

Module 6: Mountains and People

What do mountains mean to you?

Mountains have always been a source of inspiration for spirituality, traditions, and the arts.

Take **Mount Olympus**. It is one of the highest peaks in Europe, and to the ancient Greeks, it was the home of the Greek Gods who lived on Mytikas Peak.

Haleakela volcano in Hawaii was considered to be *wao akua*, or “the realms of the gods,” by the Polynesians. Many religious ceremonies are still held on the rim of the summit and in the crater to this day.

Consider the arts. There are acclaimed paintings of the Group of Seven – Lawren Harris’ “Mountains in Snow,” or Norval Morriseau’s “Riding the Great Thunderbird to the Mountain World.”



Lawren Harris' "[Mountains in Snow](#)" by [Maia C](#) is licensed under [CC BY-NC-ND 2.0](#).

Have you seen the movie, Avatar? Huang Shan, the mountains in China, were the inspiration for the floating mountain range in the movie – their jagged granite peaks with twisted trees growing out of them.

When you think of mountains and literature, what do you think of? It could be **Thomas Mann's *The Magic Mountain*** or **Li Bai's** poetry: “*We sit together, the mountain and me, until only the mountain remains.*”

And what about mountains as inspiration for music? Your choice could range from **Modest Mussorgsky's "Night on Bald Mountain"** to **John Denver's "Rocky Mountain High."** Our association of mountains with music could also evoke music outdoors on mountains: the Vancouver Symphony Orchestra playing outdoors at Whistler, or the Squamish Constellation Festival.

What else are mountains to us as people? They are borders, geopolitical divides. The border between British Columbia and Alberta is in the Rocky Mountains; the boundary between France and Spain is along the Pyrenees Mountains; the boundary between Italy and France is the Alps. Historically, countries chose mountains as borders because they could defend their frontiers, defend themselves from attacks by their neighbours. And in severely rugged mountain areas, we still see that today: In the Himalayas between India and China; and in the Andes between Chile and Argentina.

But we also see efforts of international cooperation on some mountain borders. Near Testa Grigia peak, the Theodol glacier's retreat has moved a hotel on the Swiss-Italian border requiring 100 metres of border to be redrawn. (See <https://bit.ly/3PHSEji>)

Efforts in cross-border cooperation and collaboration such as those seen with the Hindu Kush Himalayan Monitoring and Assessment Programme, which includes India, Pakistan, China, Nepal, Afghanistan, Bangladesh, Bhutan, and Myanmar, is another example of transboundary cooperation. What do they cooperate on? One initiative is mapping human-wildlife conflict hotspots in the Eastern Himalaya. They want to enhance wildlife habitats and corridors, and like us in Canada, they have bears (Himalayan Black Bears,) and antelope (Tibetan antelope,) deer (musk deer,) gaur (Indian bison,) but also the Asian elephant, royal Bengal tiger, snow leopard, and red panda.

Another example of transboundary collaboration is the Kangchenjunga Landscape Initiative. The Southern side of Mount Kangchenjunga is shared by three countries, Bhutan, India and Nepal. They cooperate on sustainable use of resources, environmental conservation, and economic development. They map human-wildlife conflict hotspots. They've had a "Yaks Across Borders" exchange to encourage yak conservation. Yaks provide milk and meat. Their hides are used. Their dung is burned as fuel for cooking and heat. They are also used for transport. Yak herding has been important in this region for 4,500 years, but as borders were militarised between the countries, the herds couldn't mix anymore, and Yak herder communities were suffering. Under this program, Bhutan has given yak bulls to India and Nepal and it is hoped this transboundary interaction between the herders will be ongoing.

In many parts of the world, mountain economies are based on agriculture or mining, and the people living there tend to be poor. These areas have limited infrastructure, service, and opportunities. For many mountains, the issues are around farming and livestock and how to introduce best farming practices for sustainable food production. Or they are

around mitigation of the impact of natural resource extraction, and the introduction of more sustainable enterprises to take its place.



Millet farming in Nepal.
Photo by Robert Plummer.



"[Mountain porters \(Nepal\)](#)" by [Ahron de Leeuw](#) is licensed under [CC BY 2.0](#).

Tourism brings income and economic benefits to mountain communities, but the challenge is how to manage the environmental, social and cultural impacts of that. Recreational tourism and associated infrastructure, commercial and residential development raise the question of how to prevent damage through over-activity; and particularly, how to share benefits from tourism to local populations, including indigenous peoples. Is economic growth happening in a socially and culturally appropriate and equitable way? Locations for second homes, such as in Nainital, Uttarakhand, in India, and in Whistler, British Columbia, in Canada, put property prices and many local services beyond the means of local populations. And when land cover changes with development,

is there the infrastructure to support it in terms of transit, clean water, sewage treatment, garbage, and power? While tourism offers benefits in terms of employment opportunities and to the economy as a whole, the challenge is how to guard against over-exploitation and increasing dependence on low-wage jobs in tourism and pressure on local populations to out-migrate from the community. This is the case for Sherpas in Khumbu, Nepal, the gateway to Mount Everest, and in the Alps, and in the Rocky Mountains.

What are the solutions? Some employers provide staff housing. Will there be employer or government-paid supplements like a cost-of-living allowance you see in some expensive urban centres like London, or point of sale subsidies like to you see in remote wilderness regions like Canada's North?

When we think of mountains and people, we should look at ethnogeology, how geological features are understood by indigenous communities. The Stawamus Chief Mountain right next to us was considered to be a longhouse turned to stone. There are traditional Quechua stories from the Andes of the most powerful spirits living on mountain summits. Mountains are often sacred sites, and many religions make pilgrimages to mountains: Wtai Shan and Emei Shan in China; Mount Sinai in Egypt; Gangotri in India; Meteora in Greece.

Legends and oral tradition are not just of cultural significance, but also of evidentiary significance. Oral histories of floods and volcanic eruptions are used by archaeologists, geographers, and geologists as corroborating evidence to piece together geological history. The Gunditjmarra in Australia are an example of this. There is archaeological evidence of their occupation of 13,000 years, but they're telling stories describing the formation of the Budj Bim volcano, a geological event from 37,000 years ago. These indigenous archives of oral tradition as geological history are of increasing importance.

The good news is there are opportunities for cooperation and collaboration to protect and preserve our mountains and mountain. There are many international organizations doing this, for example, the Adaptations at Altitude program of the Swiss Agency for Development and Cooperation, GEO Mountains led by the Mountain Research Initiative and the National Research Council of Italy, the Mountain Societies Research Institute of the University of Central Asia, the High Mountain Summit of the World Meteorological Organization, the Canadian Mountain Network, and many others.

Mountain sustainability is often defined as being where environmental sustainability, social wellbeing, and economic viability meet. So let's end where we began. What do mountains mean to you?