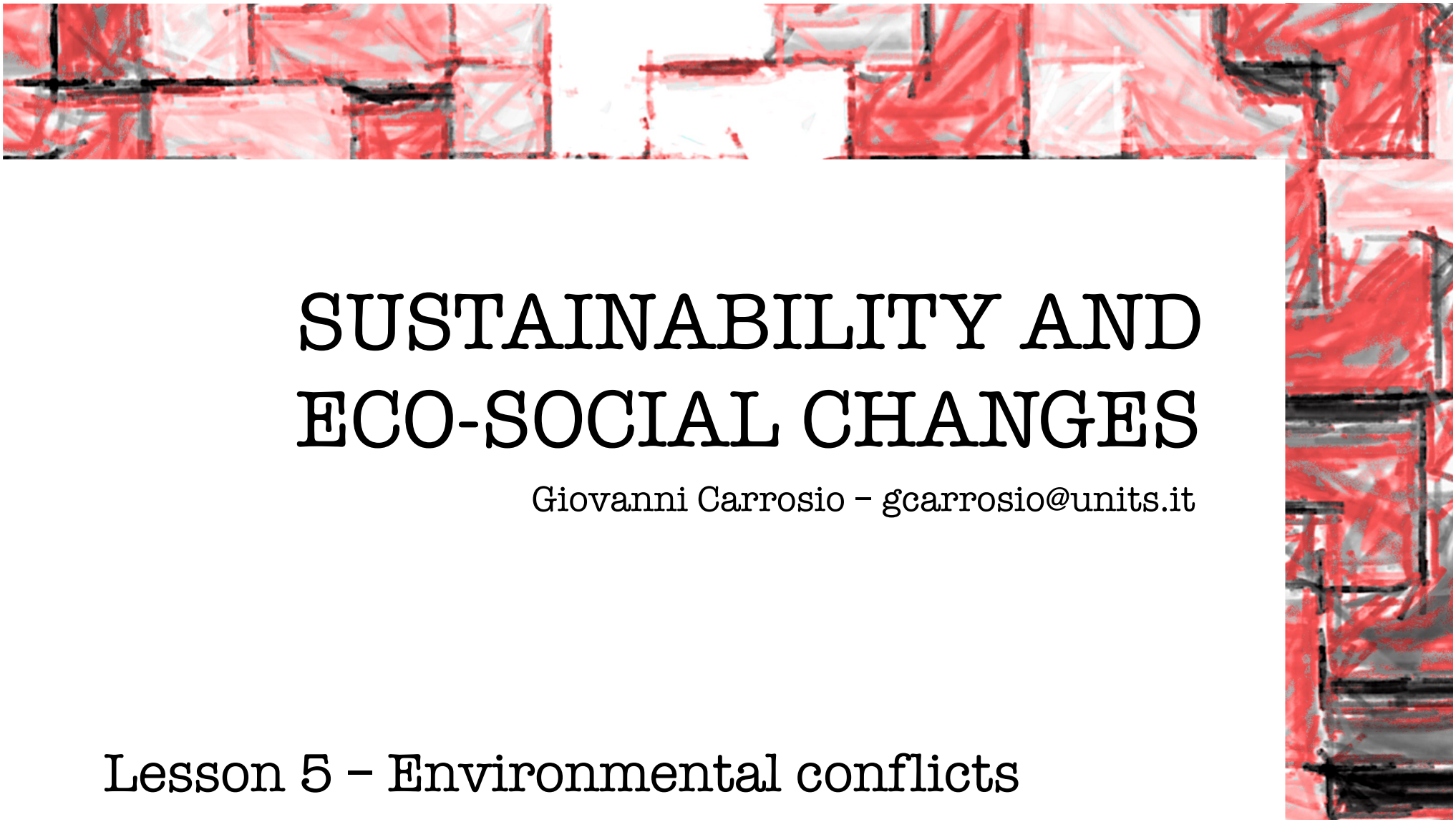

SUSTAINABILITY AND ECO-SOCIAL CHANGES

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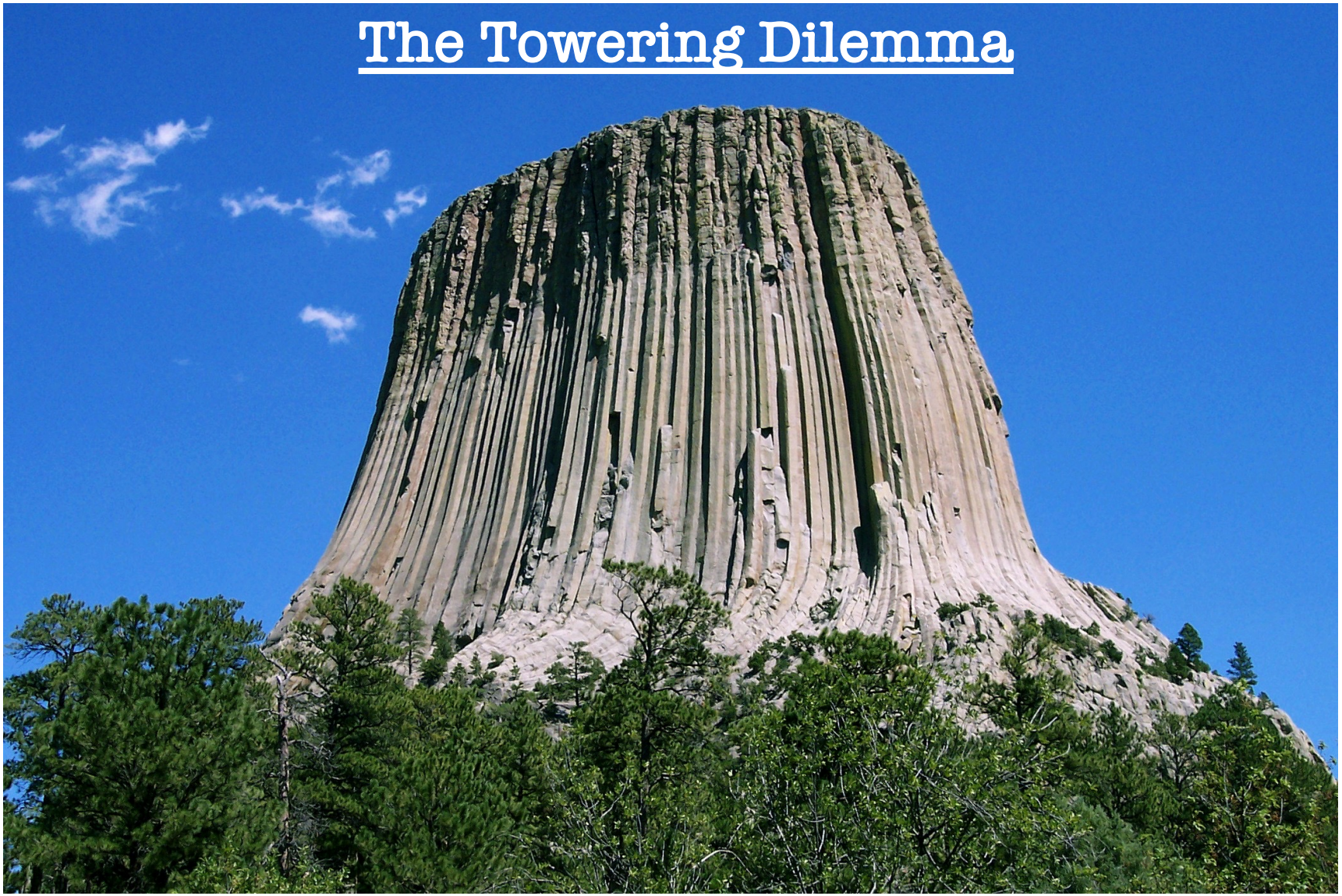
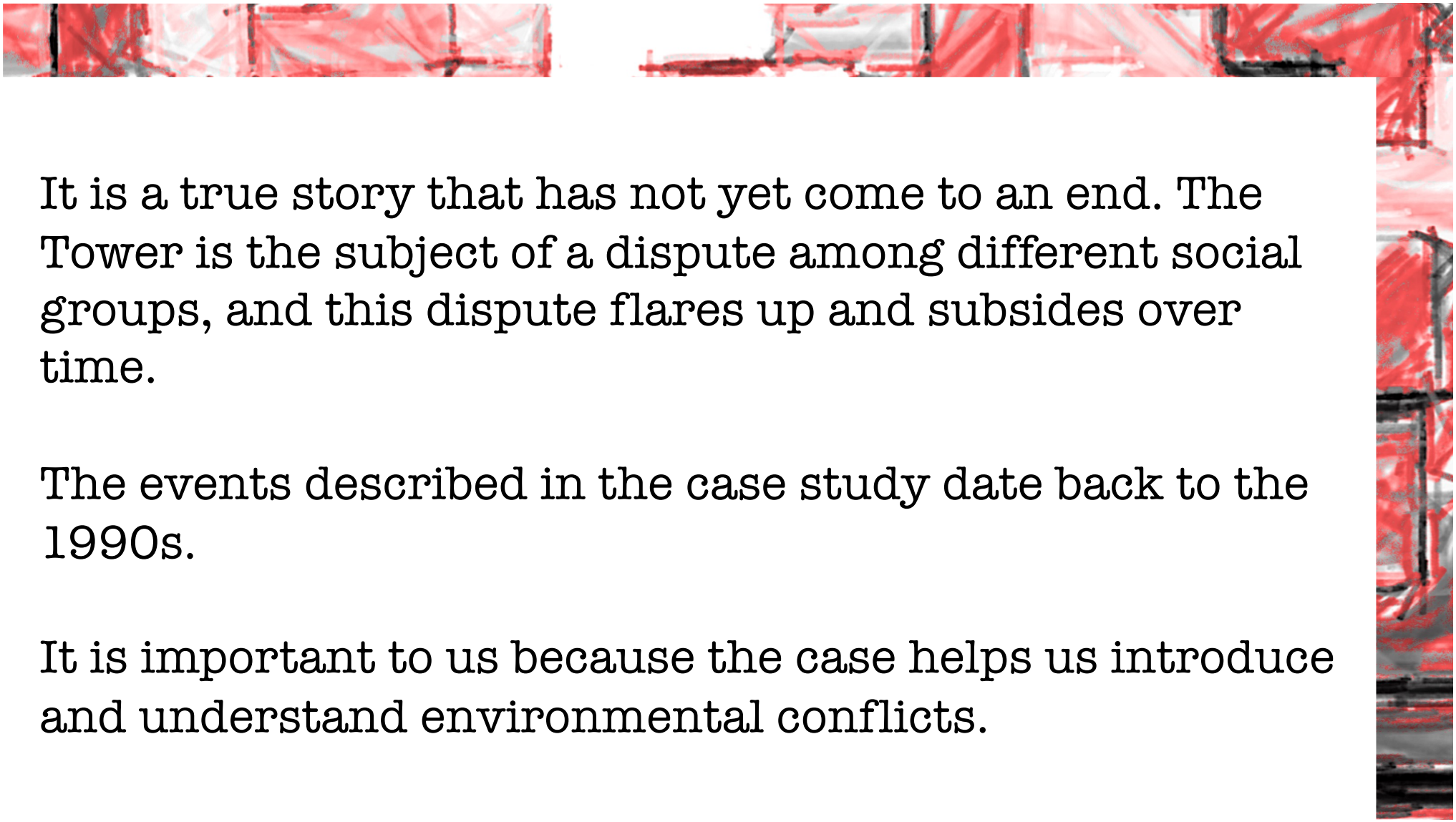
Lesson 5 – Environmental conflicts

The Towering Dilemma





It is a true story that has not yet come to an end. The Tower is the subject of a dispute among different social groups, and this dispute flares up and subsides over time.

The events described in the case study date back to the 1990s.

It is important to us because the case helps us introduce and understand environmental conflicts.

Deb Liggett is the main character, she was the superintendent of the Nationa Park Service and she retired after 25 years with this institution. She served at Great Sand Dunes, Grand Canyon, Big Bend, Dry Tortugas, Voyageurs, Everglades, Devils Tower, and at Katmai and Lake Clark National Parks and Preserves.

Step 1 — The Actors. Who is involved? What do they want? What type of actor are they (individual, group, institution, business)? And — crucially — is anyone affected but absent or silent?

Step 2 — The Problem. What is happening, and why is it a problem? When did it become visible? Does it have deep historical roots?

Step 3 — The Object of Contention. This is the key concept: the object of an environmental conflict is never just a physical thing. It is a place overloaded with meanings and functions.

Step 4 — Organisations and Institutions. What organisations and institutions are present? Whose rules are they? Whose interests do they tend to serve? Pay special attention to the NPS mandate.

Step 5 — The Dilemma. What is Deborah being asked to choose between? Why can she not satisfy everyone? For each of the six alternatives, who gains and who loses?

Actor	Type	What do they want?
American Indian tribes (Lakota Sioux, Crow, other tribes)	Groups / communities	Protection of sacred ceremonies; spiritual access; cultural recognition; respect for treaty rights
Rock climbers (6,000+ annually)	Group / recreational community	Continued access to a world-class climbing site; freedom to climb year-round; ability to establish new routes
Commercial climbing guide companies (7 licensed)	Businesses	Economic survival; continued NPS licences; access during peak season (including June)
Naturalists / ecologists	Group / advocacy	Ecosystem protection; raptor nesting protection; limits on erosion and vegetation damage
Local businesses and communities	Businesses / community	Tourism revenue; economic stability of the region
Deborah Liggett / NPS	Individual / institution	Fulfil the NPS mandate (preserve natural AND cultural resources); find a legally defensible solution; manage political pressure from all sides

Describe the problem in one or two sentences

Devils Tower is a single physical site that serves multiple incompatible functions: sacred site for American Indian ceremonies, premier rock climbing destination, and significant ecoregion. The number of climbers has grown to the point where their activity interferes with Indian ceremonies and potentially harms the ecosystem, and the NPS must decide how to allocate access.

The problem goes beyond 'Indians and climbers disagree.' The problem is structural, not interpersonal. It is about incompatible uses of a non-divisible resource.

When did the problem become visible?

The conflict existed for decades but became institutionally visible in 1992, when the NPS launched an environmental assessment. The trigger was the growing number of climbers (from a few hundred to 6,000+ per year) combined with increasing Indian mobilisation around cultural rights. The NPS assessment forced all parties to articulate their positions

Does it have deep historical roots?

Extremely deep. The conflict is rooted in colonial history: the land was part of Lakota Sioux territory, recognised by the 1868 Fort Laramie Treaty. The U.S. government violated this treaty, seized the Black Hills, and in 1906 declared Devils Tower the first national monument, an act of sovereign authority over what Indians considered their sacred land. The current conflict is therefore not between two groups arriving simultaneously at a neutral site; it is between an Indigenous people whose land was taken and a settler society that now asks them to share.

What is the physical object? Describe it as a geologist would.

An isolated igneous monolith rising 264 metres (867 feet) above the surrounding landscape in northeastern Wyoming. Geologists believe it is the eroded remnant of an ancient volcanic intrusion (laccolith). It features distinctive vertical columnar jointing (cracks) formed by the cooling of magma. The surrounding area is a mixed ecoregion where mountain and plains species coexist.

For whom?	Devils Tower is...	The value at stake
American Indians	A sacred being with supernatural origin. A place of prayer, vision quests, sweat lodge ceremonies, spiritual dances. A pilgrimage destination for 20+ tribes. Connected to creation narratives (the seven girls and the bear).	Spiritual integrity, cultural continuity, historical justice, collective identity
Rock climbers	One of the premier crack climbing destinations in North America. A technical challenge with 220 routes. A site of individual courage, teamwork, and (for some) 'spiritual' experience.	Freedom, physical challenge, adventure culture, personal identity
Naturalists	A significant ecoregion with 450+ plant species, 200 vertebrate species, 550 insect species, including nesting raptors. A habitat under pressure from human activity.	Biodiversity, ecological integrity, species protection
Commercial guides	A business asset. The source of livelihood for 7 licensed guide companies. A product to sell.	Economic survival, commercial access
Tourists	A scenic landmark, the backdrop of Close Encounters of the Third Kind. A place to photograph, picnic, and watch climbers.	Entertainment, leisure, spectacle
The NPS	A management unit. A legal responsibility. A site where natural and cultural mandates collide.	Institutional mandate, legal defensibility, political equilibrium

Are these meanings compatible? Where exactly do they clash?

- Temporal clash: June is both the peak climbing season and the most significant ceremonial period. The same month is contested.

- Acoustic clash: Ceremonies require silence and respect; climbers are described using ‘vulgar language’ audible during ceremonies.

- Material clash: 600 bolts and hundreds of pitons driven into the rock are, for climbers, safety equipment; for Indians, desecration of a sacred body.

- Ontological clash: ‘A rock to be conquered’ vs. ‘a being to be respected’. These are incommensurable. No compromise metric exists.

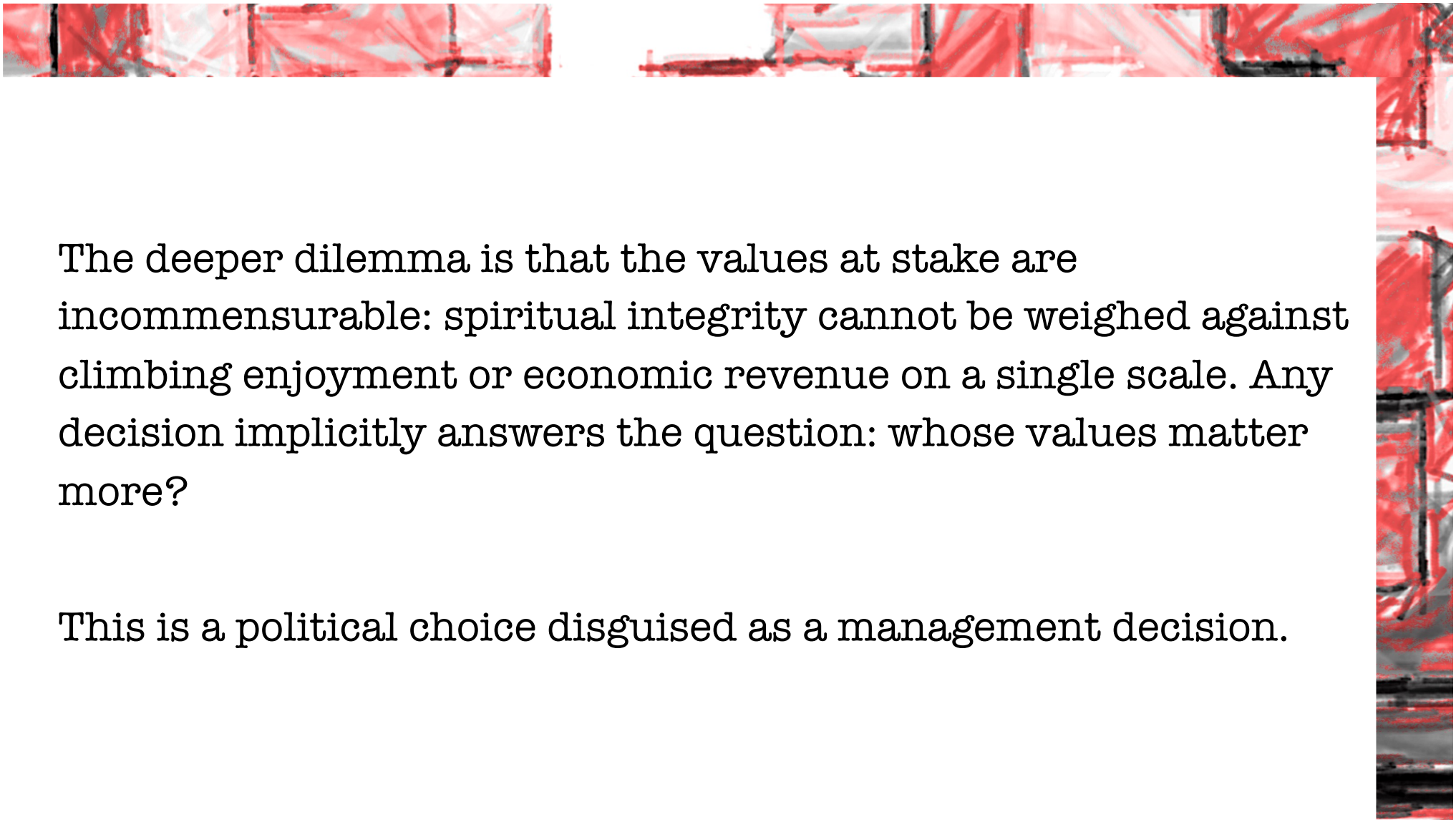
- Visual clash: Climbers on the rock face are visible during ceremonies. Some tourists enjoy watching them; for Indians, the sight is a desecration.

Organisations and Institutions

Organisation / Institution	**Role**	**Whose interests does it tend to serve?**
National Park Service (NPS)	Federal agency managing the monument. Has legal authority to set policy. Conducts the environmental assessment and public consultation.	Formally neutral (mandate to protect all resources). In practice, the NPS was created by the settler state and operates within its legal framework. Its default assumption is that the tower is 'public land' — which already frames the issue in terms that disadvantage Indigenous claims.
Commercial climbing guide companies (7)	Licensed businesses operating under NPS permits. Organised interest group with clear economic stake.	Climbers and the regional tourism economy. They have a direct financial interest in opposing any closure.
Climbing advocacy organisations	National organisations that represent the climbing community. The director is quoted in the case.	Recreational climbers. They frame climbing as a culturally significant activity with constitutional protection.
Tribal councils / Indian organisations	Representatives of ~20 tribes that use the site. Less institutionally organised in relation to the NPS than climbing groups.	Indian communities. But their institutional power within the NPS system is limited — they are consulted, not co-governors.
U.S. federal legal system	The constitutional framework (First Amendment, Establishment Clause) and treaty law (1868 Fort Laramie Treaty).	Depends on interpretation. The First Amendment is invoked by climbers to oppose closure ('you can't close public land for religious purposes'). The 1868 Treaty is invoked by Indians to claim sovereignty. The same legal system serves contradictory purposes.
National Register of Traditional Cultural Property	A formal recognition mechanism for culturally significant sites.	Potentially serves Indian interests by providing legal recognition of the tower's cultural significance. But listing does not automatically impose restrictions.

Formulate Deborah's dilemma

Deborah must choose between protecting the cultural and spiritual rights of a historically dispossessed people and maintaining access to a public site for a well-organised recreational community with economic interests. Every option involves significant losses for at least one group. If she closes the tower, she protects Indian rights but destroys livelihoods and may face constitutional challenge. If she keeps it open, she preserves access but perpetuates what Indians experience as ongoing colonial desecration. If she chooses a middle path (voluntary closure), she depends on the goodwill of the stronger party and may satisfy no one fully.



The deeper dilemma is that the values at stake are incommensurable: spiritual integrity cannot be weighed against climbing enjoyment or economic revenue on a single scale. Any decision implicitly answers the question: whose values matter more?

This is a political choice disguised as a management decision.

Alt.	Summary	Who gains?	Who loses?
1	Unlimited climbing and bolting year-round	Climbers, guide companies, local businesses, tourists	Indians (full desecration), ecosystem (no protection), NPS credibility
2	Continue current policies (no change)	Climbers (mostly), businesses	Indians (ongoing harm), ecosystem (gradual degradation), NPS (problem not resolved)
3	Phased voluntary June closure + regulated bolting	Indians (partial protection in June), naturalists (raptor protection), NPS (compromise), climbers (11 months access)	Guide companies (June revenue lost), some climbers (reduced access), Indians (only partial, voluntary, phased)
4	Voluntary June closure + ban on new bolts	Indians (better than 3), ecosystem (bolt ban), NPS	Guide companies, climbers (stronger restrictions), still voluntary = depends on goodwill
5	Mandatory June closure + no bolting	Indians (mandatory = real protection), ecosystem (strong protection)	Climbers (mandatory exclusion), businesses (revenue loss), potential legal challenge
6	Total closure, remove all bolts, restore trails	Indians (full restoration), ecosystem (maximum recovery)	All climbers (total exclusion), all businesses (economic devastation), tourists (reduced experience)

Is there a solution where nobody loses?

No. This is the defining feature of a genuine dilemma. Every option requires someone to bear a cost. The costs differ in kind: for climbers, the cost is reduced access (recreational); for guide companies, economic loss; for Indians, the cost of inaction is spiritual desecration and continuation of colonial dispossession; for the ecosystem, degradation.

The impossibility of a costless solution tells us something fundamental about environmental conflicts: they are not technical problems with optimal solutions. They are political contests over which values deserve priority. The tools of cost-benefit analysis (rational choice) can clarify trade-offs but cannot resolve the incommensurability. That is why the choice of theory matters: it determines which costs are seen as legitimate and which are made invisible.

You have mapped the conflict.

Now let's build
the conceptual tools.

What is a conflict in sociology?

What makes it 'environmental'?

What types of environmental conflict exist?

What Is Conflict in Sociology?

Definition: A conflict is a social situation in which two or more actors pursue incompatible goals regarding the same resource, space, or decision. It becomes social when actors orient their actions toward each other.

Three necessary elements:

1. **Actors** — at least two parties who see themselves as distinct groups.
2. **Incompatible goals** — goals that cannot all be achieved simultaneously.
3. **Shared object** — a specific resource, territory, or decision they all care about.

The conflict is about the object, but it is between the actors.

The social scientist does not take sides. The social scientist takes the conflict apart. We decode it. We make visible things that the actors themselves may not see, because they are too close, too involved, too angry.

This does not mean that we have no values, or that all positions are equally valid. It means that before we can evaluate anything, we need to understand the structure of the conflict.

And understanding the structure means seeing all the layers. Not just the surface argument, but the history behind it, the power relations inside it, and the institutions around it.

Conflict Is Everywhere

Does our definition work in other areas of social life? Let us test it.

Remember: a conflict needs (1) actors, (2) incompatible goals, (3) a shared object. Let us see six examples from six different areas of social life.

1. A neighbourhood that is changing (gentrification)
2. A public square at night
3. Delivery riders and platforms (gig economy)
4. A statue in a city centre (memory and monuments)
5. University research evaluation
6. Language and schools in minority regions

1. Gentrification: who does the neighbourhood belong to?

Actors	Incompatible goals	Contested object
Old residents (low income, they lived here for years) vs. new residents (higher income) and property investors.	Old residents want to stay, pay low rent, and keep their local shops. Investors want to raise property prices and open expensive bars.	The neighbourhood. For some people it is 'home.' For others it is an 'investment.' Same streets, different meanings.

2. A public square at night: quiet or alive?

Actors	Incompatible goals	Contested object
Residents who live near the square vs. young people who meet there in the evening vs. bar owners.	Residents want silence after 10 PM. Young people want a place to be with friends. Bar owners want customers but not complaints.	The square — one physical space with three different social functions. Whose square is it?

Notice: in both cases, the same place has different meanings for different actors. This is exactly what happens at Devils Tower.

3. Delivery riders and platforms: what is ‘work’?

Actors	Incompatible goals	Contested object
Riders (Deliveroo, Uber Eats, Glovo) vs. the digital platforms.	Riders want a contract, minimum pay, and safety protection. Platforms want flexibility, low costs, and riders classified as ‘self-employed.’	The legal definition of ‘work.’ Is a rider an employee or an independent worker? The answer changes everything: rights, pay, protection.

4. A statue in the city centre: memory or offence?

Actors	Incompatible goals	Contested object
People who ask for removal of colonial or fascist statues vs. people who want to keep the ‘historical heritage.’	One group wants public space that does not celebrate oppression. The other group wants to keep historical memory intact.	The statue. For one group, it is a symbol of pride. For the other, it is a symbol of violence. Compare: ‘It is just a statue’ = ‘It is just a volcano.’

Notice: the contested object is not always a place. It can be a definition (what is ‘work’?) or a symbol (what does this statue mean?). And saying ‘it is just an object’ is never neutral.

5. University: what counts as ‘good research’?

Actors	Incompatible goals	Contested object
Researchers (especially young ones) vs. evaluation agencies (like ANVUR in Italy).	Researchers want time for good work and freedom to choose topics. Agencies want measurable outputs: publications, citations, rankings.	The meaning of ‘good research.’ Is it a contribution to knowledge, or a number on a spreadsheet? Who has the authority to decide?

6. Language and schools: in whose language do we teach?

Actors	Incompatible goals	Contested object
A linguistic minority (e.g., Slovenian speakers in Trieste, Catalans in Spain) vs. the central state.	The minority wants education in its own language and bilingual signs. The state wants one common language for national unity.	The school and public space. In which language do we teach? This is a conflict about identity, not about material things.

Notice: the contested object can be a definition (‘good research’), a symbolic space (the school), or an identity (whose language?). The scarce resource is the power to define what counts.

All six examples share the same structure:

Example	Actors	Incompatible goals	Contested object
Neighbourhood	Old vs. new residents	Stay vs. profit	The neighbourhood (home vs. asset)
Square	Residents vs. youth vs. bars	Silence vs. socialising	The square (whose space?)
Riders	Workers vs. platforms	Rights vs. flexibility	Definition of 'work'
Statue	Removal vs. preservation	Justice vs. heritage	The monument (pride vs. offence)
University	Researchers vs. agencies	Quality vs. quantity	Meaning of 'good research'
Language	Minority vs. state	Recognition vs. cohesion	The school (whose language?)

The definition works everywhere. Actors + incompatible goals + contested object = conflict.

Now the question: what happens when the contested object is a natural resource, a territory, or an ecosystem? That is what makes a conflict 'environmental.'

What Makes a Conflict “Environmental”?

Definition: An environmental conflict is a social conflict in which the object of dispute is a natural resource, a territory, or an ecological condition — and in which different actors attribute different values, meanings, or uses to that object.

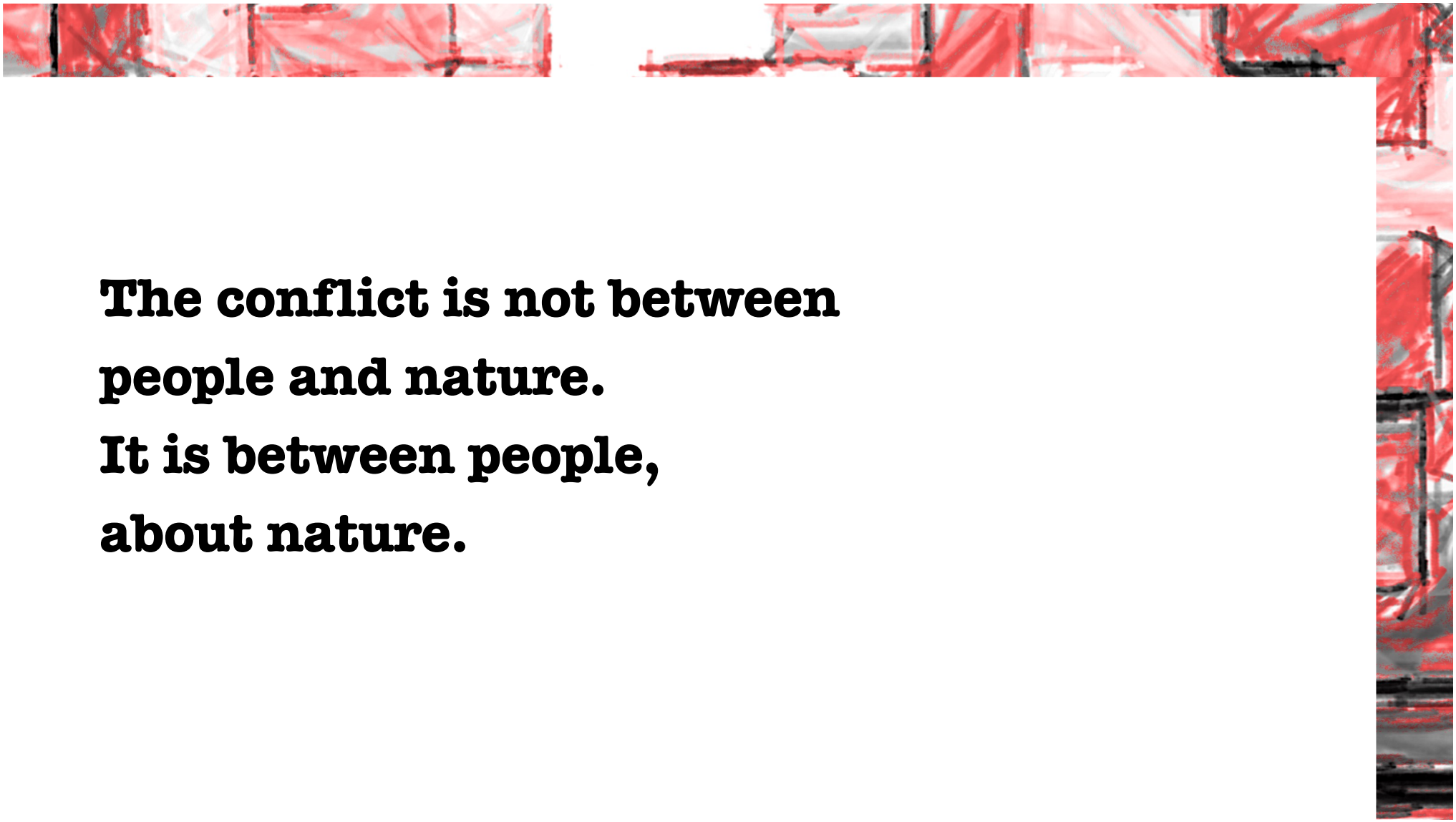
An environmental conflict is never only about the environment. It is always also about:

Identity — who we are, and how this place defines who we are.

Values — what matters most: prayer, sport, biodiversity, money.

Knowledge — whose way of knowing counts: archaeology or oral tradition?

Power — who gets to decide, and whose interests are treated as ‘default.’



The conflict is not between
people and nature.
It is between people,
about nature.

Two Research Traditions on Environmental Conflicts

Homer-Dixon (1994, 1999)

Scarcity → Conflict

Three scarcities: supply-induced, demand-induced, structural.

Two mechanisms: resource capture (powerful seize resources); ecological marginalisation (weak pushed to fragile areas).

Key: environment never causes conflict directly — always through social effects.

Martínez-Alier (1995, 2002)

Distribution → Injustice

Ecological distribution conflict: unequal distribution of environmental costs & benefits.

Incommensurable languages of valuation: value systems that cannot be reduced to one metric.

Three currents: cult of wilderness, eco-efficiency, environmentalism of the poor.

EJAtlas: 3,500+ conflicts mapped globally.

Type 1: Resource-Use Conflicts

Different groups compete for the same resource and their uses are incompatible.

At Devils Tower

The scarce resource is not rock — it is the quality of the experience: silence, spiritual atmosphere, solitude. Every climber during a ceremony reduces the sacred quality. This is symbolic scarcity.

Current example: river water

A river in a drought-prone region. Farmers need it for irrigation, cities for drinking water, industry for cooling, the ecosystem for fish. There is not enough for all uses at the same time.

The conflict: who gets how much, and who decides?

Type 2: Locational Conflicts (NIMBY / LULU)

A conflict about WHERE a facility or activity is placed. Benefits diffused; costs concentrated.

At Devils Tower

Not a classic NIMBY, but climbing infrastructure (600 bolts, asphalt trail) is a 'facility' imposed on a sacred landscape. Benefits (recreation, tourism) are diffused; costs (desecration, noise) are concentrated on Indians.

Current example: renewables siting

A large wind or solar farm in a rural area. The whole country benefits from clean energy. The local community bears landscape impact, land-use change, and disruption.

Can you impose a green transition on communities? Is 'green' always 'just'?

Type 3: Distributive Conflicts (Environmental Justice)

Unequal distribution of environmental risks along lines of class, race, ethnicity, or colonial history.

At Devils Tower

The land was taken from Indian peoples through colonial dispossession. The government declared it a 'monument' without Indian voices. Now Indians are asked to 'compromise' as if they were equal participants from the beginning.

The distributive question: who lost what, when, and why?

Other examples:

- Toxic waste & race (Warren County, 1982)
- Climate: Global South bears greatest risks
- Yasuní-ITT, Ecuador
- EJAtlas: 3,500+ cases

Martínez-Alier: 'The environment is not a luxury of the rich, it is a necessity of the poor.'

Devils Tower Is All Three

Resource-use
Competing uses of the same site. Symbolic scarcity.

Locational
Infrastructure imposed on a sacred landscape. Costs concentrated.

Distributive
Colonial history creates structural inequality. Who was wronged?

A typology is a thinking tool, not a filing system.

Resource-use lens: focuses on scarcity. Hides power.

Locational lens: focuses on spatial imposition. Hides that the land was stolen.

Distributive lens: focuses on historical injustice. May hide that practical compromise is possible.

The best analysis uses all three and sees what each reveals — and what it hides.