

The Arts and Biocultural Diversity: Further Ideas

Diane Butler

Independent Researcher/Associate Professor (USA); Research Center for Society and Culture, National Agency for Research and Innovation (PRMB-BRIN, Indonesia)

<https://orcid.org/0000-0003-1396-5234>

dianecarolbutler@gmail.com

Abstract

The invitation to come to Universitas Sebelas Maret in Surakarta, Central Java to give a talk for a very important 1st Conference on Visual Art, Design, and Social Humanities (CONVASH), convened by the Faculty of Fine Arts and Design on 2 November 2019, offered an opportunity to return to a subject that I believe is central for addressing nearly all issues which challenge us now and will in the future: biocultural diversity. In 2017, for the International Conference on Biodiversity convened in Bali by Masyarakat Biodiversitas Indonesia and Universitas Sebelas Maret, Surakarta, I urged scientists to work with artists so that the arts can be more sufficiently acknowledged, documented and explained in terms of the connections between cultural and biological diversity. The present paper puts forth further ideas about how artists can work with scientists to develop interdisciplinary practice-based methods for enhancing beneficial human-nature relationships.

Keywords: *arts, biocultural diversity, cultural creativity, practice-based methods, tangible and intangible cultural heritage*

*Corresponding author Received: July 18, 2025; Accepted 22 November 2025; Published December 2025
©2025 The Author(s). Published by Faculty of Art and Design Universitas Sebelas Maret.
This is an open-access article under the CC BY-NC-SA license*

INTRODUCTION

The invitation to come to Universitas Sebelas Maret in Surakarta, Central Java to give a talk for a very important 1st Conference on Visual Art, Design, and Social Humanities (CONVASH), convened by the Faculty of Fine Arts and Design on 2 November 2019, offered an opportunity to return to a subject that I believe is central for addressing nearly all issues which challenge us now and will in the future: biocultural diversity. Actually, the first time that I spoke about the arts and biocultural diversity (Butler, 2017) was for the International Conference on Biodiversity themed the Roles of Biodiversity and Conservation Research under Global Climate Change convened in Bali by Masyarakat Biodiversitas Indonesia and Universitas Sebelas Maret, Surakarta. On that occasion more than two hundred biologists, ethnobiologists, botanists, zoologists, ecologists, conservationists, and specialists in ethnopharmacological/ethnomedicine studies, natural resource and environmental management systems, and climatology from Indonesia and several other Southeast Asian as well as Asian nations presented papers. I felt my task as a dance-movement artist, teacher and cultural program director, was to give a keynote address that would stimulate their consideration of biocultural diversity. So, I spoke about why the arts are a primary vehicle for the transmission of cultural knowledge. I then urged the scientists to work with artists so that the arts can more sufficiently acknowledged, documented and explained in terms of the connections between cultural and biological diversity.

METHOD AND MATERIALS

This article is based on my keynote talk for the 1st CONVASH held in 2019 (see Universitas Sebelas Maret, 2020), during which I put forth further ideas about how artists can work with scientists to develop interdisciplinary practice-based methods for enhancing beneficial human-nature relationships. First, I will briefly describe the concept of biocultural diversity. Then, discuss why the arts are a primary vehicle for the transmission of cultural knowledge. Lastly, and most importantly, I will share some ways that artists and scientists can collaborate to apply creative know-how in study and practice.

RESULTS AND DISCUSSION

From biological to cultural to biocultural diversity

Sustaining diversity has become a frequent topic since the 1970s; particularly for biologists who have shown the impact the loss of biodiversity such as unique plant and animal species, habitats and ecosystems has had and will have on the ecological resilience of the Earth. At the same time, scholars and educators of sub-disciplines within the social sciences and humanities have been concerned about the decline in linguistic diversity globally. Also, culture experts have drawn attention to the importance of sustaining cultural diversity including “the set of distinctive spiritual, material, intellectual and emotional features of a society or a social group...(encompassing), in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs” (UNESCO,1982 see 2001: 12).

An important finding then emerged in the 1980s when ethnobiologist Darrell Addison Posey brought to light the “inextricable link” between biological and cultural diversity – now termed biocultural diversity (see Posey et al., 1999). I have turned to this concept to better understand how humankind’s creative capacities based on local knowledge systems and values contribute to beneficial human-nature relationships (see Butler, 2011, 2016a, 2016b, 2017, and 2018). This is particularly applicable for Indonesia, which as one of the top twelve ‘megadiversity’ countries in terms of biodiversity richness and the second most linguistically diverse (see Table 2.2 by Harmon, 1996 in Posey, 1999: 26), epitomizes a biocultural diversity region.

More and more people know about how human actions have caused accelerated depletion of biological diversity in the world’s lands and seas. Yet, for example, while reforestation can rejuvenate terrestrial habitats, it is much more challenging to restore extinct languages and unique artistic and cultural expressions. So, as participants in the 1st CONVASH at UNS were and are working in the fields of visual art, design, and social humanities, I decided to next focus on the cultural knowledge embedded in the arts, its nature and functions.

Transmission of cultural knowledge via the arts

Inherent to our discussion on sustaining biocultural diversity is the question of the role of the arts in the transmission of cultural knowledge. The Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) makes clear that “the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage [...is...] transmitted from generation to generation, [and] is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history”.

Another common view is that traditional knowledge and innovations, even recent inventions, has developed from experience gained over centuries; and is of a practical nature. Thus far the tendency has been to examine the traditional techniques and values of ‘indigenous’ and ‘local’ communities (see UNEP, 1992; Cocks, 2006) pertaining to their habitat and surrounding landscape through case studies on agriculture, fishery, health, horticulture, and forestry practices. Now more attention is given to the well-being of rural communities whose cultural practices have been altered by the homogenizing tendency of urban-based modernization and the increasing migration of the younger generation to cities. Yet, in most of these academic inquiries the arts are still often treated as a separate and unrelated matter.

Many of us who attended the 1st CONVASH at Universitas Sebelas Maret in 2019 are practitioners of both traditional and contemporary arts and have directly experienced the transmission of cultural knowledge and skills through art genres such as those stemming from the human body: dance, chants, prayer, music, song, poetic recitation, myth narratives, and drama; and those created from the elements: artefacts, symbols, ritual offerings, architecture, craft arts, sculpture, imagery, and film among others. In other words, how the arts provide experiential learning about the great variety of ways that people interact with the nature of a particular place through physical processes, the shapes, colors, textures and sounds of art forms, layout and orientation of structures and spaces, and the rhythm, dynamics, and movement of doings.

So, it feels that now is the time to make use of the cultural knowledge embedded in the arts as conveyed by both tradition-bearers and contemporary practitioners. It also feels that now is the time for artists and scientists to collaboratively develop interdisciplinary practice-based methods for enhancing beneficial human-nature relationships.

CONCLUSIONS***Applying creative know-how in study and practice***

How can artists and scientists mutually apply creative know-how in study and practice for sustaining biocultural diversity? One way is to widen the range of options beyond conventional so-called ‘objective’ methods based on observation and field notes, surveys and questionnaires, interviews or focus group discussion solely for documentation. Rather, interdisciplinary practice-based methods with a community can encourage participatory approaches, knowledge-sharing, and creativity in relation to the actual conditions of a place.

As I mentioned during my talk for the conference on biodiversity convened by Masyarakat Biodiversitas Indonesia and Universitas Sebelas Maret (Butler, 2017), artists and scientists can mutually study from the distinct cosmologies and traditional sustainable land-use applied in architectural practices in the forming of sacred natural sites and human-made structures. We can also study how the interactions of more than 500 Indonesian ethnic groups with the tremendous diversity of natural and human-made ecosystems has given birth to a wide range of local customs, traditions, settlement layout patterns, calendar and counting systems, agricultural systems, architectural forms, life-cycle rituals, ceremonial arts, culinary and medicinal arts, modes of resource use and trade, and forms of social cooperation to foster a harmonious relationship between humans and with nature and God/the Source of Life.

To more fully understand local adaptation processes to climate change in the past, artists and scientists can mutually study from sagas, chronicles, maps, local oral and literary history, prayer texts, paintings and rock art. For design projects in any field to sustain natural resources, we can learn from traditional artisans about where to find local environment-friendly materials and ingredients, the time for gathering them, and processes for working with and renewing local materials.

Applying sustainable creative know-how needs to take place in daily life in a manner that supports a re-searching of the wisdom, memories, and beauty of local communities and reintegrates the arts and sciences. Moreover, by practicing the arts we can learn how to apply social, cultural and spiritual values for the long-term benefit of diverse cultural environments.

Acknowledgements

Appreciation to the steering committee of the 1st Conference on Visual Art, Design, and Social Humanities (CONVASH) convened by the Faculty of Fine Arts and Design for the invitation to give a keynote talk on 2 November 2019. Appreciation also goes to the Research Center for Society and Culture (Pusat Riset Masyarakat dan Budaya), National Research and Innovation Agency (BRIN) of Indonesia for the facilities and opportunities provided during my position as an independent researcher since January 2024. I also wish to thank the Rector of Universitas Udayana, Dean of the Fakultas Ilmu Budaya, and Chair of the Kajian Budaya Doctoral Program for providing a conducive environment during my doctoral studies and nine-year post as a volunteer Associate Professor (2014–2023). Gratitude also to the resource persons and my fellow alumni of the 2011 UNITAR Series on the Management and Conservation of World Heritage Sites held in Japan for their sustained encouragement. Finally, appreciation to the founder of Padepokan Lemah Putih the now-late Suprpto Suryodarmo, Sharing Movement colleagues, cooperative members of Dharma Nature Time, and all of the people who shared art, prayer, ideas, questions, dialogue, skills and materials that have made Sharing Art programs in Indonesian provinces and in other countries possible.

REFERENCES

- Ash, N., et al. (Eds.). (2010). *Ecosystems and human well-being: A manual for assessment practitioners*. Island Press. Available on IUCN website: <https://portals.iucn.org/library/sites/library/files/documents/2010-029.pdf>
- Butler, D. (2016a). Living prayer: Its contributions for the world's ecosystems and interreligious harmony. *Jurnal Kajian Bali*, 6(1), 81–118. <http://ojs.unud.ac.id/index.php/kajianbali/article/view/19900>
- Butler, D. (2016b). Dharma nature time and the well-being of traditional and modern cultures. Plenary paper presented at the International Conference on Cross-Cultural Understanding on Well-Being, Faculty of Social Sciences, Yogyakarta State University, 11–12 May.
- Butler, D. (2017). The arts and biocultural diversity. In *Abstract book of the International Conference on Biodiversity: Roles of biodiversity and conservation research under global climate change* (Bali, 9 December). Masyarakat Biodiversitas Indonesia & Universitas Sebelas Maret. <https://events.smujo.id/abstract-file/pdf/A0409aaALL.pdf>
- Butler, D. (2018). Taman Budaya Gunung Lawu as a reference. *Javanologi: International Journal of Javanese Studies*, 2(1). <https://javanologi.uns.ac.id/en/vol-ii-2018-2/>
- Butler, D. C. (2011). *Religiosity in art inspired by Samuan Tiga and Tejakula, Bali: Unity in diversity* (Ph.D. thesis, Universitas Udayana, Bali). Abstract and summary in *E-Journal of Cultural Studies*, 5(2). <http://ojs.unud.ac.id/index.php/ecs/article/view/3643>
- Cocks, M. (2006). Biocultural diversity: Moving beyond the realm of 'indigenous' and 'local' people. *Human Ecology*, 34(2), 185–200.
- Iida, Y. (Ed.). (2016). *Policies and actions on biocultural diversity for sustainable communities*. Abstract book of the 1st Asian Conference on Biocultural Diversity, 27–29 October, Wakura-Onsen, Nanao, Ishikawa Prefecture, Japan. UNI-IAS OUIK. https://collections.unu.edu/eserv/UNU:5948/ACBCD_2016_UNU_IAS_OUIK.pdf
- International Society of Ethnobiology. (1988). The Declaration of Belém, adopted by participants in the First International Congress of Ethnobiology. Museu Paraense Goeldi, Belém, Brazil. In D. A. Posey & W. L. Overall (Eds.). <http://www.ethnobiology.net/what-we-do/core-programs/global-coalition-2/declaration-of-belem/>
- Loh, J., & Harmon, D. (2005). A global index of biocultural diversity. *Ecological Indicators*, 5, 231–241. <https://doi.org/10.1016/j.ecolind.2005.02.005>
- Nasr, S. H. (1984). *The encounter of man and nature*. University of California Press. Iyubenu, E. A. H., et al. (Eds.). (2003). *[Antara Tuhan, Manusia dan Alam]* (A. N. Zaman, Trans.). Yogyakarta: IRCiSoD.
- Palmer, M., & Finlay, V. (2003). *Faith in conservation*. Washington, DC: The World Bank.

- Posey, D. A. (Ed.). (1999). *Cultural and spiritual values of biodiversity: A complementary contribution to the global biodiversity assessment*. London/Nairobi: Intermediate Technology Publications/UNEP. https://wedocs.unep.org/bitstream/handle/20.500.11822/9190/Cultural_Spiritual_thebible.pdf
- Pusat Bahasa. (2009, April 30). *Pusat Bahasa peluncuran peta Bahasa Indonesia*. Pusat Pembinaan dan Pengembangan Bahasa, Depdiknas. <https://badanbahasa.kemendikdasmen.go.id/kegiatan-detail/1116/peluncuran-peta-bahasa-indonesia>
- Soedjito, H., Purwanto, Y., & Sukara, E. (Eds.). (2009). *Situs keramat alami: Peran budaya dalam konservasi keanekaragaman hayati*. Proceedings of workshop convened by Indonesian MAB National Committee – LIPI at Kebun Raya Cibodas, 30–31 October 2007. Jakarta: Yayasan Obor.
- UNESCO. (2001). *Universal declaration on cultural diversity*, adopted by the 31st Session of the General Conference of UNESCO. Paris, 2 November. <https://unesdoc.unesco.org/ark:/48223/pf0000127160>
- UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000189121?posInSet=1&queryId=665f8947-54f9-4a7f-b188-3236d42cc256>
- UNESCO. (2008). *Links between biological and cultural diversity—Concepts, methods and experiences*. Report of the International Workshop, 26–28 September 2007, UNESCO HQ Paris. <https://unesdoc.unesco.org/ark:/48223/pf0000159255>
- UNEP. (1992). *Convention on biological diversity*. Nairobi: UNEP. <https://www.cbd.int/convention/text>
- Universitas Sebelas Maret (UNS). (2020). *Proceedings of the 1st Conference of Visual Art, Design, and Social Humanities by Faculty of Art and Design, CONVASH 2019, 2 November 2019, Surakarta, Central Java, Indonesia* (S. Saddhono, A. Ardianto, S. Sudasna, C. Chinda, & A. Azizan, Eds.). Gent, Belgium: European Alliance for Innovation. <https://eudl.eu/proceedings/CONVASH/2019>
- Universitas Udayana (UNUD). (2017, April 17). *Proceedings of the Seminar Nasional tentang Nilai-Nilai Kearifan dalam Konteks Sejarah Lokal di Bali*. Denpasar: Universitas Udayana. Convened by Program Studi Ilmu Sejarah, Fakultas Ilmu Budaya, Universitas Udayana, with Masyarakat Sejarawan Indonesia (MSI) cabang Bali and Direktorat Jenderal Kebudayaan, Kementerian Pendidikan dan Kebudayaan. [See, in particular, keynote papers by Amanda Katili Niode & Amurwani Dwi Lestariningsih].
- World Culture Forum. (2016, October 13). *Bali declaration*, adopted by participants of the 2nd World Culture Forum: Culture for an inclusive sustainable planet. Nusa Dua, Indonesia: Ministry of Education and Culture & UNESCO. http://www.unesco.or.id/download/WCF_2016_Declaration.pdf
- World Wildlife Fund International (WWF). (1986, September 29). *The Assisi declarations: Messages on man & nature from Buddhism, Christianity, Hinduism, Islam & Judaism*. Gland, Switzerland. <https://digitallibrary.un.org/record/430419/files/EarthFaith.pdf?ln=ar>