How to Protect your Lineage: It's not what you think

Within desegregating American cities, many of you in the 1920s[1] are struggling to greet interracial differences. Unfortunately, challenges of prejudice are not estranged to the 2020s either. Within a globalizing world, we, in the 2020s[2], also struggle to look past the differences between cultures, nations and ethnic groups. It seems that building walls comes easier than building bridges. There is hope, however, for unity.

One thing that might bring more nations and peoples together is the looming environmental crisis that we face. By the mid 1900s, you will be introduced[3] to the term "climate change" and warned that human capitalism and population growth has led to the emission of massive amounts of greenhouse gases which warm our globe, alter weather patterns and threaten the livelihoods of people everywhere.

"The solution to climate change addressed herein is as pertinent to you as to me"

The threat is shared[4] by every nation, every race, and every gender and age. It unites even you and me, separated by a century of time, because climate change threatens the fate of our shared lineage. We, people of the 1920s and 2020s, are as united by a shared problem as we are by a shared responsibility[5] over its solution. The solution to climate change addressed herein is as pertinent to you as to me.

Indigenous knowledge needs a seat at the climate policy table

The 2020s face the growing recognition of a new approach to climate action: to draw upon the long-held wisdom of Indigenous cultures from around the world to combat climate change. Indigenous peoples' understanding of the dynamics of ecosystems offers great potential[6] to advance climate change policy. It is an untapped opportunity that, if leveraged, could be mutually beneficial to both the communities and policymakers who must deal with a changing planet.

If you in the 1920s are sceptical of the assertion of value in traditional Indigenous knowledge, it is because the concept did not appear in scholarly discussion[7] until the 1980s and 1990s. The Earth was once thought to be flat. Women were thought to be Witches. Preconceptions should not prevent us from accepting alternatives as truth.

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In 2020, the legitimacy of Indigenous knowledge as a source for environmental policy decision making has been formally recognized[8] by the United Nations, an intergovernmental coalition of world leaders aimed to maintain international peace and security founded in 1945. Why is involvement of Indigenous knowledge critical in environmental decision making?

Bridging the gaps between Indigenous knowledge and climate science

Indigenous people have preserved practices of ecologically based living that have evolved over 40,000[10] years of continuous relationship with their local environments. Much like you would seek a doctor's guidance when you are ill, Indigenous communities harness the intimate ecological knowledge necessary[11] for us to properly conserve it.

By 2020 it has even been argued[12] that Indigenous knowledge of environmental planning outperforms dominant Western science. Whether or not we can wholeheartedly agree with that judgement (many likely will not), we can at least acknowledge that the basic complexity of ecosystems has been difficult to comprehend. This misunderstanding supports the potential utility of traditional knowledge because its holistic approach has developed an understanding of complex environmental systems. Where to begin?

Working groups pave the way

"Indigenous peoples [should be seen] as carriers of knowledge and tradition that, far from being ancient and outdated, can offer concrete solutions to modern crises."
- Victoria Tauli-Lopez

To study Indigenous relationships, the United Nations has in 2000 developed[13] a *Permanent Forum on Indigenous Issues*, which examines land and natural resource management of Indigenous tribes in order to implement their ways of life on a larger scale and for the good of all. Victoria Tauli-Lopez, a member of the forum, comments, "Indigenous peoples [should be seen] as carriers of knowledge and tradition that far from being ancient and outdated can offer concrete solutions to modern crises."

Even the Environmental Protection Agency (EPA), an executive agency of the US federal government tasked with environmental protection matters founded in 1970, is calling

for the aid of Native American tribes to address sustainability issues on US soil. In 2013, for example, the EPA held a workshop[14] titled "Indigenous Knowledge for Sustainable Development: Case Studies". This workshop highlighted sustainable practices carried on by several tribal reservations, including organic farming, hunting and trapping, fishery and hatchery development, forest and fire management, and invasive species management. Much like the UN's forum, the EPA aimed to understand and appreciate Native American ways of life and to apply this knowledge on non-reservation lands.

Policy language holds the key

The biggest challenge to climate resolution is that the enormity of effort required for resolution too easily leads[15] to resignation and then passivity. Thankfully, however, this solution, the incorporation of Indigenous knowledge, is not insurmountable. Let us believe we can find resolve so we can function at full capacity as concerned citizens.

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The language within many existing environmental policies already not only allows us to use traditional knowledge in environmental impact assessments, but encourages it. NEPA, which enforces that agencies assess the environmental impacts of their actions in Environmental Impact Statements (EIS[16]), requires that agencies "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences in planning and in decision making."

Furthermore, the Council on Environmental Quality (CEQ), a division of the Executive Office of the President founded in 1969, has a NEPA consultation regulation that requires[17] agencies to consult with tribes when preparing environmental impact statements. Such engagement would provide an easy entryway for Indigenous knowledge into modern environmental management.

As another blueprint for how traditional knowledge can be utilized in environmental impact statements are tribal environmental assessments. For example, the Haudenosaunee tribe's Haudenosaunee Environmental Protection Process (HEPP[18]), incorporates traditional knowledge as a guide for protecting the natural world. The HEPP can provide a framework for a culturally-based EIS.

Much like you are witnessing the internal hurdles of accepting interpersonal differences of black and white America in the Harlem Renaissance, you and I, in the 1920s and

2020s, will have to confront our pragmatic barriers and keep an open mind towards the use of Indigenous knowledge in environmental decision making.

Overcoming barriers ahead

One of the prevailing barriers towards applying Indigenous knowledge is that many view Indigenous knowledge as inferior[6] to Western Science. The view is so prevalent that even advocates of the use of Indigenous knowledge adopt language that subordinates it[19] to Western science. This pervasive thinking is so prevalent that it is viewable within this article: requesting to "integrate" Indigenous knowledge rather than treat it as a separate and legitimate science. The subordination of Indigenous knowledge to Western Science becomes damaging because it affects which scientific studies and reports agencies rely and act upon.

In order to combat 1920 desegregation conflicts and 2020 opposition to Indigenous knowledge use, people and agencies need to stop evaluating individual subpopulations under a hierarchy. People around the world and within the US, represent a vast community with a myriad of perspectives. The environment is complicated. Therefore, entities responsible for the protection of people and planet should use every tool available, including Indigenous knowledge. Diversity of humanity should mean diversity in solutions.

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We need you

The second category of obstacles facing an agency looking to rely on Indigenous knowledge is one which the 1920s can help alleviate in the 2020s. Tribes themselves are often resistant to agency use of Indigenous knowledge.

Tribal objections are complex, however, the main theme is concern over cultural assimilation. The 1920s and 2020s both agree that colonialist mistreatment of Native American tribes was atrocious. This troubled history generates warranted skepticism of efforts by the US government to combine Indigenous Indian culture with non-Native cultures. The use of Indigenous knowledge in agency decision-making is often seen[20] as part of a larger pattern of oppression, forced assimilation, and appropriation.

One solution for a better partnership is for the sharing of Indigenous knowledge to take place earlier[21] than the point of consultation for agency analysis. The sensitivity to and appreciation for Indigenous knowledge should begin in universities and educational

institutions that we grow up in. The hope is that such an endeavor would raise scientists truly capable of respecting Indigenous ways of knowing. The 2014 Climate and Traditional Knowledges Workgroup (CTKW[22]) provides a number of good suggestions for proper educational programming.

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Introducing traditional knowledge in academic institutions can also drive research in support of its use. For example, UBC's Indigenous studies program published a Water journal article[23] titled "Reimagining Water Security through Tr'ondëk Hwëch'in (TH) Relationships to Treated and Traditional Water Sources." While the research project indicated that a lack of information on traditional knowledge is an obstacle to understanding its effectiveness, it concluded that traditional knowledge is useful to securing clean water quality levels.

Another solution to alleviate Indigenous mistrust and opposition to agency use of their knowledge systems would be for you, people of the 1920s, to do better and avoid the harm inflicted upon Native American communities that ensued within the century between us.

Native Americans around you[24] in the 1920s have no US citizenship. Natives are denied the right to vote in many states, struggling much like the African Americans that are disenfranchised in the South. The Meriam Report[25], published in 1928, showed that most Indians live in extreme poverty, suffering from a poor diet, inadequate housing, and limited health care. The same report rejected 'the disastrous attempt to force individual Indians or groups of Indians to [assimilate], to break their pride in themselves and their Indian race, or to deprive them of their Indian culture'.

Indigenous injustice will continue[24] through the 21st century unless we rise up against it now. If Indigenous injustice prevents us from utilizing Indigenous knowledge, a viable resource to address climate change, then it is critical for you to protect the livelihood of Indigenous peoples in order to protect the livelihood of your lineage.

A message to take with you

The best environmental policy that America can pursue is to fight racial prejudice and Indigenous injustice. Only then can we achieve the unity required to combat climate change. We must tear down the walls and build bridges between interpersonal and

interracial differences. We must allow room for diversity in peoples to offer diversity in perspective and approach. No matter who you are, where or when you come from, the ability to triumph begins with you — always.

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