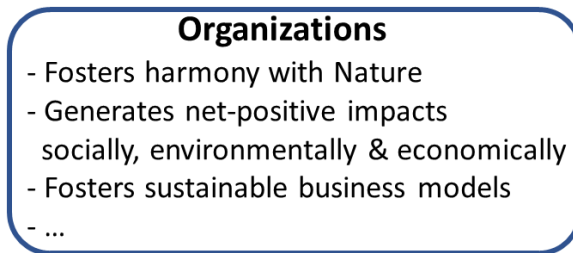


Fig. 8. I-O Model - Outside Impacts - Organisations

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 bio-regions 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 bio-regions, 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 bio-regions, 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 x, this volume).

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)

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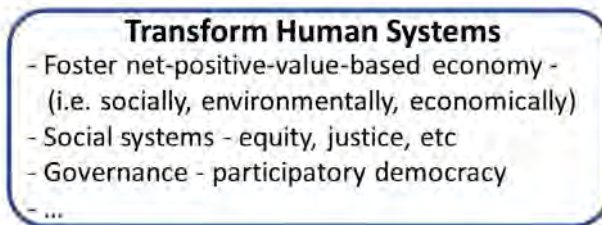


Fig 10. I-O Model - Outside Impacts - Human Systems

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 bi-products 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 14 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.

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