From: Jane Munday <Jane@janemunday.com.au>
Sent: Monday, 27 June 2022 10:35 AM
To: eia NTEPA <eia.NTEPA@nt.gov.au>;
Subject: Response to draft guidance note on culture and heritage

It's good to see the guidance note on culture and heritage. However, could I suggest the following.

1. There needs to be a better distinction made between:

a. Cultural heritage (many **places** of cultural significance are non-Indigenous)
b. Cultural heritage assessment (assessment of **places** of cultural significance, including associations with those places)
c. Cultural impact assessment (assessing changes to the **culture of people** who use or value the land or resources that are likely to be affected by development - the assumption being that we are talking about First Nations culture)
d. Rights to be considered as part of Native Title or ALRA land claims. Not all land covered by environmental impact assessments are covered by Native Title or ALRA but all land is covered by Heritage and Sacred Sites legislation.

2. **Cultural heritage assessments** are generally led by archaeologists and cover **places** of cultural significance, many of which are protected by sacred site and heritage legislation. Cultural significance covers "aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects" (Burra Charter 2013).

3. **Cultural impact assessment** covers how **people's** culture may be changed by development. Cultural impact assessment may be subsumed by social impact assessment. Dedicated cultural impact assessments (CIA) are generally led by anthropologists. CIAs cover many matters not prescribed by legislation, such as cultural identity, cultural practices, passing on of knowledge and social relationships. Even the Environment Protection Act 2019 suggests only that cultural impact assessment MAY be included. It is not covered by statute or common law, although it is certainly good practice to consider Aboriginal cultural values and how they might be impacted by a project/development.

Australia does not have a good history of cultural impact assessment. It is more accepted in Canada and New Zealand. See in particular work by Professor Ciaran O'Faircheallaigh, the Firelight Group in Canada and Dr Dyanna

Jolly in New Zealand (https://www.nzaia.org.nz/dyanna-jolly.html; https://firelight.ca/wp-content/uploads/2016/03/MCFN-303_MAPP-Report_Final.pdf; https://reviewboard.ca/upload/ref_library/may_2009_cultural_impact_assessment_guidelines_status_report_1242 859917.pdf; https://reviewboard.ca/reference_material/cultural_impact_assessment). See attached literature review.
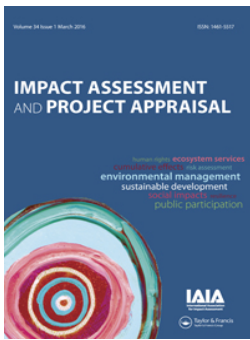
3. The guidance note mentions the role of the Aboriginal Areas Protection Authority but makes no mention of the statutory role of the Territory's four land councils, eg determining who has a right to negotiate for benefits and ensuring free, prior and informed consent.

4. You make no mention of the Burra Charter (https://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf), which applies to "all types of places of cultural significance including natural, Indigenous and historic places with cultural values". The Burra Charter is intended to guide conservation of cultural heritage.

5. Given the failure to distinguish between cultural impact assessment and cultural heritage assessment, I consider the guidance section of this note to be misleading and poor. See p.10 of the Burra Charter for a cultural heritage assessment process (understand the place, assess cultural significance, identify all factors and issues, develop policy, prepare a management plan etc).

I also suggest amending the factor and objective to better reflect the distinction. Since the objective is 'protection' I suggest this factor should be 'cultural heritage' only. Cultural values/living culture may be enhanced, as well as protected.

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Cultural impact assessment: a systematic literature review of current methods and practice around the world

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IAIA
International Association for Impact Assessment

Taylor & Francis
Taylor & Francis Group

Cultural impact assessment: a systematic literature review of current methods and practice around the world*

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ABSTRACT

In the past decades, culture has increasingly been accepted as a dimension to be planned and managed within public policy, alongside social, economic and ecological considerations. Techniques for impact assessment of interventions on our economy, ecology and society are becoming more sophisticated, but are not yet well established within the cultural domain. This paper presents the results of a systematic literature review on applications of cultural impact assessment (CIA) internationally. Findings indicate that CIA has largely been practiced since 2002 to understand the impact of development processes on indigenous communities. While interest in CIA was also apparent in areas of public policy, particularly local government, little evidence was found of the practice actually established. A divergent understanding of CIA was found in the 'cultural' (funded arts and heritage) sector where it was understood as both impact on culture, but also impact of cultural activities. Only two developed tools for measuring cultural impact were found, one each for indigenous contexts and cities. Recommendations for strengthening CIA practice include establishing agreed definitions of culture and cultural impact, and validated tools, including measurement frameworks and indicators.

Introduction

Discussions about what is important for the world and its people are taking place in the context of the UN's post-2015 development agenda. In response to previous development agendas, including the Millennium Development Goals, that paid little heed to the role of culture in development, many significant international bodies are calling for a change (UCLG 2015a). These agencies argue that culture is both a driver and an enabler of sustainable development, that policies and projects that do not take into account the cultural dimension often fail, and consequently, that there should be a stronger role for culture as a domain of governance and policy. This lack of consideration of the cultural dimension includes failure to consider how initiatives impact on the culture of a place or group. The Committee for Culture of the international peak body for local government, United Cities and Local Government, has discussed the underdevelopment of tools and practices of cultural impact assessment (CIA), especially in regard to local governance (UCLG 2006). This article responds to those statements, in undertaking and presenting the results of a systematic international literature review on practices of CIA.

An earlier article by Partal (2013) provides a literature review on the inclusion of culture and CIA specifically within the sustainable development paradigm. The current paper provides a summary of CIA practices internationally: what is occurring, when, where, how and why and by whom. The research methodology is outlined, followed by a brief overview of the origins and evolution of the practice of impact assessment (IA) more broadly. Findings are presented, including understandings of the terms 'culture' and 'cultural impact assessment'. Methodologies used to undertake CIA are discussed, along with challenges regarding measurement frameworks. The geographic locations of CIA application, historically and currently, and the professional fields in which CIAs are largely sited are summarized. Two developed systems for measuring cultural impact are presented, and the strengths of these, as well as areas of potential development are examined. This is followed by a synthesis of findings about the diverse functions of CIA, and a discussion of the relationship between CIA and other types of IA. The article concludes with observations about future potential applications of CIA and recommendations for further research.

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Method

This review was undertaken through desk-based research in Australia between 2013 and 2015. The main search terms were 'cultural impact' and 'cultural impact assessment', but 'cultural indicators' and 'cultural value' were also included, to explore whether either of these terms were used for a similar process. While many related fields, including indigenous, heritage, language and ethno-biological IA (see, for example, Kimberley Land Council 2010) also examine issues related to culture; and combinations of other forms of IA are used with CIA, the authors' primary interest was in research identified explicitly as pertaining to 'cultural impact assessment'. Given this interest and the resource limitations of the study, only literature that specifically included the afore-mentioned search terms was examined.

First, the digital library JSTOR and search engines Google and Google Scholar were used to search the academic literature. This was followed by both electronic and hand searching of relevant peer-reviewed research in journals from fields including cultural studies, cultural policy, sociology and anthropology (as detailed in Appendix 1). Specific organizations' websites were also searched (see also Appendix 2), including the Social Impact Research Centre, UNSW and the International Association for Impact Assessment, USA. References of references were checked, publication lists of individual scholars in the field were examined, and several of these experts responded to our requests for recommendations for seminal literature.

As the intention for this review was a documentation of how CIA is practiced, not just how it is reported by academics, the review also included articles from books, magazines and newspapers, consultants' reports, government documents, national arts council reports, guidelines, reviews, working papers and workshop presentations. English language sources were the major focus, but articles in Spanish, German, Catalan and French were also examined. Given the modest amount of relevant material, no specific limit of publication date was proscribed, with the search attempting to find early and recent publications about CIA.

An initial sample of 133 documents that appeared to be relevant and included one or more search term was gathered and examined. Of these, only 34 resources were ultimately included in the review, with all of these specifically mentioning CIA and offering substantial information on the topic. Several resources, for example, mentioned CIA but included little or no content about it. A systematic analysis of these documents was undertaken to enable comparison across several elements. Each document was examined for:

- definitions of culture and CIA;
- application of CIA: timeframe, professional fields, geographic locations;
- methodologies, including theoretical approaches and frameworks for measurement; and
- functions of CIA and relationship of CIA with other domains.

Additional resources were located after the initial search, thanks to generous colleagues with specific expertise. Many of these articles were not included in the final sample, however, as their inclusion would not have substantially changed the findings, given that they offered more information on CIA in indigenous communities.

This analysis forms the basis for the findings that follow.

Findings

Origin and evolution of impact assessment

IA had its inception in the late sixties, with the establishment of the practice of environmental impact assessment (EIA) in response to the growing concern in developed countries about the impact of human activities on the biophysical environment. The International Association for Impact Assessment (IAIA), founded in 1980, defines EIA, as 'the process of identifying, predicting, evaluating and mitigating the biophysical, social, and others relevant effects of development proposals prior to major decisions being taken and commitments made' (2009, p. 1). The National Environmental Policy Act (NEPA) in the USA, which became effective on 1 January 1970, was the first of many EIA laws and procedures around the world. The European Union approved a directive on the environmental assessment of plans and programs in 2001 (IAIA 2009).

From an initial focus on biophysical components, IA evolved to a broader concept involving physical-chemical and biological dimensions, as well as visual, cultural, socio-economic and health aspects of the total environment, including natural and human-modified environments and communities (IAIA 2009). This development mirrors public policy changes, from earlier emphases exclusively on economic outcomes, to more recent recognition of social and ecological considerations.

Other specific forms of IA developed as a consequence. Social impact assessment (SIA) was defined in 2003, in a set of international principles, as 'the process of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (i.e., policies, programs, plans, projects) and any social change processes invoked by those interventions' (Vanclay 2003, p. 2).

IA has become a well-established practice across a range of sectors, including environment, economics, social services and health (IAIA 2009). The need to apply IA to strategic levels of decision-making (e.g., policies,

legislation, plans, programs) has led to the development of a more integrated process, of strategic environmental assessment. This has a wider purview, generally considering 'environmental, social, economic, and health issues', aiming to 'mainstream and ensure the sustainability of strategic decisions' (IAIA 2009, p. 2).

IAs are used to predict the future, assisting decision makers to conceptualize what might happen if an intervention, such as a new policy or action, is implemented. They are also used at the opposite end of the decision-making process, to understand what has happened as a result of a course of action. IA can include both qualitative and quantitative methods. All IA assumes an intervention whose effects will be measured against a set of potential stakeholders' needs (Tanner 2012).

Definitions of culture and cultural impact assessment

CIA is a less well-developed aspect of IA. The IAIA, for example, offers little information on CIA, with no definition provided and few articles or presentations at its annual international conferences focusing on the topic. This deficiency is related to the fact that culture is a relatively new dimension of public policy, not yet fully integrated into government policies around the world, but increasingly being included (Hawkes 2001; Pascual 2008; Partal 2013). At the time of writing, a significant international campaign is underway to ensure that culture is included as a goal in the UN's post-2015 global development framework and sustainable development goals.

No review of published literature about CIA was found. One article entitled *Social, Cultural, Economic Impact Assessments: A Literature Review* (Glicken 2002) was in fact largely focused on social IA, with no references in the bibliography mentioning CIA.

One of the major challenges of CIA is that defining 'culture' and therefore 'cultural impact assessment' is difficult. This may not be surprising, given that culture is known to be one of the most contested words in the English language (Hawkes 2001). Nevertheless, because culture is increasingly accepted as a domain of public policy, given its fundamental role in human well-being, considerations of culture and related impacts are vital. The lack of clear definition of culture results in a commensurate challenge of understanding impacts on and of culture. Finnish cultural policy specialist Häyrynen comments on 'the fundamental problem for both cultural policy and the larger system of impact assessment' which arises because 'the concept of 'culture' is . . . imprecise, not concrete,... vary(ing) not only in its theoretical definitions, but also according to its linguistic and administrative uses'. He sees that 'the remaining problems are more or less results of this fundamental one' (2004, p. 3).

In most of the literature examined, no definition of culture was provided. However, of the eight definitions offered, strong concordance was evident, both between definitions, and with UNESCO's seminal definition that culture is

> the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs. (UNESCO 1982)

In an article about CIA guidelines, the Mackenzie Valley Review Board of Canada offers a definition that is consistent with articles examined in this review, in proposing that 'culture is a way of life, a system of knowledge, beliefs, values and behaviours passed down to each generation' (2009, p. 6). Elements of Aboriginal cultures in the Mackenzie Valley were seen to be:

- traditional knowledge,
- commonly held values such as respect for Elders.
- principal history,
- spiritual practices,
- language,
- physical heritage resources,
- traditional dances and songs,
- place names,
- spiritual sites and cultural landscapes,
- traditional land use, and
- values associated with the land (2009, p. 6).

Canadian IA specialists Gibson, MacDonald and O'Faircheallaigh also included in their conception of culture 'obligations (responsibilities); cultural transmission; land ownership structures; sense of common identity in values, beliefs, ancestry; organisational structures; oral, visual and written communication forms (stories, language, art)' (2011, p. 1800).

Definitions of CIA found were also largely concordant. The International Network for Cultural Diversity's Working Group on CIA, for example, offered a substantive definition of CIA as

> a process of evaluating the likely impacts of a proposed development on the way of life of a particular group or community of people, with full involvement of this group or community of people and possibly undertaken by this group or community of people. A CIA will generally address the impacts, both beneficial and adverse, of a proposed development that may affect, for example, the values, belief systems, customary laws, language(s), customs, economy, relationships with the local environment and particular species, social organization and traditions of the affected community. (Sagnia 2004, p. 9)

Other definitions of CIA, including those provided by Glicken (2002), Mackenzie Valley Review Board (2009), O'Faircheallaigh (2009), Department of Land and Natural Resources, State of Hawai'i (2008) and Rolleston (2008) are commensurate with this.

The elements of culture considered most frequently in the literature about CIA were tangible, such as heritage

resources of gravesites or archaeological sites (Rogers 2006; Dyanna 2007a, 2007b; Department of Land and Natural Resources, State of Hawai'i 2008; Gibson et al. 2008, 2011; Hammatt 2008; Secretariat of the Convention on Biological Diversity 2004; Mackenzie Valley Review Board 2009; Kimberley Land Council 2010; Arrow Energy 2012; Schindler 2012; Nakamura 2013; Subsecretaría de Minería 2014). But intangible elements of culture, things that cannot be seen or touched but are essential to maintain and practice culture, such as spiritual beliefs, language, traditional knowledge, oral history and inter-generational relationship patterns, were also considered important. Gibson et al. particularly recommend that CIA consider both tangible and intangible elements, with culture being 'much more than stones and bones; . . . a living, continually adaptive system, not a remnant of the past' (2011, p. 1800).

Thus, it is evident that, as far as can be deduced from the published literature, practitioners undertaking CIA over the past decades have comparable understandings of culture and CIA, and consider both tangible and intangible elements in the assessments. The article now examines the way CIA is being applied around the world.

Application of cultural impact assessment: timeframe, professional sectors and geographic locations

Timeframe of CIA application

The earliest reference related to CIA located, in the *International Journal of Information Management*, outlined a methodology for measuring cultural impact of innovations such as new products or information systems or organizational changes (Stamper 1988). In that study, cultural impact was understood from the behavior and feelings of people regarding the intended change, with indicators being cultural emotions and signals. The next series of publications mentioning CIA appeared from the late 1990s, largely with respect to initiatives involving indigenous peoples, such as Bryant's study of environmental justice for indigenous Hawai'ians (2011). This includes policies adopted by the Environmental Council of that state (Environmental Council, State of Hawai'i 1997).

Professional sectors utilizing CIA

Not surprisingly, therefore, the professional sectors producing most of the literature about CIA were related to indigenous issues, with specific topics including cultural heritage, resource management, property and state property boundaries, conservation of landscapes (Department of Land and Natural Resources, State of Hawai'i 2008; Gibson et al. 2008, 2011; Hammatt 2008; Kimberley Land Council 2010; Bryant 2011) and mining (Gibson et al. 2011; Subsecretaría de Minería 2014). From the mid-2000s, a broader application was evident, with

CIA documented also with respect to cultural development (funded arts and heritage activities) (Small et al. 2005; Selwood 2010; BOP Consulting 2013; Fujiwara et al. 2014) and cultural heritage (Rogers 2006; Kiriama et al. 2009; Schindler 2012), local development (Sagnia 2004; Dyanna 2007a, 2007b), tourism (Sharma 2008) and urban planning (Office of Environmental Quality Control, State of Hawai'i 2012).

CIA documented in the literature was undertaken most often by consulting companies (such as Heritage Consulting Australia, or Cultural Surveys Hawai'i) and universities (including Department of Geography and Environment and Maori Studies Departments). Several projects were documented by central and local governments, including the Mackenzie Valley Review Board in Canada (2009), the Department of Land and Natural Resources (2008) and the Office of Environmental Quality Control (2012), both from the State of Hawai'i, or the Mining Sub-secretariat in Chile (Subsecretaría de Minería, 2014). Professional organizations discussing CIA were diverse, including International Federation of Arts Councils and Culture [IFACCA] (2005), UNESCO (2006), the International Network for Cultural Diversity (Sagnia 2004), the Secretariat of the Convention on Biological Diversity (2004) and the peak body for IA, the IAIA (2009).

Geographic location of CIA

Given that most CIA has been undertaken in relation to indigenous concerns, it is not surprising that CIA has mainly been documented in countries with indigenous populations. This includes New Zealand (Dyanna 2007a, 2007b; Rolleston 2008; Palmer 2011; Quality Planning 2014), Australia (Kimberley Land Council 2010; Arrow Energy 2012), northern Japan (Nakamura 2013), Hawai'i (Hammatt 2008; Bryant 2011), Canada (Häyrynen 2004; Gibson et al. 2008, 2011; Mackenzie Valley Review Board 2009; Secretariat of the Convention on Biological Diversity 2004), Chile (Subsecretaría de Minería, 2014) and Africa (Kiriama et al. 2009). Articles about CIA in relation to cultural development originated in the UK (Selwood 2010; BOP Consulting 2013; Fujiwara et al. 2014) and Australia (Small et al. 2005), while CIA connected to tourism and urban planning is discussed in relation to initiatives in Nepal (Sharma 2008), Japan (Nakamura 2013) and Hawai'i (Office of Environmental Quality Control, State of Hawai'i 2012) (Figure 1).

In summary, the literature indicates that CIA has largely been practiced only in the last two decades, primarily for the purpose of understanding impacts of development, including mining, on indigenous communities, and, relatedly, has mainly been documented as occurring in countries with indigenous populations. The range of professional sectors engaging in CIA has significantly diversified since the mid-2000s, with cultural development, tourism and urban planning fields engaging in CIA more recently, although these are still the

Figure 1. Locations of published CIA initiatives.

minority of CIA activities. Proponents range from consultants to governments to university-based researchers.

Methodologies for undertaking CIA

This section discusses the methodologies used in CIA projects. The processes used to undertake CIA, and indicators and frameworks for assessment that were documented in the literature, and issues around data collection are summarized below.

Processes of CIA

Six articles that included instructions for conducting CIA were found: four that focused on CIA specifically (Gibson et al. 2008, 2011; Mackenzie Valley Review Board 2009; James 2014); one that focused on cultural heritage IA (Rogers 2006); and one that included CIA as part of cultural, environmental and social impact practices (Secretariat of the Convention on Biological Diversity, Canada 2004). Differences and similarities between these are discussed in the sections to follow.

While most articles did not offer detailed information about methodology of CIAs, the literature referring to indigenous issues was most consistent in discussing methods used. Articles that offered detail of methods were examined in depth, and relevant information synthesized. Gibson et al. (2011) provided a particularly comprehensive set of directives for CIA undertaken in the context of mining and indigenous communities. The stages, as discussed in the following paragraphs, were relatively common.

Firstly, a preparatory stage is seen as necessary to engage communities successfully. That implies screening, scoping and notifying the people living in the affected area about the proposed development (Secretariat of the Convention on Biological Diversity 2004). A second stage generally focuses on collection of data to identify and describe the cultural resources, practices and beliefs

located within the relevant area. The historical period to be studied in a CIA is recommended as being the initial presence in the area of the particular group whose cultural practices and features are being assessed (Office of Environmental Quality Control, State of Hawai'i 2012).

Processes of CIA include studies of traditional land use, traditional ecological knowledge, physical anthropological/archaeology and ethno-geography such as place names; analysis of statistical trends in appropriate cultural indicators, collected by the Bureau of Statistics or other government body (for example, land usage, language proficiency); and community wellness surveys including cultural indicators (Häyrynen 2004; Hammatt 2008; Mackenzie Valley Review Board 2009; Gibson et al. 2011). Mapping of cultural activities (previous and current), field surveys and significance assessment in accordance with specific legislation is considered important. This legislation might include for example, in Australia, the Burra ICOMOS Charter for Places of Cultural Significance. A critical examination of historical and cultural source materials with respect to biases of the authors, any opposing views, and any other relevant constraints, limitations or biases is recommended (Office of Environmental Quality Control, State of Hawai'i 2012).

A high priority for all approaches documented were consultation techniques such as focus groups, interviews and public meetings with stakeholders including community members (indigenous and non-indigenous) and government, and oral interviews with persons knowledgeable about the historic and traditional practices (Glicken 2002; Rogers 2006; Hammatt 2008; Sharma 2008; Mackenzie Valley Review Board 2009; Kimberley Land Council 2010; Gibson et al. 2011; Arrow Energy 2012).

Methodological challenges

The previous paragraphs document methodological approaches to CIA that have many shared features. Methodological challenges were also evident. As

mentioned above, culture and cultural impact were infrequently defined, leading to the problem that few authors discussed specifically, the difficulty in measuring impact of a concept that has not been clearly explicated (Häyrynen 2004; Sharma 2008). This relates to a fundamental problem for CIA, in that, if culture is defined as pertaining to values and norms of specific groups of people, assessment of impact is, by definition, fraught: seemingly similar cultural phenomena or institutions can have a totally different meaning for different groups of people (Keating et al. 2003).

Gibson et al. (2008, 2011) offer the most specific information about challenges with data collection. They suggest that qualitative approaches can provide valuable data, particularly of oral histories and other knowledge, but they are also limited in that they can be difficult, time-consuming and often perceived as anecdotal, and therefore not scientific. Quantitative data used for CIA have different limitations, in potential inaccuracy if it does not represent concerns of all stakeholders, take account of oral educational models or consider dysfunction models of culture. Misinterpretation of cultural realities is possible, especially when analyses are based on settler values. Quantitative data can rarely offer insight as to why change is occurring, especially with respect to intangible assets of culture. A further challenge identified is the lack of agreed indicators of cultural impact.

Nakamura (2013) discusses a related concern about the need for cultural sensitivity of researchers and the developers they often work with and for. Well-developed sensibilities about traditional ecological knowledge or oral history are required when IA is being undertaken in indigenous communities. This requirement would seem self-evident, but in Nakamura's observation, confirmed by Gibson et al. (2011), it is not ubiquitous. Also important is the timescale of projects, with Tanner (2012) commenting on the risk of CIA processes with very limited timescales. He recommends that measurement of impact takes place over longer time periods, which offers greater probability of impacts being detected by researchers.

In summary, then methodological challenges for CIA documented in the literature are significant. These include lack of agreed definitions and indicators, the limitations of quantitative data, especially in explaining causality, the expense and difficulty of using qualitative data, the unmet need for assessors to have strong cultural sensitivity and timescales that are inadequate for reasonably tracking impacts.

Theoretical approaches, measures and frameworks of assessment

Although this review was intended to provide an analysis of theoretical approaches to CIA and frameworks of assessment, including indicators and scales, insufficient

information was published about any of these concepts to enable observation of any patterns or themes. This may be related to concerns, like those expressed by Häyrynen (2004), regarding the desirability of universal and formal measurement for CIA. While Häyrynen recognizes the usefulness of defined measurements for statistical analyses, he advises that these have the potential to wrongly homogenize cultural impact occurring in different circumstances. This can lead to an imposition of ideas that are based on majority norms or other hegemonic values, and results that might include inappropriate assumptions of cause–effect relationships.

However, two articles that included systems of measurement of cultural impact were found. Gibson et al. (2011) offer a process for assessing cultural impact in relation to mining in indigenous communities, while James (2014) provides a framework with a much broader application, of CIA in relation to cities.

Gibson et al's (2011) schema is detailed and thoughtful. It includes a developed list of cultural components, goals and indicators; recommendations for types of data required to ensure relevant indicators; suggestions for assessing impact in the absence of relevant research; factors to consider when determining cultural impact significance; and strategies to mitigate cultural impact and enhance cultural resilience. While specific examples of the application of the framework are not provided, it is evidently based on the authors' extensive experience in this field. It offers clear direction for practitioners, while not being a toolkit, with users still needing to do considerable interpretation and shaping of detail before use. No suggestion that it functions to create data comparable across initiatives or place is made, and no specific information about how the ideas might integrate with other types of IA is provided. There is some indication that a full set of guidelines will be developed out of this work by the Mackenzie Valley Review Board (2009), although this review did not find a published document.

James offers a CIA schema that is entirely different. He proposes 'principles, protocols, indicators and tools for a cultural impact assessment process' (2014, p. 4) to be usable by cities and local governments of all types. This schema is based on the *Circles of Sustainability* model developed by the UN Global Compact Cities Programme and Metropolis, and currently being used by cities around the world to measure progress on complex issues. James' article was commissioned by United Cities and Local Government (UCLG)'s Committee on Culture to address the dearth of CIA resources for local governments.

In this model, culture is considered one of four integrated domains (cultural resilience, political vibrancy, economic prosperity and ecological adaptation) that contribute towards the desired endpoint of social sustainability, all of which the system proposes to measure. Culture is divided into seven sub-domains of: identity

and engagement; creativity and recreation; memory and projection; beliefs and ideas; gender and generations; enquiry and learning; and health and well-being. Indicators in the form of questions are offered within each of these sub-domains, and these are posited as being able to measure negative to positive change on a nine-point scale. The article offers detail about how such an assessment would be undertaken, including a draft questionnaire, advice on how the assessment could be made (by an expert panel) and theory about measures.

However, some challenges with this approach were evident. No explanation is offered for how the seven sub-domains or questions were devised, and it is difficult to know what theory or research they might be based on, even when a more comprehensive resource (James et al. 2015) was consulted. Some of the detail appears underdeveloped, for example, with the header question 'How sustainable are the following aspects of the urban area?' not actually answerable by the proffered indicators such as: *the level of participation in and appreciation of the arts – from painting to story-telling*. The understanding of culture seems extremely (too) broad, in its inclusion of indicators such as the availability of aged-care in the urban area, while other indicators seem overly complex: *the translation of the monitoring of gender and generational relations into strategies for enhancing positive engagement*, particularly for the intended users who are not academics. The most significant problem is that schema doesn't actually measure impact, in the sense of the change (actual or expected) as a result of an intervention, but, rather, is an assessment of the current situation in a place, as purported by a group of experts. Adjustments would have to be made before it was truly a system of IA, to reflect what happened that caused or might be expected to cause a certain change. Nevertheless, it offers potential for future application of CIA that could be comparable across times, locations and topics, and a level of conceptual thinking and detail not provided by any other resource located.

Functions of CIA and relationship with other domains

While the search focused specifically on literature about CIA, a close relationship between CIA and other aspects of IA was observed. In most instances, CIA functioned as one aspect of a different type of IA.

The majority of documented CIA projects were undertaken in the context of an EIA, to understand how a new initiative would impact on an indigenous culture (Department of Land and Natural Resources, State of Hawai'i 2008; Mackenzie Valley Review Board 2009; Department of Land and Natural Resources, Kimberley Land Council 2010; Bryant 2011; Arrow Energy 2012). For instance, a CIA was undertaken as part of an EIA prior to the implementation of a Marine National Monument

Management Plan (Department of Land and Natural Resources, State of Hawai'i 2008). The interconnection between environment and cultural impact was evidenced in traditional knowledge from the Mackenzie Valley, Canada, whose people acknowledge that 'the health of the culture, language and people depends on the health of the land' (Mackenzie Valley Review Board 2009, p. 9).

CIA is also often discussed as a sub-dimension of SIA. The international principles for SIA conceptualize culture as subsidiary to the social domain, where social impacts are considered to include changes to 'people's culture – that is, their shared beliefs, customs, values and languages or dialect' (Vanclay 2003). Small et al. (2005) provide an example of this type of conflation. In seeking to measure what the authors posit as 'socio-cultural impacts of a small community festival', they devise and apply a framework of *Social Impact* and *Social Impact Perception*. The measures used – impacts on local character of the community; impacts on the region's cultural identity; local interest in the region's culture and history; and local awareness of cultural activities available – are essentially cultural. Thus, these researchers are essentially measuring *cultural impacts* of a *cultural activity*, but calling their findings social impact and *social impact perception*.

Sagnia (2004) provides an explanation for what can be confusing interconnections between EIA, SIA and CIA, in his identification of the 'cultural aspects of the environment'. These include, for example, the ways people cope with life through their economy, rural system and values, the ways communities are organized and held together by their social and cultural institutions and beliefs. CIA is seen as 'a method of analyzing what impacts a development policy or action may have on the cultural aspects of the environment' (Sagnia 2004).

Validation for the close connection between EIA, SIA and CIA is also provided by the Secretariat of the Convention on Biological Diversity (2004). They acknowledge that, as most indigenous and local communities live in areas where the vast majority of the world's genetic resources are found and they have used biological diversity in a sustainable way for thousands of years, their cultures are deeply rooted in the environment on which they depend. This interconnection was the organization's impetus to develop guidelines that involve all of these types of IA, the 'Voluntary guidelines for the conduct of cultural, environmental and SIAs regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities' (Secretariat of the Convention on Biological Diversity 2004).

Therefore, it can be seen that CIA is closely intertwined with other practices of IA practices, often subsidiary to SIA or EIA, and in some cases confused or conflated with either of those.

New and divergent understanding of CIA

A new use of the term CIA has emerged in the cultural sector, that is, organizations working with 'culture', where culture is, as Holden defines it, 'the arts, museums, libraries and heritage that receive public funding' (Holden 2006). This is an entirely different field of endeavor than most of the work in indigenous and heritage contexts discussed already, where CIA is mostly an assessment of impact of interventions on an existing culture. In the cultural sector, CIA is often used to mean assessment of the impact of cultural activities or interventions, on outcomes, that are sometimes cultural, but also social and economic, and in many cases, not specified at all. This use of the term CIA is related to a lively contemporary debate about cultural value, which is not about the value of culture in the broad sense of the term, as used by other proponents of CIA, but how funded cultural institutions measure the value of their activity (see, for example, Belfiore 2002).

For example, a major UK study about the 'cultural impact' of museums (Selwood 2010) included these two different conceptualizations of CIA without differentiation. The article ostensibly discusses CIA, as the concept has been used in other sectors, and the challenges posed by the lack of a framework for CIA, in comparison with social and economic domains where measures are better established. However, a strange conundrum was also evident, with the museum experience itself also being considered the 'culture' that was impacting on individuals. Therefore, the article is considering both the impact of culture: how attendance at a cultural institution impacts individuals, and simultaneously, the impact on culture, how people's attendance impacts the broader culture, without making a clear distinction. Jensen's blog post (2014) indicates a similar confusion, in ostensibly discussing research about the tricky issue of 'quantification of cultural impacts', when it actually refers to research about the social impacts of cultural activity.

Thus, it is clear that CIA is closely connected to other dimensions of IA in development, and currently subordinate to most of them. It is also being used in the cultural sector for a different and unrelated function.

Future applications of CIA

The literature included much discussion of the need for meaningful approaches to considering impact, like those applied in other domains of development, if culture is to be fully recognized as a dimension of desirable development. The need for the establishment of cultural statistics, indicators and agreed processes of CIA for the achievement of a more culturally sustainable society has been discussed over the last decade by international organizations such as IFACCA (2005); the Convention on Biological Diversity (2004) based in Canada; UNESCO (Rogers 2006); and the international peak body for local

government UCLG (2006). UCLG's Committee for Culture for example is critical of local development initiatives for favoring economic, social and environmental assessments over cultural impacts. Its *Agenda 21 for Culture* includes recommends application of CIA for initiatives that involve significant changes in the cultural life of cities (UCLG 2006). A group of international cultural organizations advocating for the role of culture in the UN's post-2015 development agenda prioritizes the need for CIA, for example, in urban and tourist development plans. However, achievement of these recommendations has been hampered by the lack of a well-established framework for CIA, hence UCLG's commissioning of James' schema discussed earlier. The review confirmed such a lack, with few articles documenting CIA in cities found. This indicates significant new possibilities and an imperative for the application of CIA, particularly in local government contexts where increasing value and investment is being placed on the cultural dimension of development.

Recommendations for future research

The discussion in this study was limited to literature that specifically mentioned 'culture' or 'cultural impact assessment', thus reducing the consideration of closely related topics such as indigenous, language and heritage IA. Further research might explore the relationship between these different terms with CIA specific literature, to see whether they examine the same concerns, or offer a wider or deeper perspective. This review was also limited to examination of understandings and processes of CIA, rather than findings. An additional valuable study would be an investigation of the literature for findings of CIAs and their outcomes: what they find, how communities are benefited (or not) by CIAs, and the factors that contribute to this benefit (or detriment).

Conclusion

This article offers an overview of the field of CIA through a systematic review of the modest international literature, including journal articles and more informal sources of information from 1988 to 2015. Findings indicate that, while most documents did not offer definitions of culture and CIA, there was strong concordance between those published. Culture was consistently conceptualized in its broadest sense as a way of life, a system of knowledge, beliefs, values and behaviors passed down to each generation. Strong shared understandings of CIA were also evident, with practitioners understanding it as a process of evaluating the likely impacts of a proposed development on the way of life of a particular group or community of people. The most frequent application of CIA was in sectors relating to indigenous development, such as cultural heritage, resource management and

conservation. Initiatives were implemented most often in countries with indigenous populations.

Methodologies documented were also quite consistent, with stages generally including scoping, desk research through existing studies, mapping of cultural activity, field surveys and community consultation. Only two articles offered systems of measurement with developed indicators, one for mining in indigenous communities and one for cities, with both indicating promise, but also potential for strengthening. As yet, CIA appears to be the least well established of all the IA approaches, with much less scholarship and practice in the field. A strong relationship between CIA and other IA approaches was evident, with CIA regularly being included, albeit as a subsidiary part of environmental and social impact projects.

A different process, also called CIA, is being implemented in the cultural (funded arts and heritage) sector that is unlike previous practices, in that it considers impacts *of* cultural activities, rather than only impacts of other activities on culture. New possibilities for the expansion of CIA practice to be used more broadly than current practice were apparent, with strong recommendations provided by international bodies with responsibility for culture, such as the UCLG, international peak body for local government. Their urging for CIA to be used consistently to understand impacts of changes in cities seems timely given the increasing investment and focus on cultural activity and recognition of its value.

Acknowledgements

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Appendix 1. Articles analysed.

Author/Publisher	Date	Location	Related topic	Relations to other domains	Definition of culture	Definition of CIA	Method discussed
Arrow Energy / Surat Gas Project	2014	Queensland Australia	Indigenous/non-indigenous cultural heritage; consulting company	Yes, focus on environmental, social, economic impact assessment	X	X	√(within the document)
BOP Consulting / City of London	2013	London	Arts and culture cluster from the city of London	Economic impact and social impact assessment, arts	X	X	X
Bryant, E / Asian-Pacific Law & Policy Journal	2011	Hawai'i	Analysis of Hawai'i's Cultural Impact Assessment Process as a Vehicle of Environmental Justice	Environmental justice, environmental impact assessment, indigenous cultural heritage	√(p. 244)	√(p. 291)	X
Department of Land and Natural Resources, State of Hawai'i	2008	Hawai'i	Cultural Impact Assessment, Papahanaumokuakea Marine National Monument Management Plan	Environmental impact assessment, environmental law, indigenous cultural heritage and natural resources impact	X	X	√(p. 22)
Dyanna J. / Marlborough District Council and Te Rūnanga o Kaikōura	2007	New Zealand	Cultural Impact Assessment, For a Proposed Plan Change and Coastal Subdivision	Environmental laws, cultural heritage impact, local development	X	X	√(p. 3)
Dyanna J. / Marlborough District Council and Te Rūnanga o Kaikōura.New Zealand	2007	Christchurch: Marlborough District Council and Te Rūnanga o Kaikōura.New Zealand	Cultural Impact Assessment, for Discharges associated with the Sewage Treatment Plant	Environmental laws, cultural heritage impact, local development	√(p. 10)	X	X
Environmental Council, State of Hawai'i	1997	Hawai'i	Guidelines for assessing cultural impact	Environmental Impact Statement	X	√(p. 4)	√(p. 4)
Gibson, G., C. O'Faircheallaigh, A. MacDonald/ International Association for Impact Assessment.	2008	International Association for Impact Assessment.	Integrating Cultural ImpactAssessments into development Planning	Biophysical impacts (social, economic, indigenous cultural heritage and cultural impacts)	√(p. 8)	√(p. 12)	√(within the article)
Gibson, Gibson, G, MacDonald, A. & C. O'Faircheallaigh	2011	General	Cultural Considerations for Mining and Indigenous Communities	Cultural resilience, Environmental and Social Impact Assessment	√(p.1799)	√(p.1799)	√(within the article)
Glicken, J. / Galisteo Consulting Group Inc	2002	Albuquerque, US	Social, Cultural, Economic Impact Assessment: A literature Review	Economic and social impact assessment	√(p. 9)	√(p. 9)	√(p. 12)
Hammatt, H / Cultural Surveys Hawai'i.	2008	Hawai'i	Cultural Impact Assessment for a Fence Project in a local community in Hawai'i	Indigenous cultural heritage	X	X	√(p. 5)
Häyrynen, S. / Carmelle and Rémi Marcoux Chair in Arts Management.	2004	Montreal, Canada.	Role of Cultural Policy in Cultural Impact Assessment Proceedings	X	√(p. 2)	√(along the document)	√(within the article)
International Federation of Arts Councils and Culture Agencies (IFACCA)	2005	International	Statistical Indicators for Arts Policy	Arts	X	X	√(p. 11)
James, P. / Jensen, E.	2014 / 2014	International / UK	Cultural sustainability Impact Evaluation in the Arts and Culture Sector	Cultural sustainability Sports, arts	√Within the article / X	√Within the article / X	√(p. 7) / X
Kimberley Land Council	2010	Australia	Indigenous Cultural Heritage Impact	Ethnobiological Impact, Environmental Impact Assessment	√Within the article	X	√Within the article
Kimberley Land Council	2010	Australia	Indigenous Impact	Archeological Impact, Environmental Impact Assessment	√Within the article	X	√Within the article

(Continued)

Appendix 1. (*Continued*)

Author/Publisher	Date	Location	Related topic	Relations to other domains	Definition of culture	Definition of CIA	Method discussed
Kiriama, H; Ishanlosen, O, Sinamai, A	2009	Africa	Cultural Heritage Impact Assessment	Environmental, Social, Cultural Heritage Impact Assessment	√Within the book	√Within the book	√Within the book
Mackenzie Valley Review Board	2009	Yellowknife, Canada	Developing Cultural Impact Assessment	Environmental impact assessment	√ (p. 6)	√ (p. 7)	√ (within the article)
Nakamura, N. / Geographical Research	2013	Japan	The Protection of Ainu Cultural Heritage in the Saru River	Environmental and cultural heritage impact assessment	X	√ (p. 27)	X
O'Faircheallaigh, C.	2009	Australia	Social Impact Assessment	Aboriginal Peoples Resources	√Within the article	X	√Within the article
Office of Environmental Quality Control, State of Hawai'i	2012	Hawai'i	Guide to the Implementation and Practice of the Hawai'i Environmental Policy Act	Environmental domain, urban planning	X	√ (p. 11)	√ (within the article)
Quality Planning Palmer, S. / Tumana Research	2001	New Zealand New Zealand	Cultural Impact Assessment Cultural Impact Assessment in local government	Māori cultural values Environmental and social domain	√Within the blog X	√Within the blog X	√Within the blog √ (p. 4)
Rogers, P. / UNESCO (Pakistan office)	2006	International	Cultural Heritage Impact Assessment	Cultural Heritage Impact Assessment, arts	X	Cultural Heritage Impact Assessment (p. 7)	√ (within the article)
Rolleston, S / Beca Group	2008	New Zealand	Aora Matawi Cultural Impact Assessment Matakana Island	Economic impact and social impact assessment	X	√ (p. 1)	√ (p. 4)
Sagnia K. B. / International Network for Cultural Diversity (INCD).	2004	Turkey, Bali, Suriname	Cultural Impact Assessment	Construction of new local infrastructures, environmental law, social impact assessment	X	√ (p. 6)	X
Schindler, J European Commission / European Association of Cultural Researchers.	2012	Europe (European Association of Cultural Researchers)	Culture-related Impact Assessment	Arts	√ (p. 22)	X	X
Secretariat of the Convention on Biological Diversity	2004	Montreal	Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment in indigenous and local communities in Montreal	Cultural heritage impact assessment, customary law, environmental and social impact assessment	√ (p. 6)	Cultural Heritage Impact Assessment (p. 7)	√ (p. 8)
Selwood, S.	2010	London	The cultural impact of museums	Museums cultural impact, arts	X	X	√ (p. 24)
Sharma, R / Himalayan Journal of Sociology & Anthropology	2008	Nepal	Impacts of tourism business in a region of Nepal	Tourism	√ (p. 108)	X	√ (p. 110)
Small, K., D. Edwards, L. Sheridan / International Journal of Event Management Research	2005	Australia	Evaluation of socio-cultural impacts of a festival	Social and cultural impact assessment, arts	X	X	√ (Within the article)
Subsecretaria de Mineria	2014	Chile	Indigenous heritage	Environmental Impact Assessment	√ (Within the article)	X	√ (Within the article)

Appendix 2. Resources searched.

Journals

American Sociological Review
Cultural Studies – Critical Methodologies
Cultural Trends
Culture and Local Governance
Culture & Recherche
Geographical Research
Impact Assessment and Project Appraisal
International Journal of Cultural Policy
International Journal of Event Management Research
International Journal of Information Management
International Journal of Media & Cultural Politics
International Journal of Urban and Regional Research
Journal of Asian Studies

International organisations' websites

International Association for Impact Assessment (IAIA): http://www.iaia.org/
International Federation of Arts Councils and Culture Agencies: http://www.ifacca.org/
International Network for Cultural Diversity: http://www.incd.net/incden.html
Secretariat of the Convention on Biological Diversity: http://www.cbd.int/secretariat/
UNESCO Framework for Cultural Statistics: http://www.uis.unesco.org/culture/Pages/framework-cultural-statistics.aspx

United Cities and Local Governments: http://www.uclg.org/
United Nations: http://www.un.org/en/

Canada

Centre for Policy Studies on Culture and Communities: Simon Fraser University, Vancouver. http://www.cultureandcommunities.ca/resources_indicators.html
Selected Cultural Impact sources: http://www.reviewboard.ca/upload/ref_library/Selected%20CIA%20sources_1226510252.pdf

Europe

European Commission Portal for Impact Assessment: http://ec.europa.eu/governance/impact/index_en.htm

Oceania

Australian Community Indicators Network (ACIN): http://www.acin.net.au/
Community Indicators Victoria (CIV): http://www.communityindicators.net.au/
Cultural Development Network: http://www.culturaldevelopment.net.au/
RMA (Resource Management Act) Quality Planning Resource New Zealand: the FAQ on Cultural Impact Assessments: http://www.qualityplanning.org.nz/index.php/supporting-components/faq-s-on-cultural-impact-assessments