



## **Developing a Triage System to Determine Approaches to Sustaining Intangible Cultural Heritage**

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Heritage

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# Developing a Triage System to Determine Approaches to Sustaining Intangible Cultural Heritage

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*Abstract: High-profile agencies such as UNESCO continue to underscore the urgent need to support the sustainability of intangible cultural heritage across the world, in all its forms: from languages to music, theatre to dance. That task is enormous, and within any specific region or nation, even within a community, decisions often need to be made about where to best direct the limited funding, time, and resources for sustainability efforts. Drawing on precedent from the environmental sciences, this paper suggests a 'triage system' to help set priorities for implementing sustainability initiatives. The tripartite model assesses (1) the nature and severity of the threat to the cultural expression in question, (2) its perceived value in the community, and (3) the solvability of the problem. The system holds potential to assist stakeholders – communities themselves, as well as bodies that allocate funding and resources for cultural maintenance and revitalisation – to determine priorities for support, in turn leading to better deployment of resources and optimal outcomes for effort.*

*Keywords: Cultural Heritage Management, Cultural Sustainability, Intangible Cultural Heritage*

## Introduction

The viability of many intangible cultural expressions is under threat. Reasons are many, from cultural hegemony, deep political shifts, economic and industrial development, and urbanisation through to the unremitting advance of technology and global information networks. In certain regions of the world, the loss is egregious – as in Indigenous Australia, where a “massive cultural extinction” is occurring (Marett 2010, 253). A growing awareness of the “disappearing world” (Howard 2006, 173) in which we live has led to international recognition of the need to take urgent action against the loss.

If ‘sustainability’ is here taken to mean the ability of intangible cultural heritage to respond successfully to the changing environment (without implying a need to remain static or unchanging), an array of strategies, policy instruments, and activities supporting sustainability operate at all levels, from the local – such as the grassroots cultural preservation project *Revival of Afghan Music* (ANIM 2009) – to the international, like UNESCO’s *List of Intangible Cultural Heritage in Need of Urgent Safeguarding* (UNESCO 2012). International networks serve as a means for key players to explore and exchange perspectives and experiences on supporting global cultural diversity; examples include the *International Network for Cultural Diversity* (INCD 2008), the *International Federation of Coalitions for Cultural Diversity* (IFCCD 2010), and the *International Network on Cultural Policy* (INCP 2008). International conventions, declarations, and treaties such as the landmark *Convention for the Safeguarding of the Intangible Cultural Heritage* (UNESCO 2003a) represent high-profile efforts to protect and promote intangible expressions of culture.

Realistically, given the vast difference in circumstances from community to community and cultural expression to cultural expression, much of the groundwork needs to be done at the local level. The tasks facing communities (and those who assist them) are considerable. Local-level initiatives supporting cultural sustainability may include documenting cultural expressions at risk, building community capacity, creating learning and teaching resources, supporting education and transmission processes, lobbying for government action and support, raising public and scholarly awareness, organising activities to strengthen cultural practices, and implementing revitalisation strategies. Most of these activities require substantial investment of time, effort and money. Marginalised and economically disadvantaged communities in particular – ironically,

those most likely to be facing challenges to cultural viability – may struggle to find the means to take these tasks into their own hands.

Making matters more difficult is the fierce competition for the very finite resources available from external sources for these kinds of undertakings. Crystal (2000, 95) presents various estimates from the literature of the cost of supporting a single endangered language, ranging from \$US56,000 for a basic grammar and dictionary to a far more comprehensive approach costing around \$US2 million. Crystal himself suggests a figure of around \$US64,000 per year per language. With something in the order of 3,000 languages in danger of being lost by the end of this century (Krauss 1992, Crystal 2000), and with many other forms of intangible cultural heritage also under threat, setting priorities for supporting intangible cultural heritage is clearly an imperative.

Current priority-setting mechanisms vary widely between communities, governments, funding bodies, policy-makers, and international cultural organisations. UNESCO, for example, receives nominations from State parties for inscription of a given cultural expression onto its ‘urgent safeguarding’ list, an honour that brings a degree of UNESCO support and backing. The selection of intangible cultural heritage to be nominated to the list, however, is therefore sometimes driven more by government interests than by community concerns or the urgency of safeguarding efforts – as in Vietnam and China, whose strong engagement with the UNESCO schemes are both arguably driven to some degree by national pride and the perceived potential of the cultural expression to appropriately represent the country in the international arena. For schemes like National Geographic’s *Genographic Legacy Fund*, the *Christensen Fund*, and Ford Foundation’s grant programs, priorities for funding allocation are set via a grant application process; but here too, the cultural expressions most in need of support may miss out because of lack of community capacity, skills, knowledge or resources to submit an application, or disinclination to engage in that process. In yet other cases, the procedures by which stakeholders determine how to direct their support for intangible cultural heritage remain unclear. At times, ill-conceived action plans and insufficient financial means to implement them have resulted in disillusionment about cultural heritage support schemes, as has reportedly been the case with UNESCO’s *Masterpiece of the Oral and Intangible Heritage of Humanity* (A. Seeger, pers. comm., 22 March 2011). This raises the question: Taking into account the realities of limited funding, resources, and time, how might culture-bearers, communities, and other stakeholders effectively and systematically determine priorities for sustaining intangible cultural heritage?

In response to this question, this article proposes a general framework to assist cultural stakeholders set priorities and direct resources for the best outcome. First, I present a priority-setting model from another discipline, and then explore how that ‘triage system’ may be adapted as a conceptual framework for setting priorities to support intangible cultural heritage. Finally, I assess some of the strengths and limitations of this system for intangible cultural heritage.

## **Drawing on environmental sciences**

In environmental management, decision-makers have been accused of sometimes

... veer[ing] from the ‘rational’ path due to cognitive limitations, hidden preferences, political pressures, resource constraints or the need to bargain and negotiate outcomes with other stakeholders. There is much evidence that planning and decision making in practice does not follow a rational model (Etzioni, 1967, Lindblom, 1959, Mintzberg et al., 1996, Williams, 2002). (in Hajkowicz and McDonald 2006, 91)

Particularly over the last decade or so, environmental scientists have increasingly recognised the need to develop systematic, transparent, and rigorous processes for making decisions about priorities in environmental management. These might include “practically applicable models,

guidelines and analytical frameworks that can help decision makers resolve trade-offs and direct limited resources towards projects or regions where the expected returns are greatest” (Hajkowicz and McDonald 2006, 88).

A number of priority-setting models for environmental management have been proposed and tested, including Conservation Action Planning (CAP) (The Nature Conservancy 2003), the Assets, Threats and Solvability model (ATS) (Hajkowicz and McDonald 2006), the Multicriteria Landscape Assessment and Optimisation framework (MULBO) (Meyer and Grabaum 2008), and the Investment Framework for Environmental Resources (INFFER) (Roberts, Pannell, Park & Alexander 2011). Hughey et al (2003) assesses the strengths and weaknesses of several earlier models, suggesting further inclusion of economic factors like cost-benefit analysis and cost-utility analysis in priority-setting mechanisms (a suggestion later taken up by Hajkowicz, Spencer, Higgins and Marinoni 2008 and Boardman et al, among others). Wilson, Carwardine and Possingham (2009) offers a generic framework for setting conservation priorities based on the principles of classic decision theory, a framework that aims to encapsulate “the key elements of any problem, including the objective, the constraints, and knowledge of the system” (237); the authors argue that prioritisation exercises must take into account not only the assets themselves and their location, but also the conservation actions required to sustain them. Other decision-making frameworks have been used in relation to the impact of environmental issues, such as the health consequences of ecosystem change; on this matter, the World Health Organization sets out a number of important considerations, including that priorities for action should reflect the priorities and values of those who are affected by the action (2005, 42). Several other studies make useful broad recommendations for developing decision-making approaches, like Fiksel (2006), which notes that such approaches should ideally support “dynamic, adaptive management rather than static optimization” and suggests exploring “the simultaneous use of multiple models that reflect different system interpretations or stakeholder perspectives” (20).

While many of these studies inform this paper, below I assess one of the environmental frameworks in particular for its relevance to setting priorities for supporting intangible cultural heritage. The Assets, Threats and Solvability (ATS) Model assesses situations of environmental risk in terms of (i) the value of the asset in question, in environmental, social and/or economic terms; (ii) the severity of the threat to that asset from physical or social processes; and (iii) the perceived solvability of the problem, measured by the rate of change in the underlying condition following investment in it (Hajkowicz and McDonald 2006, 90). According to this model, priority attention should be given to those environmental assets that are highly valued, under the most pressure or risk, and where the solvability of the problem is deemed to be high. Low-value assets with a low level of threat and that are difficult or costly to ‘solve’ receive lowest priority (see Figure 1). I have chosen this framework for examination above others on the basis of its non-discipline-specific nature and its relative simplicity, characteristics that facilitate transfer to the cultural arena.

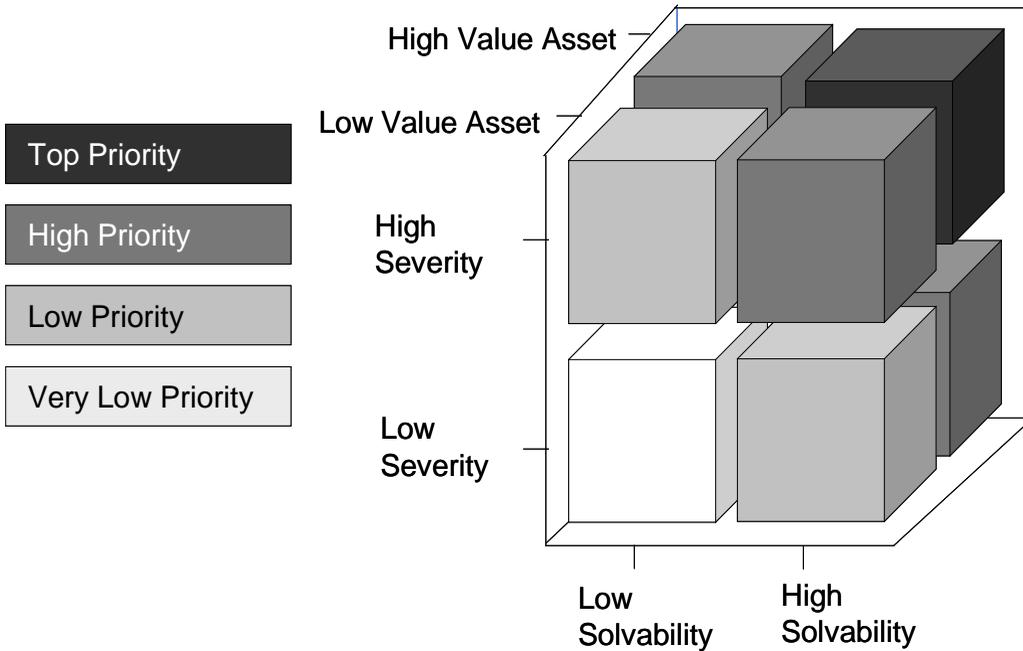


Figure 1: The Assets, Threats and Solvability (ATS) Model for Setting Environmental Priorities.  
*Source: Hajkowicz and McDonald 2006, 90. Reprinted by permission of the publisher.*

The ATS model has been successfully employed on several projects, including to set environmental management priorities for the Western Australian Salinity Investment Framework (Government of Western Australia 2003), in the Wet Tropics region of North Queensland (FNQRRM and Rainforest CRC 2004), and in a research study examining how multiple criteria analysis (MCA) may be used to help reach environmental management decisions in multi-stakeholder situations (Hajkowicz 2008). While the model has attracted some criticism for failing to provide “an ideal combination of usability, rigour and comprehensiveness” (Pannell et al 2013, 127) that would assist environmental organisations to undertake the full range of tasks necessary for investment planning (including “initial project identification, development of well costed and logically consistent environmental projects for public funding and prioritisation of the available projects” (127), Hajkowicz and McDonald are clear that the main function of the ATS Model is to help structure complex decisions about environmental management, “to focus stakeholder debate and provide a standardized means for setting priorities, which makes the process auditable and transparent” (2006, 88). Applying the model gives a preliminary assessment of priorities. Further appraisals may follow as needed, such as cost-benefit analyses, or an assessment of the environmental or social impacts of environmental management initiatives (88).

### Applying the model to intangible cultural heritage

The ATS Model may serve as a conceptual framework for assessing priorities in sustaining intangible cultural expressions. In principle, transferring the model, priority attention should be given to those cultural expressions that are (i) highly valued (high-asset) in cultural, social and/or economic terms; (ii) under significant pressure or risk (high-threat) from social and/or economic processes; and (iii) where those threats are easily fixed (high-solvability), measured by the

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(estimated) rate of change in the vitality of the cultural expression following investment in sustainability. Lowest priority should be those expressions considered to be of low value, that have a low level of threat, and that are difficult or costly to ‘solve’.

Implementing the ATS framework for intangible cultural heritage involves three key steps. The first is to identify the aim of the prioritisation exercise, including specifically what needs to be ranked according to priority (the ‘units’). Units may not always be cultural expressions themselves, as indicated in Table 1, which instances five generalised hypothetical examples of situations where the ATS Model may be useful. In the first three examples, cultural expressions of various kinds need to be ranked in order of priority for action, but in the last two examples, the aim is to rank geographical regions of the world and cultural heritage management projects respectively. (For each situation, the units being ranked are in bold type).

Table 1: Examples of situations where the Assets, Threats and Solvability (ATS) Model may be used to inform decisions around supporting intangible cultural heritage. ‘Units’ – the items being assessed for relative priority – are in bold.

<i>Situation</i>	<i>Aim of the prioritisation exercise</i>
Within a certain Australian Indigenous community, many ceremonial performance traditions are no longer being practised. Wanting to retain these traditions in some form, the community decides that initially, the limited available resources for supporting them should be funnelled into one or two traditions that it feels are particularly important components of its heritage.	To set priorities for supporting <b>ceremonial performance traditions</b> within a single community
A team of language maintenance experts undertakes a research project that aims to determine the relative severity of the threat to Indigenous languages in Siberia, and to recommend action.	To set priorities for supporting <b>languages</b> across a number of communities in a geographical region
The government of an Asian nation-state undertakes to set priorities for governmental funding that supports traditional cultural heritage, within a framework of maximising outcomes for minimal outlay.	To set priorities for supporting <b>traditional cultural expressions</b> within a nation-state
A UK-based charitable body runs a grant scheme to fund projects that support threatened intangible cultural heritage. For its next funding round, it wishes to identify as focus areas the three or four regions of the world in most urgent need of support.	To set priorities for <b>geographical regions</b> in order to best direct funding that supports cultural sustainability
An international cultural organisation seeks to assess the outcomes and viability of their projects supporting intangible cultural heritage, in order to determine whether they should be continued.	To set priorities for <b>projects</b> supporting intangible cultural heritage

The second step is to assess each unit being prioritised – whether cultural expressions, geographical regions, sustainability initiatives, or other – according to the three constituent parts of the ATS Model. In the area of intangible cultural heritage, the methodology will probably be primarily qualitative (in contrast with environmental sciences, where assessments may draw on quantitative measurements exclusively or alongside qualitative data). This step will generate a matrix identifying the uniqueness of each unit in terms of its assets, threats, and solvability. The differentiation between units then serves as the basis for the ranking exercise. This step (and the resulting matrix of information) could be as comprehensive or as cursory as required for the purposes of the exercise.

By way of example, Table 2 displays a summary matrix generated by applying the ATS Model to three indigenous Venezuelan languages: Mapoyo, Kari’ña and Sanima. Brief data relating to the vitality of these languages were used to exemplify a methodology developed by UNESCO for assessing and comparing levels of language endangerment (2003b, 22-23; data prepared by María E. Villalón). In drawing on those cursory (and now somewhat dated) data to create an equally cursory Table 2, my aim is not to suggest decisions around priority-setting for these languages, which would require more extensive investigation, but rather to succinctly demonstrate how such a matrix might develop from an application of the ATS Model. Note that I evaluate asset value solely on the UNESCO framework’s assessment of community members’ attitudes towards their own language; in reality, other stakeholders’ perspectives on value may also come into play.

The UNESCO report’s description of the three languages (or for the purposes of the ATS Model, the three ‘units’ to be prioritised) is as follows:

Mapoyo is a Cariban language no longer naturally spoken, but remembered by a handful of elders in a multi-ethnic community all of whose members communicate in Spanish, which is also the first language learned by all the Mapoyo children. Kari’ña is a Cariban language as well, but has many more speakers, most of whom are bilingual. Some elders learned Kari’ña as their first language and can speak it fluently, although nowadays Spanish is the preferred language of communication for most Kari’ña, numbering over 8,000. Sanima, related to Yanomami, has over two thousand speakers, yet very few of them are bilingual in the dominant Spanish language. (UNESCO 2003, 23)

Table 2: Summary matrix generated by applying the ATS Model to three indigenous Venezuelan languages (based on data prepared by M. E. Villalón in UNESCO 2003b, 22-23)

<i>Unit</i>	<i>Asset value</i>	<i>Threats</i>	<i>Solvability</i>
Mapoyo	Low to medium. <i>Some</i> members support language maintenance; others are indifferent or may even support language loss	High. No use of the language, no increase in domains of use, and no intergenerational transmission. No active speakers; a very small “rememberer” population. While an orthography and some audiovisual learning materials exist, teaching and literacy materials are otherwise limited. Inadequate documentation.	Low, if measured by the (estimated) rate of change in language vitality following investment in sustainability, given minimal current use, transmission, documentation, and low perceived asset value
Kari’ña	Medium. <i>Many</i> members support language maintenance;	Medium to high. Weak intergenerational transmission: language is used mostly by grandparental generation and up, in	Medium; the rate of change in language vitality may moderately improve following

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	others are indifferent or may even support language loss	limited social domains, with minimal use in new domains. Speakers are a minority within the total population. Written materials for education and literacy exist, but literacy is not promoted. Amount and quality of documentation is fair.	investment in sustainability e.g. activities to expand domains of use, promote literacy, transmit language skills to younger generations
Sanima	High. All members value their language and wish to see it promoted	Low. Few serious threats beyond the fact that the language is basically undocumented (unannotated recordings of varying quality exist). The language is used competently by all ages, from children up. All members of the community speak the language, and it is used in all domains for all functions.	Low, if measured by the (estimated) rate of change in language vitality following investment in sustainability (in this case, probably documentation) – little change is estimated

The third step in applying the ATS Model is to translate these outcomes (that is, the matrix data) into decisions on the distribution of resources for sustainability initiatives. Without wishing to draw conclusions on priorities for action for the languages in Table 2 without deeper analysis, the summary application of the ATS Model begins to clarify the relative situation of those languages: Mapoyo appears to be high-threat but relatively low-asset and low-solvability; Samina, high-asset but low-threat and low-solvability; and Kari’ña, medium-asset, medium- to high-threat, and medium solvability. Recalling that priority attention should be given to those cultural expressions that are highly valued (high-asset), under significant pressure or risk (high-threat), and where those threats are easily fixed (high-solvability) (measured by the estimated rate of change in the vitality of the cultural expression following investment in sustainability), these findings provides a possible foundation for discussions and ultimately, decision-making.

Hajkowicz and McDonald suggest two possible approaches to the task of translating the matrix data into decisions about resource distribution: all units could be allocated a share of available resources proportional to their rankings; or the highest-priority units could be awarded full funding “until a budget constraint binds” (2006, 95). Each of these approaches has a downside. While proportional funding may be the more politically acceptable, it “may not be appropriate where projects have high fixed costs and indivisibility” (Hajkowicz and McDonald 2006, 95). In order to award full funding to the highest priority units, though, the net cost of an initiative needs to be known in advance, and this is not always possible.

**Discussion**

The ATS Model is by no means fail-safe, nor necessarily always the best way to set priorities for supporting intangible cultural heritage. Many circumstances may complicate or impede the application of the model: inaccurate or insufficient information about the cultural heritage in question, difficulties obtaining data needed to complete the assessment, judgements being swayed by emotional interests, and any number of “political, social, cultural, financial, legal and technological constraints” (as Hajkowicz and McDonald note for environmental management, 2006, 88). Other challenges raised in the environmental literature in relation to decision-making processes that also apply here include lack of clarity about goals, institutional complexities, and the need to integrate different information types (in Pannell et al 2012, 377-8). In the face of

challenges like these, it is more important than ever that priorities are set transparently and methodically rather than using “informal, unstructured or intuitive approaches” (Hajkowicz and McDonald 2006, 91). A number of questions warrant close consideration, though: In cultural terms, what is a high-value asset, and who says? What are some common threats to the sustainability of cultural expressions, and how can their severity be measured? What constitutes a ‘highly solvable’ threat, and what are some possible approaches to solving threats?

Measuring the asset value of a cultural expression, or even identifying criteria by which to measure asset value, is no easy task. Among other things, that undertaking may be complicated by the diverse and sometimes competing views of stakeholders in intangible cultural heritage. Commercial recording companies might attribute high asset value to a certain music genre because of its potential to bring financial gain, for example, whereas the culture-bearers themselves might view the genre as no longer serving a social or cultural function. Local businesses might value a certain dance tradition because it acts as a tourist drawcard to their region. A government might consider a specific form of theatre to be high-value because of its symbolic role in national identity; and so on. Further complicating the process of measuring asset value is the subjectivity necessarily involved in the process. In some cases, there may be resistance to the very notion, as has been the case in some environmental priority-setting processes:

Some decision makers are resistant to the idea of estimating the relative values of different environmental assets. They feel that all environmental assets are important, and all should be protected. Some particularly dislike the concept of non-market valuation. Even a softer approach, based on a scoring system, still makes some uncomfortable. They express concerns about the subjective nature of any scoring system used to value environmental assets, perhaps overlooking the fact that subjective valuation of environmental resources is already implicitly undertaken in existing decision processes. (Pannell, Roberts, Park and Alexander 2013, 129)

That last point is both significant and relevant to applying the ATS Model at large: subjective valuation of intangible cultural expressions is already implicit in many existing mechanisms to allocate resources for supporting them. Subjectivity is arguably inevitable in decisions surrounding the management of intangible cultural heritage, where figures and facts may take a secondary role to attitudes and opinions. For this reason, the ATS Model will rarely (if ever) generate adequate priority-setting solutions in itself, but will more likely be useful as a foundation to guide and stimulate rigorous and critical discussion around the issues.

On the matter of conflicting stakeholder perspectives, arguably the main criterion that should be used to evaluate the asset value of a given cultural expression is its perceived value within its community. A community may place high value on a cultural expression because of its role in collective identity, social well-being, sense of community, or sense of connection with the past, for example. On the other hand, communities may decide to adopt new cultural practices and new ways of life based on the opportunities afforded by advancements in information and communications technology, industry, health, transportation, and urban services. Where a community decides a certain cultural practice no longer serves a function, or is of low or no perceived value, it is arguably not the responsibility of ‘outsiders’ (like industry or government bodies) to take efforts to sustain it. Prioritising the view of the community in this way reflects the concept of First Voice, in which communities remain in full control of the future of their cultural heritage (Galla 2008). Admittedly, even by this approach challenges may arise, for example when the community itself lacks consensus on the asset value of a given cultural expression.

For Hajkowicz and McDonald, the problem of conflicting or competing stakeholder perspectives was evident in the considerable variability of rankings and preferred priorities of participants in one environmental priority-setting exercise employing the ATS Model (relating to

natural resource management in the Wet Tropics of North Queensland, Australia). In this case, the variability resulted from the participants' differing opinions about the value of assets and the severity of the threat to them. Those researchers conceded that a diversity of views is to be expected in decision-making, but found that "aggregating (or averaging) individual scores produces potentially inconclusive and contested results" (2006, 99). Faced with the challenge of determining how to translate the range of individual opinions into the best group decisions, they used the ATS Model as a framework around which to stimulate debate about priorities:

When the results were tabulated the Board engaged in a spirited debate about the differences and reviewed critical ranking and prioritization decisions. A major advantage of the ATS model is the structure of the methodology introduced to the debate. Using ATS people could debate threat and asset issues and provide insights. (98)

The severity of threats, the second dimension of the ATS Model, may also be difficult to classify. For intangible cultural heritage, threats may be defined as those situations or processes that cause the vitality and/or viability of the asset in question to depreciate. Situations and processes that threaten a cultural expression may include the dispersal or decimation of a population due to poverty, disease or war; encroaching industrialisation, tourism, and economic development; and political and/or economic imbalances of power (Schippers 2010, 170). In such contexts, inter-generational processes of cultural transmission may weaken, performance contexts may disappear, the social function of the cultural expression may become redundant, and so on. A thorough understanding of the nature of a threat will be needed in order to identify its level of severity and also its solvability.

'Solving' threats may be approached in a number of ways. An initiative supporting a threatened cultural expression might aim to check or reverse an existing threat, for example by creating new contexts for performance in a situation where traditional contexts no longer exist, or by encouraging the use of languages in new social domains (in schools, for example). It might seek to mitigate the impact of an unavoidable threat, such as the global spread of digital technologies (a process that might in fact act very favourably on the vitality of a given cultural expression). It could also try to avoid an immanent or expected threat, such as by lobbying against the introduction of unfavourable governmental policies.

Solvability may be relatively easy or very complicated to determine. In some situations, the solution to a threat will be clearly evident and easily implementable with right resources or funding. For example, if the lack of a suitable performance venue is identified as the main contributor to a decline in a particular theatre tradition within a community, the solution may be clear, and relatively inexpensive and straightforward to implement. In other situations, the threat may be extremely expensive or even impossible to solve in cultural heritage terms alone (consider a repressive governmental regime, for example – or even the Mapoyo and Kari'ña languages from Table 2, the threats to which will inevitably be closely connected with social, economic, and political factors). Poor understanding of the dynamics of a threat may also contribute to low solvability of a problem. In these situations, care should be taken not to deem solvability lower than may actually be the case: the ramification may be that though a cultural expression is both highly valued and under severe threat, it will receive low or no allocation of funding or resources. High performance on one of the three dimensions of the ATS Model cannot compensate for low performance on another (Hajkowicz and McDonald 2006, 94).

As international awareness grows of the need for measures to support the sustainability of intangible cultural heritage, so too does the need for rational, efficient and effective decision-making procedures regarding investment in those measures. Given the extent of the global threat to intangible cultural heritage combined with the challenge of limited human and financial resources, strategic priority-setting, strategic investment of funds, and transparency in these processes are all essential. As a mechanism – albeit imperfect – for setting priorities in the sustainability of intangible cultural heritage, the ATS Model may help guide policy-makers,

governments, funding agencies, and communities themselves in making optimum decisions relating to cultural heritage sustainability. In this way, judiciously adopting the model could help ensure the best use of funding and resources for cultural sustainability efforts, maximising returns on investment in sustainability initiatives and leading to the delivery of more meaningful and effective support.

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**Dr. Catherine Grant** is Research Fellow at Queensland Conservatorium Research Centre. Her doctorate (Griffith University, Brisbane, Australia), which was awarded the Chancellor's Medal, investigated the ways in which the field of language maintenance may inform approaches to support the sustainability of endangered music genres. Her academic publications on cultural sustainability include articles in the *International Journal of Intangible Heritage*, the *Journal of Cultural Heritage Management and Sustainable Development*, and the entry 'Music Sustainability' in *Oxford Bibliographies Online*. Her monograph 'Music Endangerment' is to be published by Oxford University Press in 2014.

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