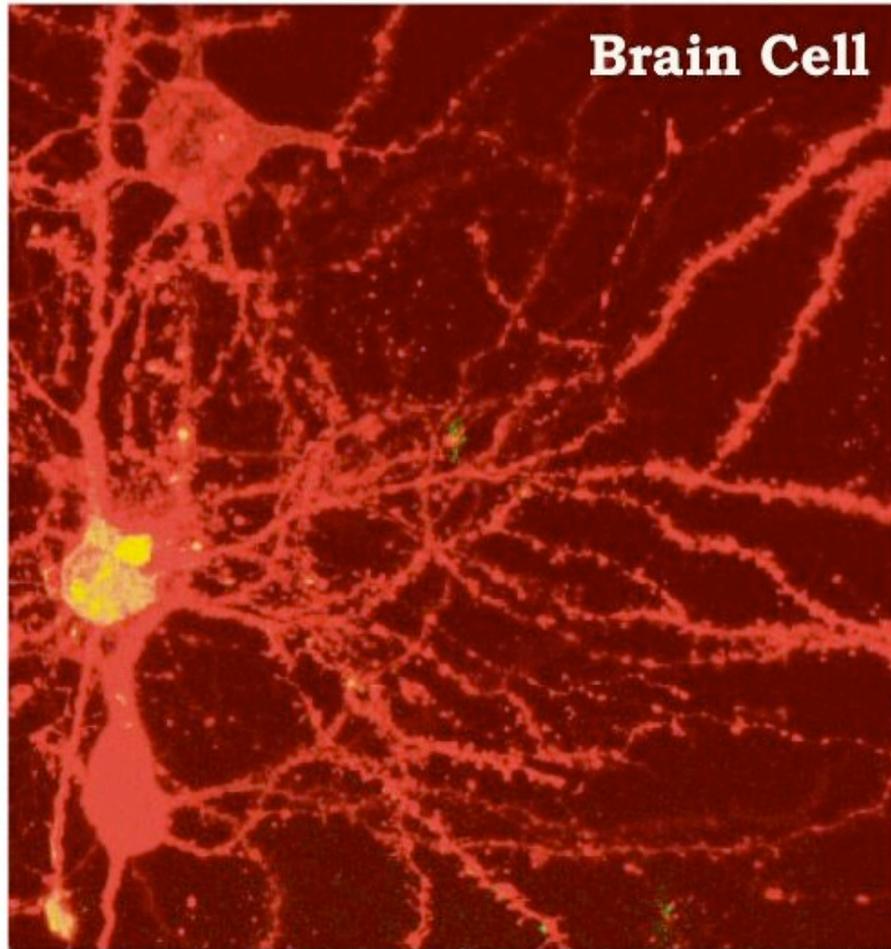
An aerial photograph of a mountain valley. In the foreground, a wide, light-colored river flows through a green valley. The middle ground shows rolling green hills and a winding road. In the background, majestic mountains with snow-capped peaks rise against a blue sky with light clouds. The overall scene is a vast, natural landscape.

Ktunaxa Cosmology as the Foundation for Transformative Research

Michele A. Sam

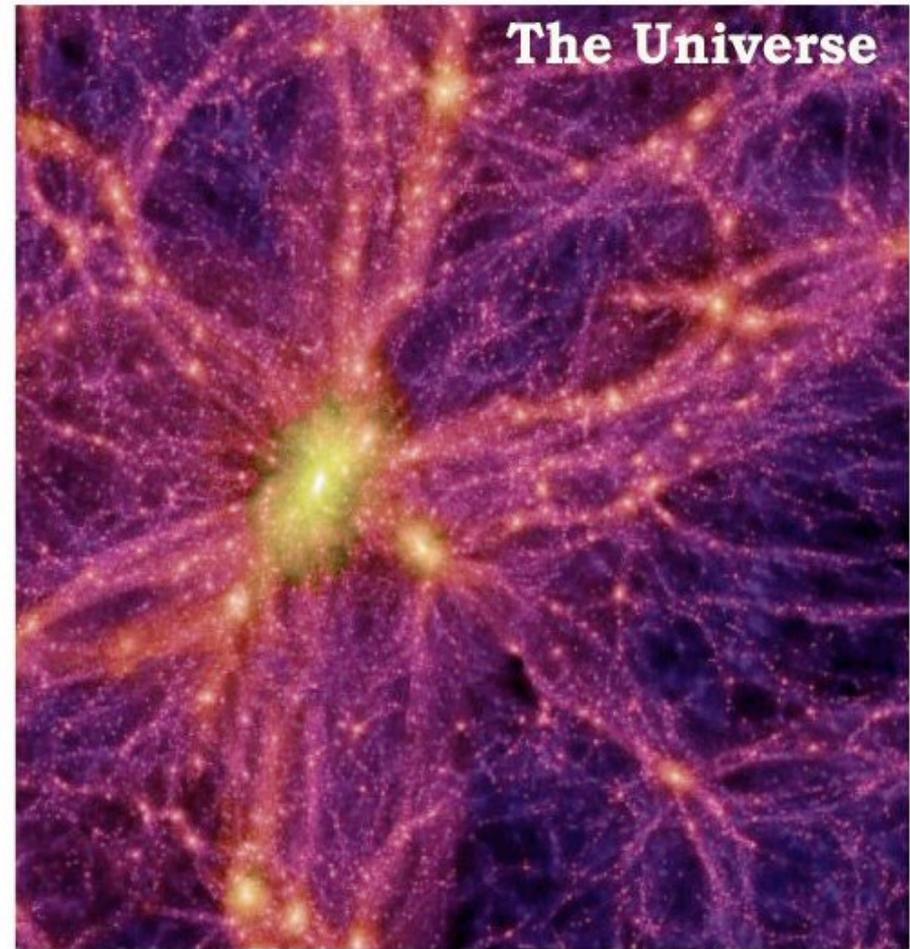
One is only micrometers wide. The other is billions of light-years across. One shows neurons in a mouse brain. The other is a simulated image of the universe. Together they suggest the surprisingly similar patterns found in vastly different natural phenomena. *DAVID CONSTANTINE*



Mark Miller

Mark Miller, a doctoral student at Brandeis University, is researching how particular types of neurons in the brain are connected to one another. By staining thin slices of a mouse's brain, he can identify the connections visually. The image above shows three neuron cells on the left (two red and one yellow) and their connections.

Source: Mark Miller, Brandeis University; Virgo Consortium for Cosmological Supercomputer Simulations; www.visualcomplexity.com



Virgo Consortium

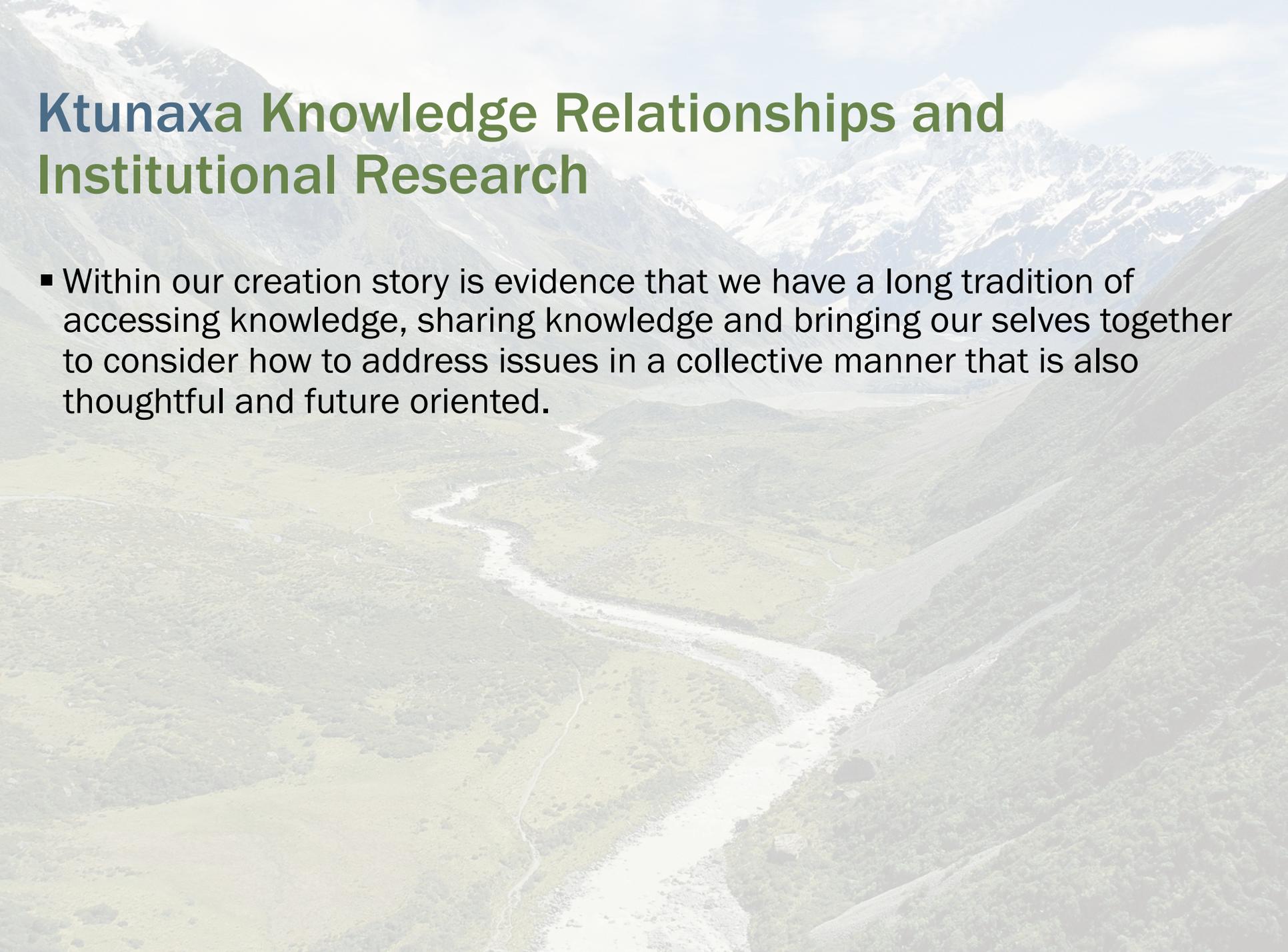
An international group of astrophysicists used a computer simulation last year to recreate how the universe grew and evolved. The simulation image above is a snapshot of the present universe that features a large cluster of galaxies (bright yellow) surrounded by thousands of stars, galaxies and dark matter (web).

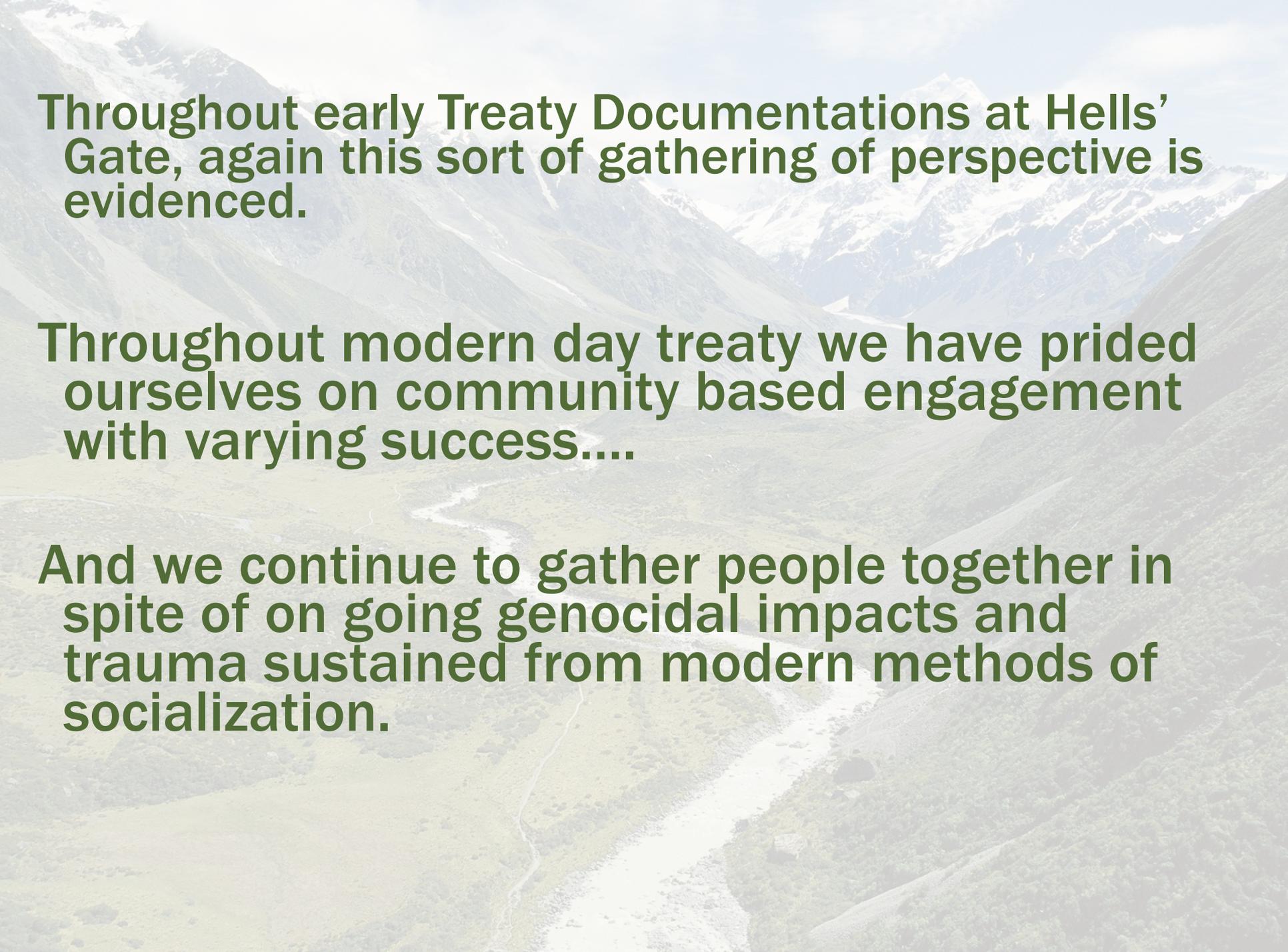
The New York Times

If you enjoy mind-boggling science stories like this, visit **Pickover.Com**

Ktunaxa Knowledge Relationships and Institutional Research

- Within our creation story is evidence that we have a long tradition of accessing knowledge, sharing knowledge and bringing our selves together to consider how to address issues in a collective manner that is also thoughtful and future oriented.

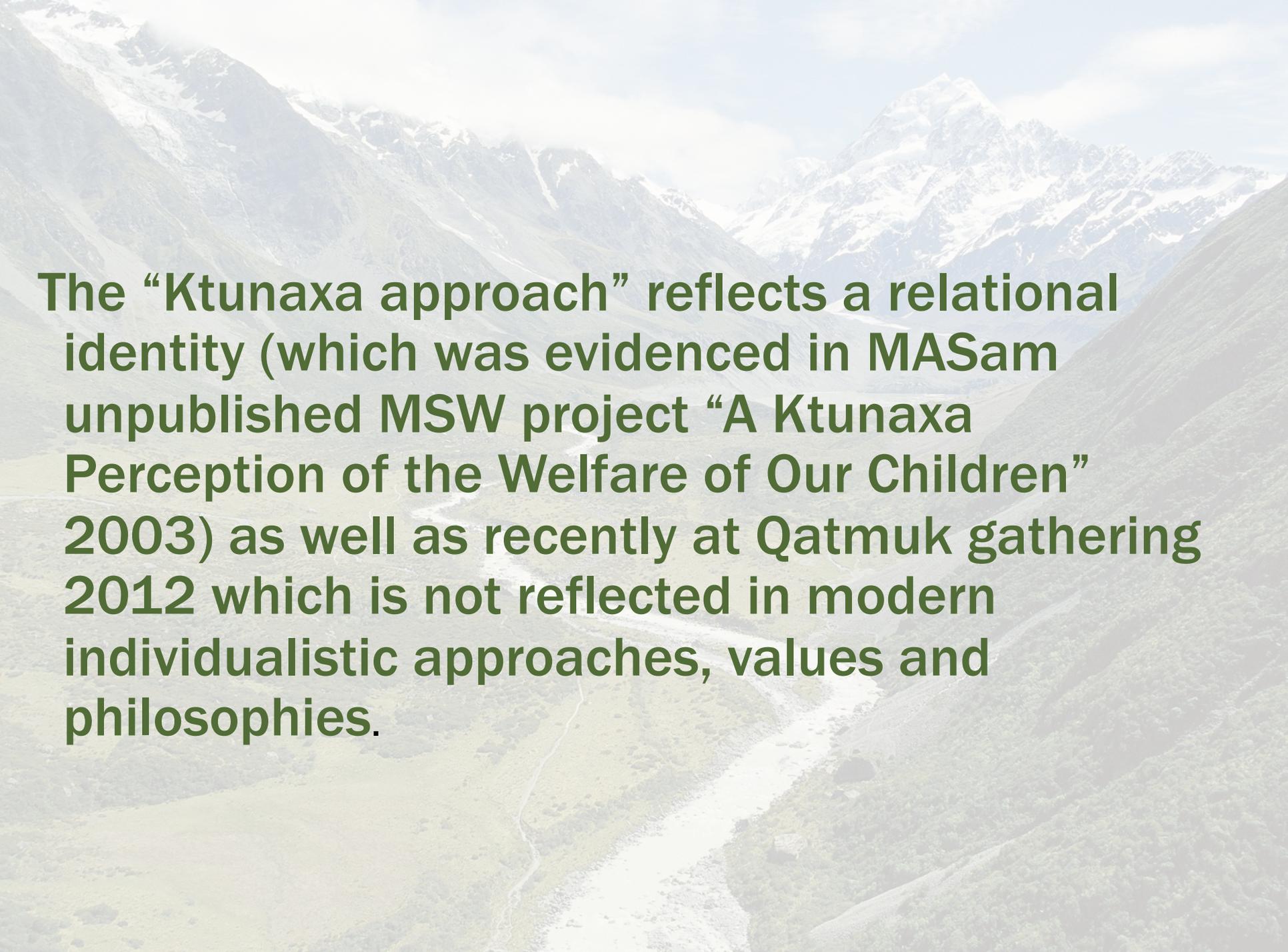




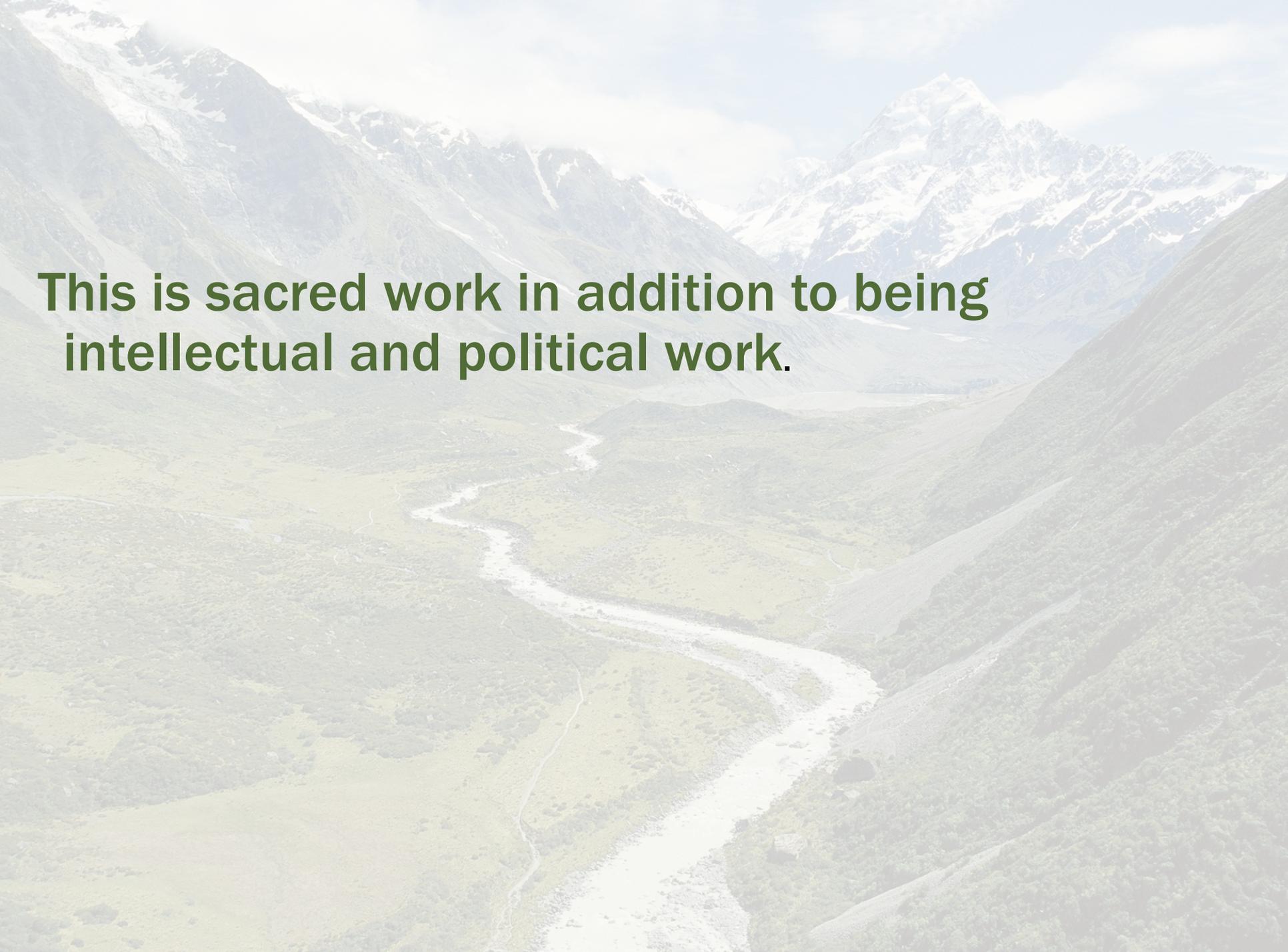
Throughout early Treaty Documentations at Hells' Gate, again this sort of gathering of perspective is evidenced.

Throughout modern day treaty we have prided ourselves on community based engagement with varying success....

And we continue to gather people together in spite of on going genocidal impacts and trauma sustained from modern methods of socialization.



The “Ktunaxa approach” reflects a relational identity (which was evidenced in MASam unpublished MSW project “A Ktunaxa Perception of the Welfare of Our Children” 2003) as well as recently at Qatmuk gathering 2012 which is not reflected in modern individualistic approaches, values and philosophies.

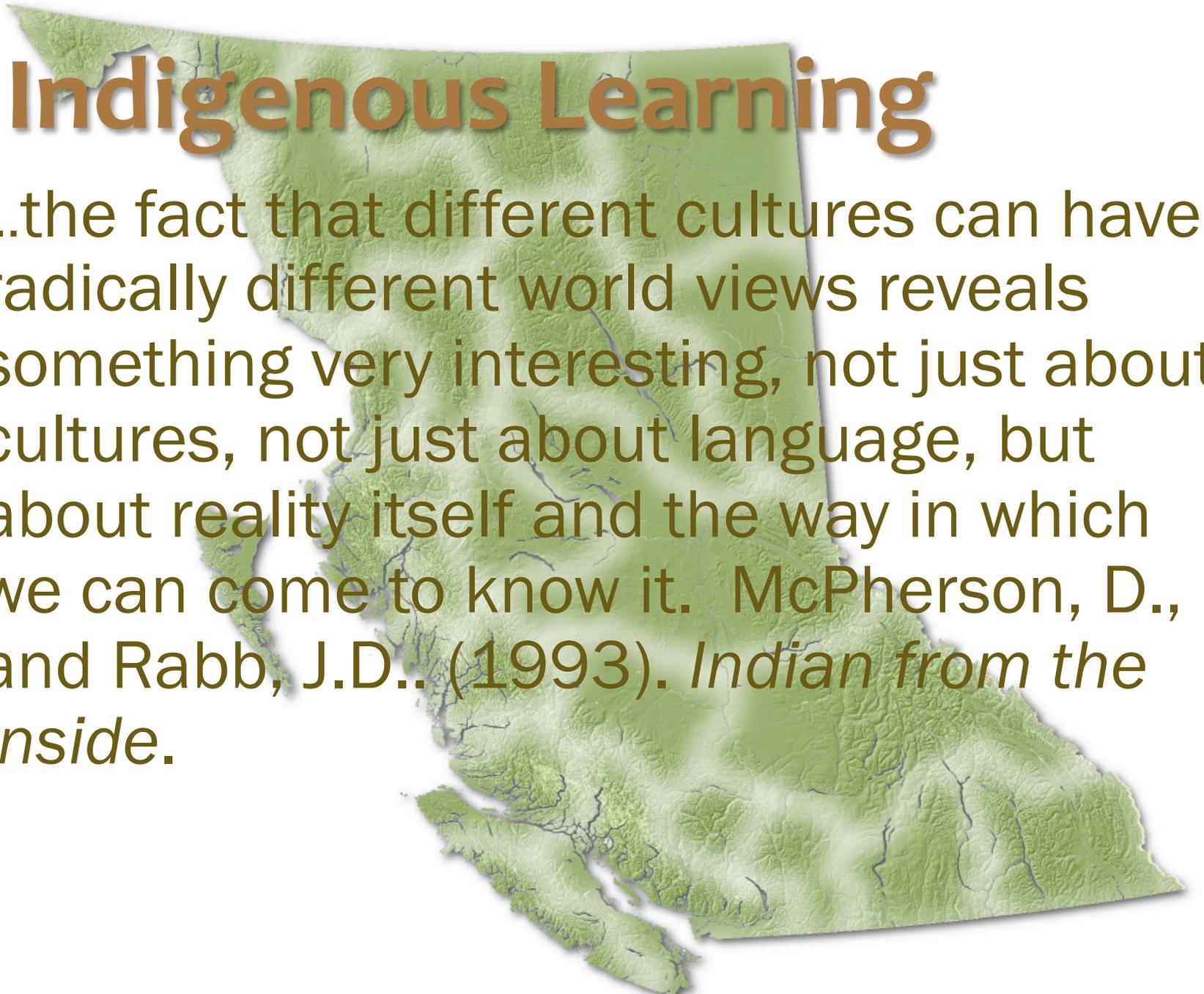
A wide-angle landscape photograph of a mountain valley. In the foreground, a river with white water rapids flows through a lush green valley. The middle ground shows rolling green hills and a winding path. In the background, majestic mountains with snow-capped peaks rise against a cloudy sky. The overall scene is serene and majestic.

This is sacred work in addition to being intellectual and political work.

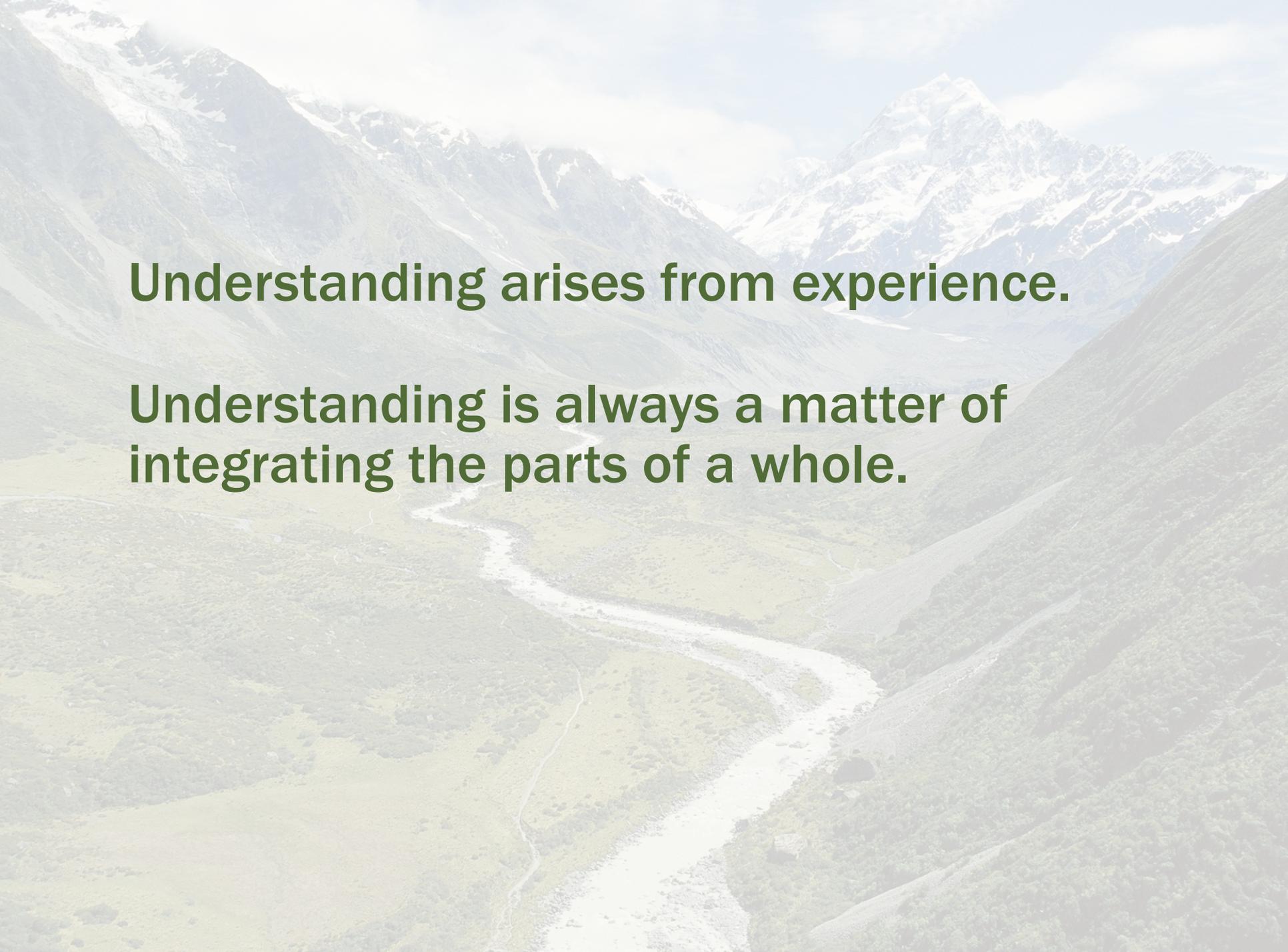
Something to consider...



Indigenous Learning



...the fact that different cultures can have radically different world views reveals something very interesting, not just about cultures, not just about language, but about reality itself and the way in which we can come to know it. McPherson, D., and Rabb, J.D.. (1993). *Indian from the Inside*.

An aerial photograph of a mountain valley. A river flows through the center of the valley, surrounded by green and brownish slopes. In the background, there are large, rugged mountains with significant snow cover under a cloudy sky.

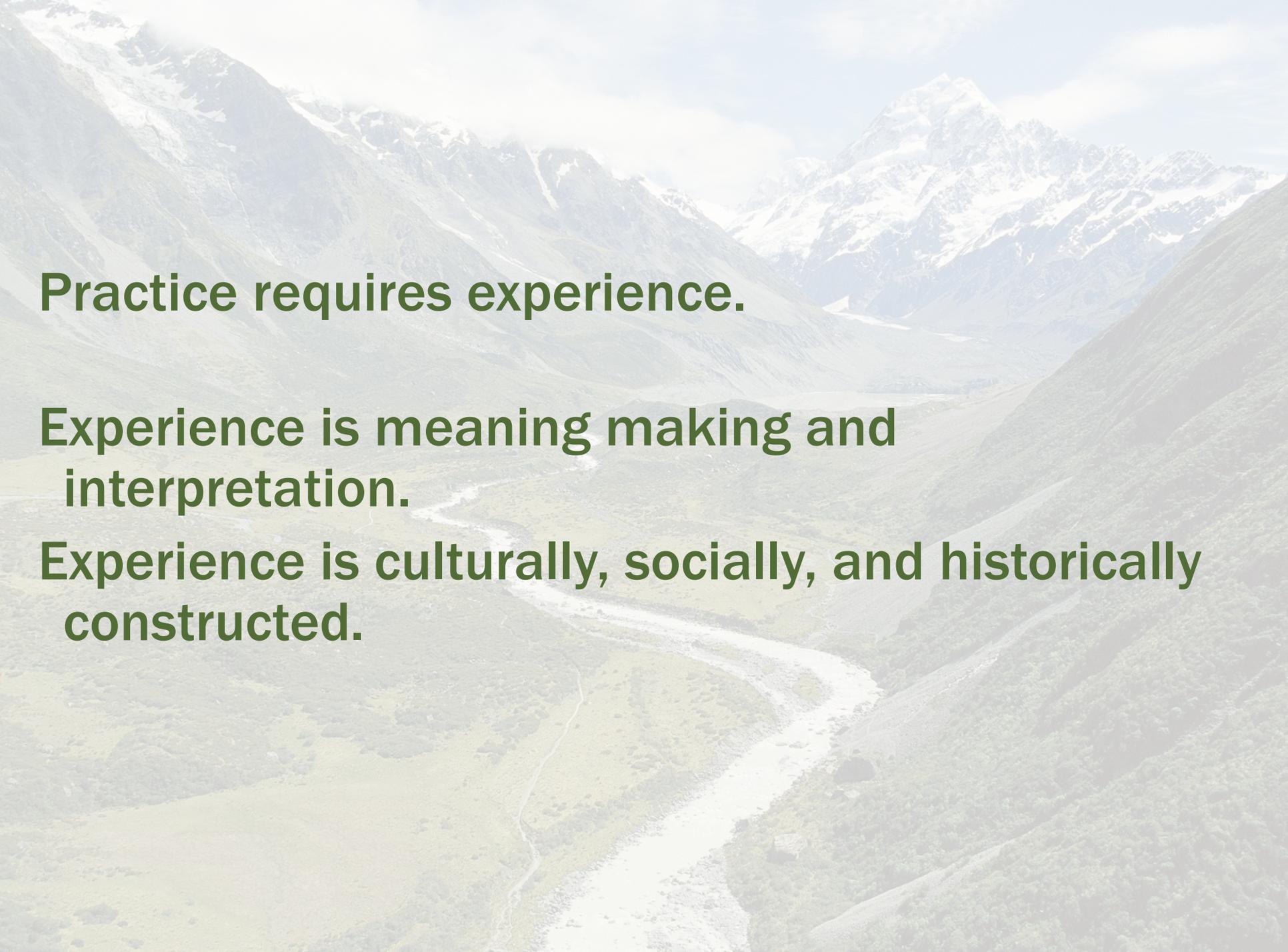
Understanding arises from experience.

**Understanding is always a matter of
integrating the parts of a whole.**

A scenic view of a mountain valley with a river winding through it. The mountains are covered in snow and the valley floor is green. The text is overlaid on the image.

Integration is always but one of many possible integrations.

Integration requires practice.

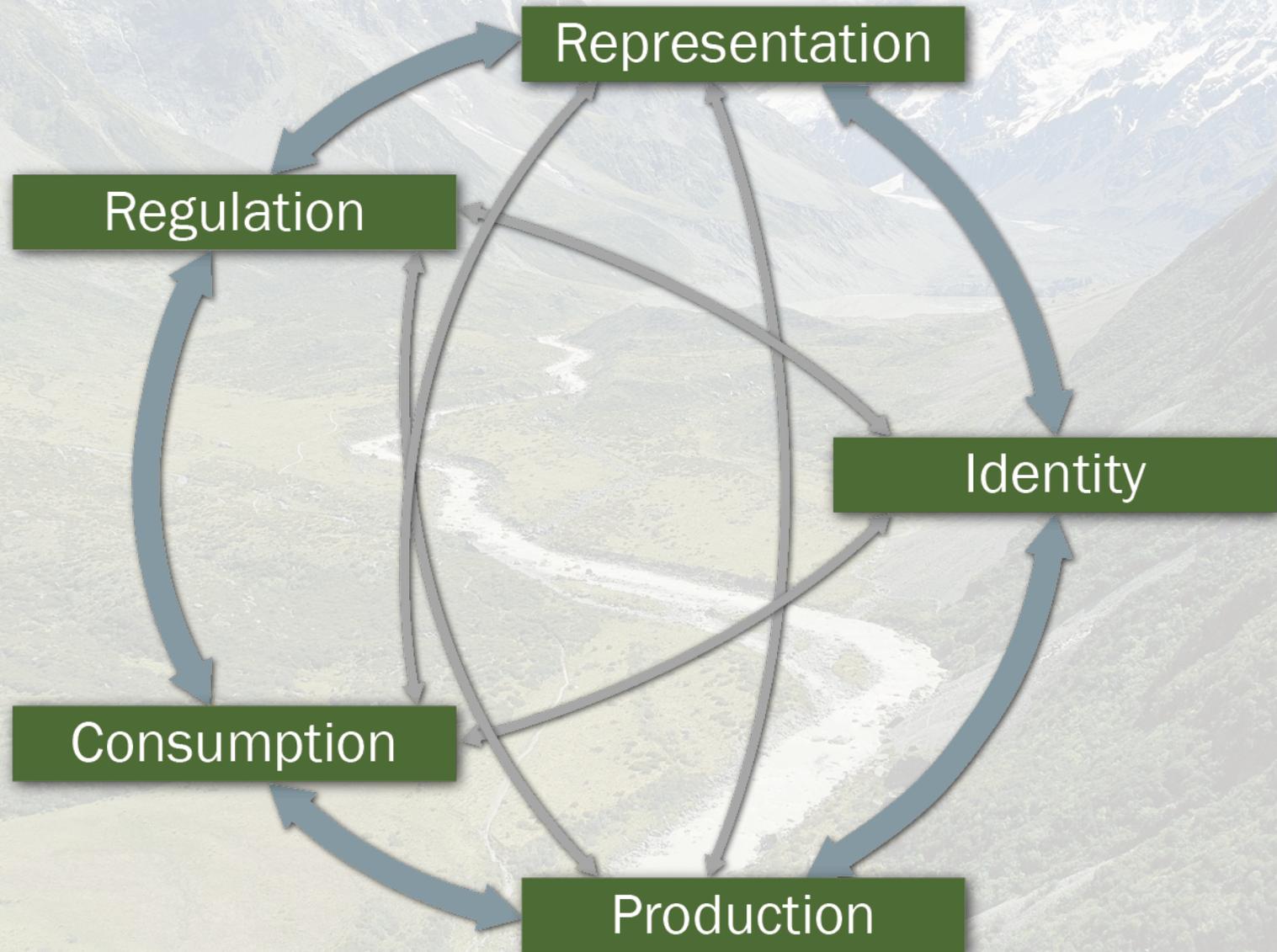
A scenic view of a mountain valley. In the foreground, a river flows through a lush green valley. The middle ground shows rolling hills and a wide riverbed. In the background, majestic mountains with snow-capped peaks rise against a blue sky with light clouds. The overall atmosphere is serene and natural.

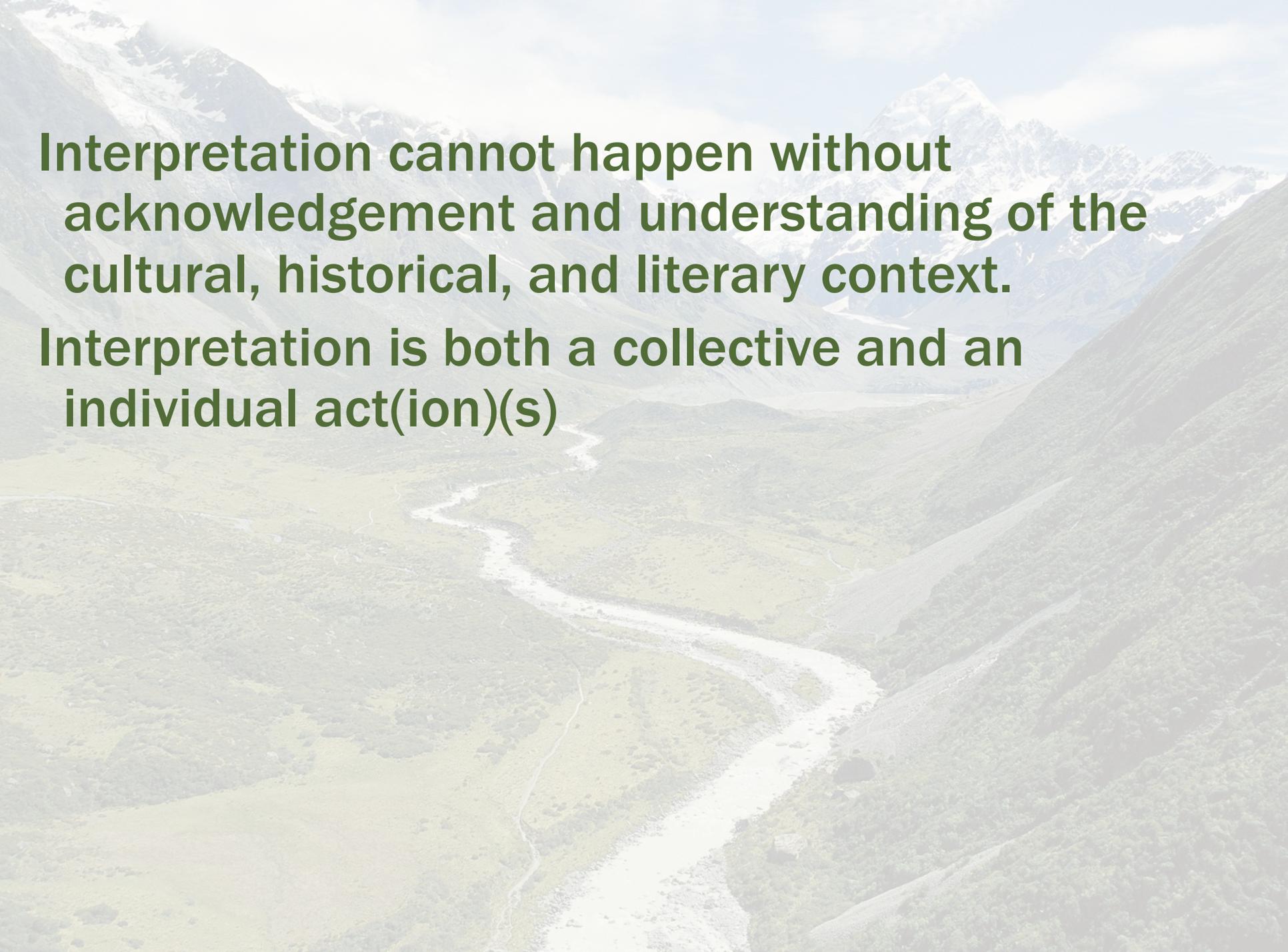
Practice requires experience.

Experience is meaning making and interpretation.

Experience is culturally, socially, and historically constructed.

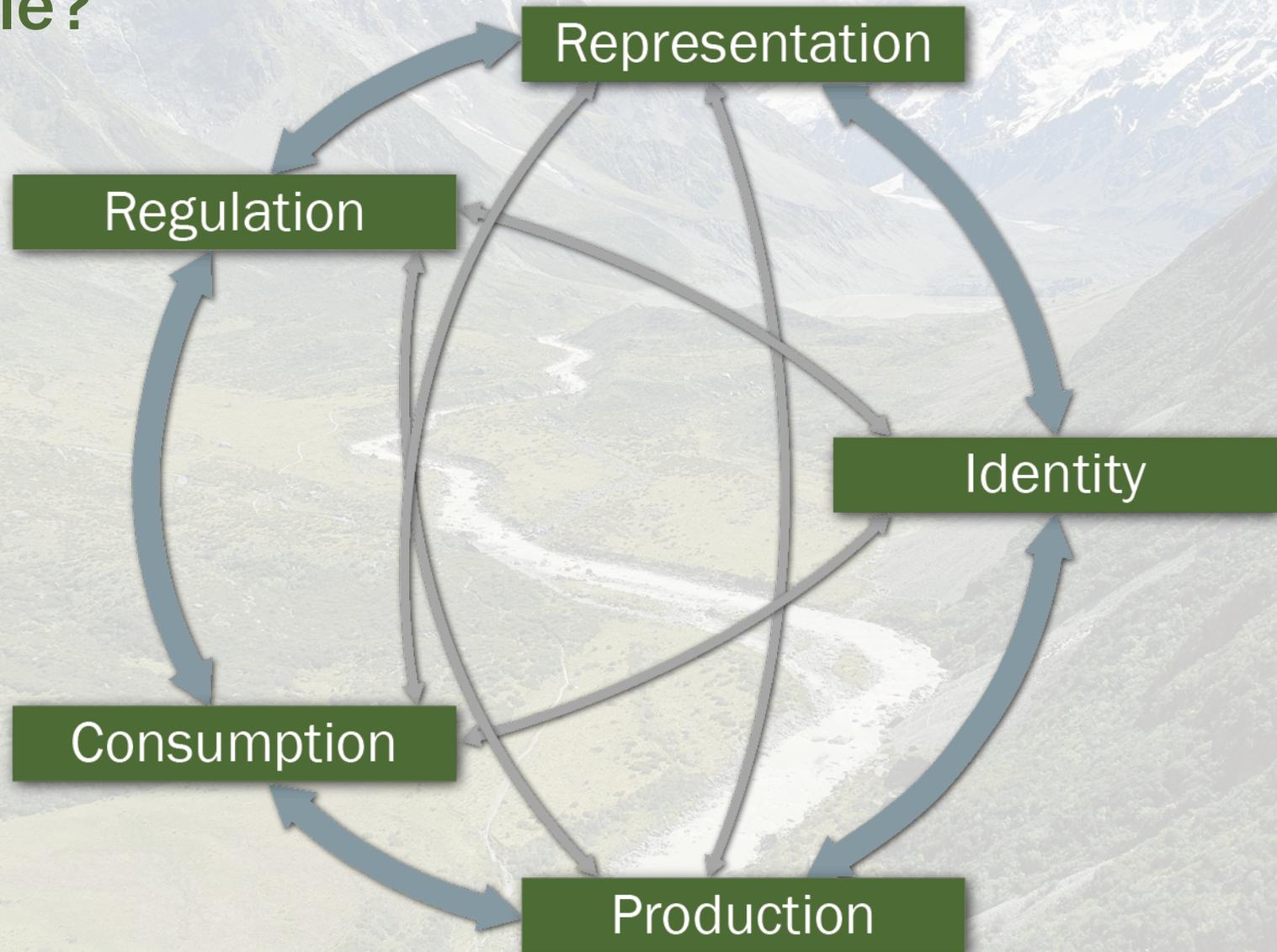
Circuit of Culture (du Gay, 1998): a framework

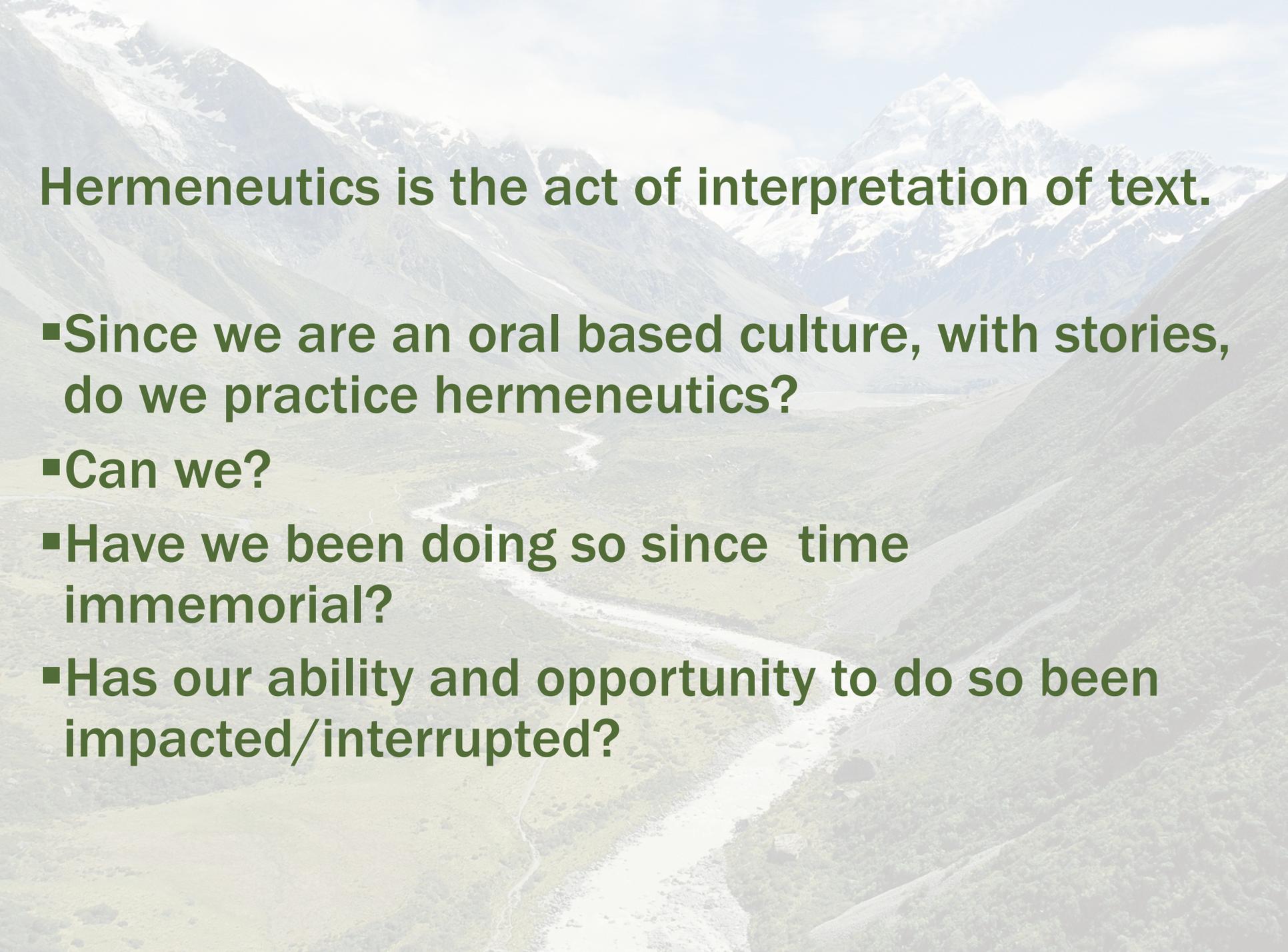


An aerial photograph of a mountain valley. A river flows through the center of the valley, surrounded by green and brownish slopes. In the background, there are large, rugged mountains with significant snow cover under a cloudy sky. The text is overlaid on the upper left portion of the image.

**Interpretation cannot happen without
acknowledgement and understanding of the
cultural, historical, and literary context.
Interpretation is both a collective and an
individual act(ion)(s)**

PRIMARY SOURCE DATA WITHIN A CIRCUIT OF CULTURE: How does this become a Hermeneutic Circle?





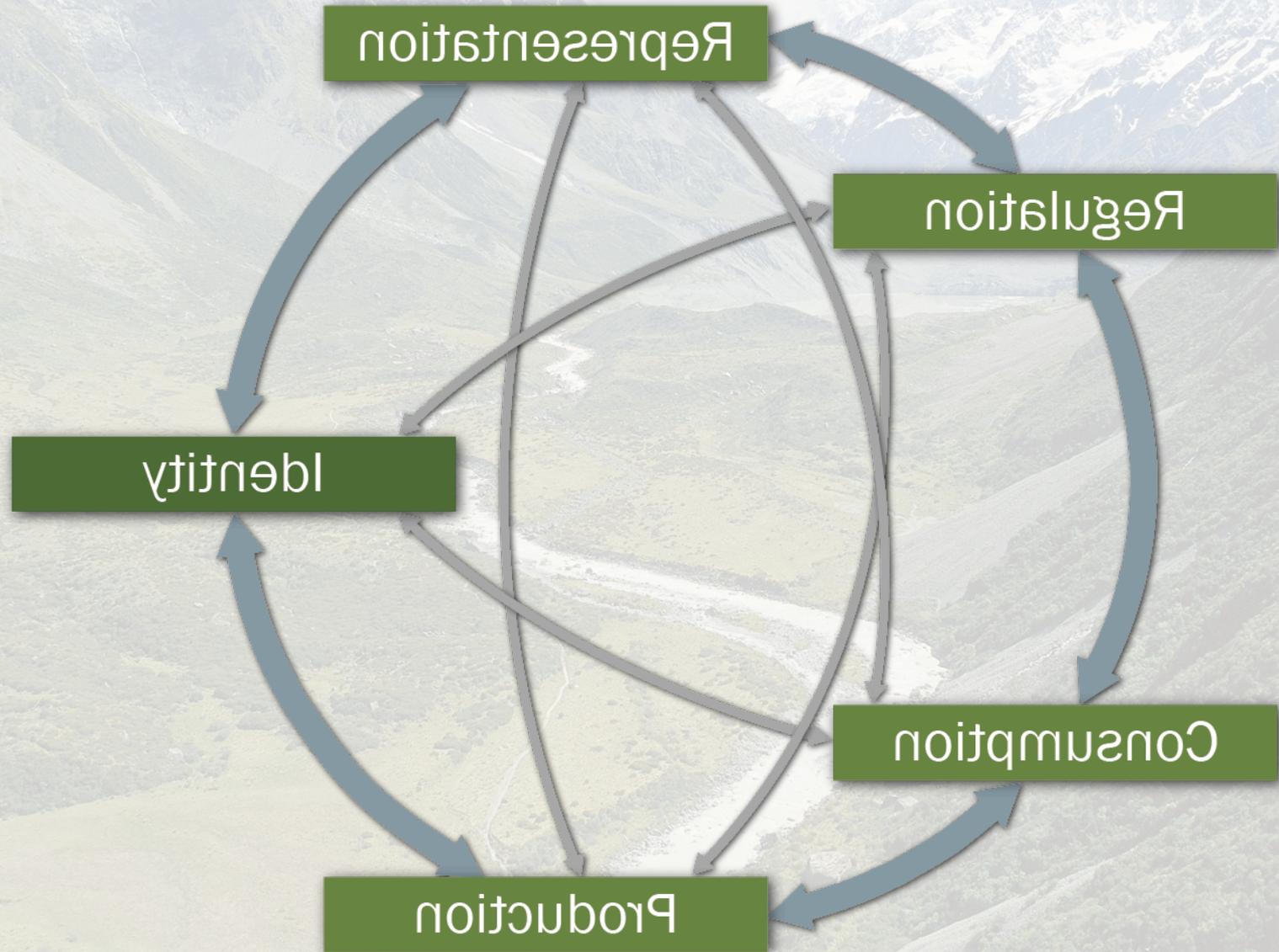
Hermeneutics is the act of interpretation of text.

- **Since we are an oral based culture, with stories, do we practice hermeneutics?**
- **Can we?**
- **Have we been doing so since time immemorial?**
- **Has our ability and opportunity to do so been impacted/interrupted?**



Research creates policy and policy generates programs. ... Because the research that influences policy and shapes practices that impact Indigenous communities emerges from Western, not Indigenous, knowledges or forms of inquiry. The proposition is that the methodology itself necessarily influences outcomes. (Kovach, 2009, p 13).

SECONDARY SOURCE DATA WITHIN A CIRCUIT OF CULTURE

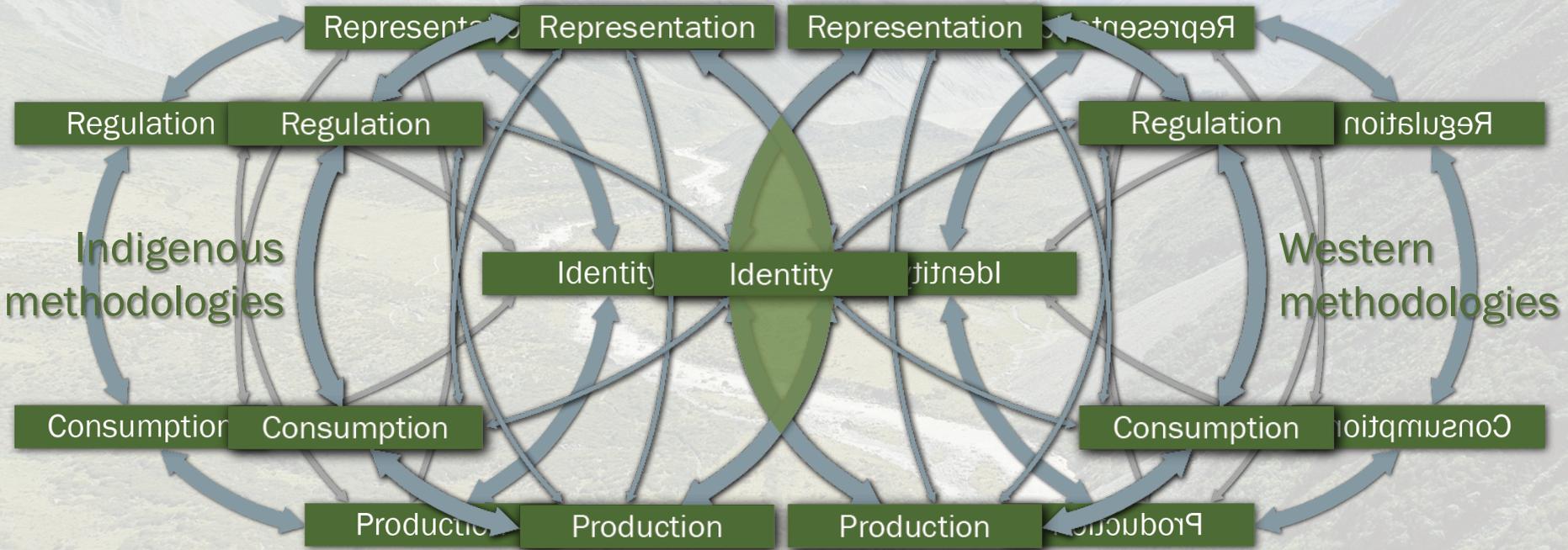


INTERACTION OF CIRCUITS OF CULTURE WITHIN RESEARCH RELATIONSHIPS

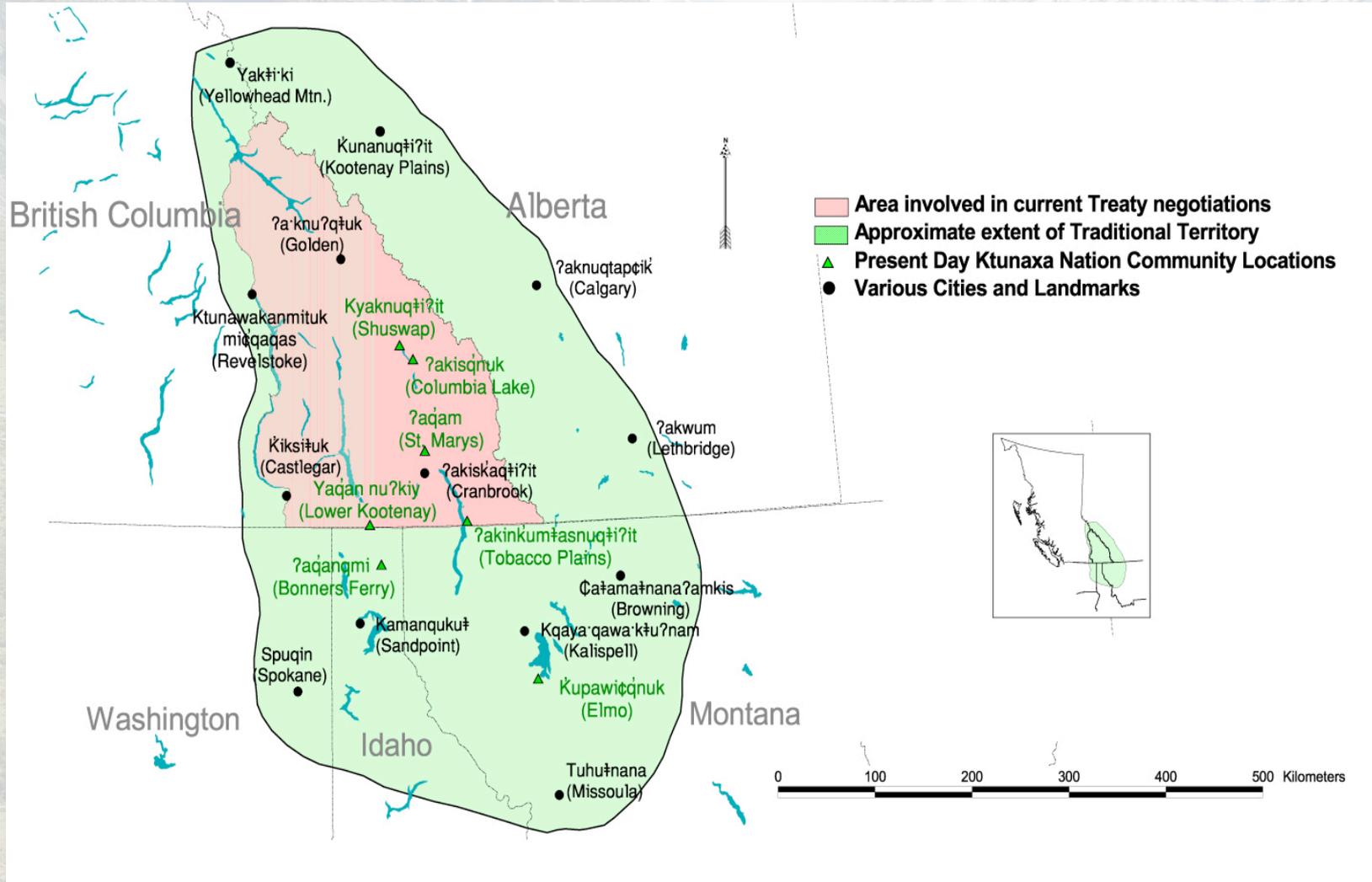
Primary Source Data

Decolonizing methodologies

Secondary Source Data



TRADITIONAL TERRITORY OF THE KTUNAXA NATION



DYSCONSCIOUSNESS

A photograph of a coyote lying on the ground in a natural setting. The coyote is the central focus, with its head and front paws visible. It has a mix of grey, brown, and white fur. The background is a soft-focus green and brown, suggesting a forest or brushland environment. The lighting is natural, coming from the side, creating some highlights on the coyote's fur.

“ A subjective identification with an ideological viewpoint that admits no fundamentally alternative vision of society ”

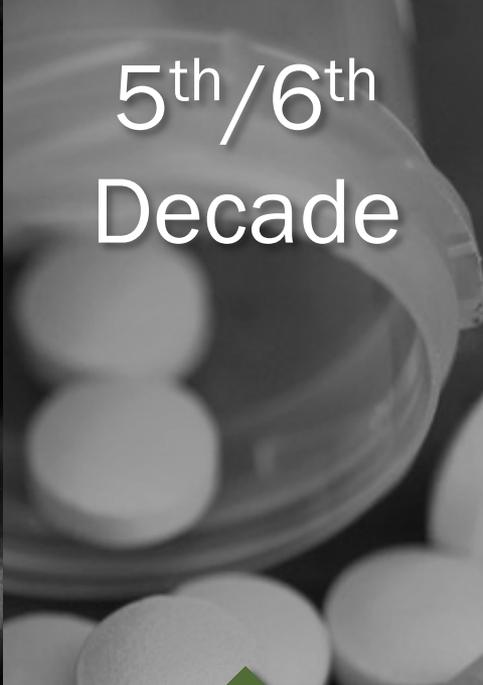
(in King, J.E., 1991 pg 135)



2nd Decade



3rd/4th Decade



5th/6th Decade



Old Age

- School Failure
- Teen Pregnancy
- Criminality

- Economic Development
- Land Claims/
Treaty
- Education

- Obesity
- Elevated Blood Pressure
- Depression

- Child Welfare
- Mental health
- Addictions

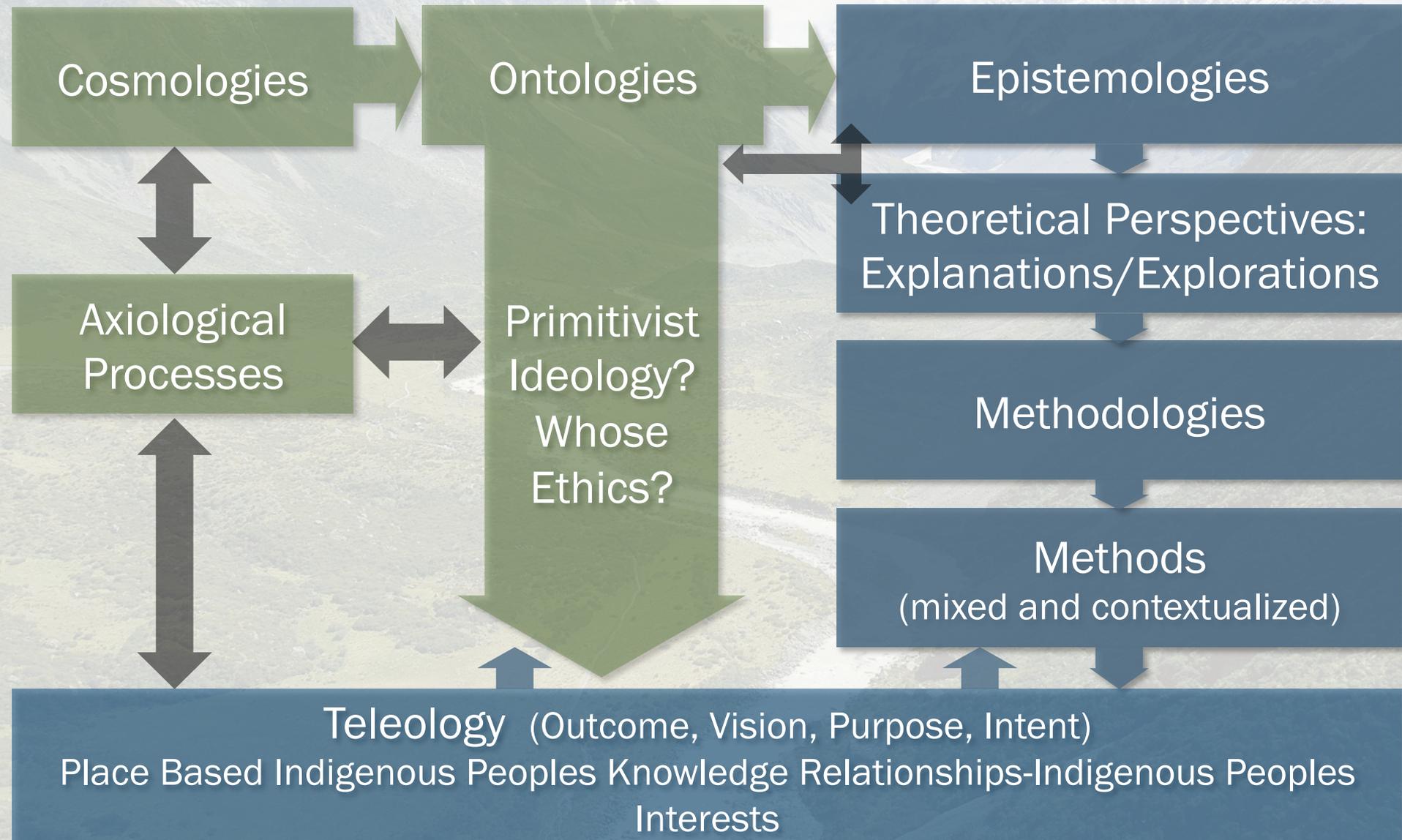
- Coronary Heart Disease
- Diabetes

- Residential Schools/
Disease
- 1st wave urban migration

- Premature Aging
- Memory Loss

- Disease
- Residential Schools
- Welfare/Relief
- Dis-enfranchisement

Transforming Indigenous Peoples' Knowledge Relationships with/in Research



'Strong, healthy citizens and communities speaking our languages and celebrating who we are and our history in our ancestral homelands, working together, managing our lands and resources, as a self-sufficient, self-governing Nation.'



Ktunaxa Social Governance: Considering Self-Development

