

# Heard Island & McDonald Islands – Research Dossier

## Cartography Desk: Mapping a Remote Realm

<sup>1</sup> <sup>2</sup> Heard Island and the McDonald Islands (HIMI) lie in the stormy Southern Ocean, roughly **4,000 km southwest of Australia and 4,700 km southeast of Africa** <sup>1</sup>. This tiny sub-Antarctic archipelago – **an Australian external territory covering ~658,903 hectares (only ~37,000 ha of it land)** <sup>2</sup> – is *exceptionally remote and uninhabited*. High-resolution cartography helps convey HIMI's isolation and geography. The Australian Antarctic Division (AAD) provides detailed maps: an A4 **location map** shows HIMI's position relative to Australia and Antarctica <sup>3</sup>, and a **Marine Reserve map** (updated Jan 2025) illustrates the expansive protected waters around the islands <sup>4</sup> <sup>5</sup>. These official maps (available via AAD's Map Catalogue) are published under a Creative Commons 4.0 license, allowing reuse in infographics <sup>6</sup>. Notably, **the entire territory plus a 12-nautical-mile sea zone is a strict nature reserve**, so maps highlight restricted zones and permit requirements.

For visual impact, a composite infographic could combine: **a world map inset** pinpointing HIMI's lonely latitude (53°S, 73°E), **a topographic cutaway** of Big Ben volcano (Mawson Peak) with its glaciers, and **marine reserve boundaries** overlaid on satellite imagery. NASA and UNESCO offer rich media: for example, a NASA Landsat 8 image captured **cloud vortices ("von Kármán vortices") swirling downwind of Mawson Peak** <sup>7</sup>, dramatizing the island's interaction with atmosphere (a stunning visual of **HIMI's haunting beauty** when emerging from its usual shroud of cloud). Similarly, an ISS astronaut photo (2009) reveals Big Ben's snow-draped caldera and glacial tongues in rare clarity <sup>8</sup>. These images (public domain via NASA) and **interactive map layers** (UNESCO's World Heritage map platform <sup>9</sup>) can be leveraged to create engaging, high-resolution graphics. A **3D terrain fly-over** (using satellite DEM data <sup>10</sup>) could virtually tour Mawson Peak's summit crater and the surrounding glaciers and black sand beaches, helping readers grasp the stark topography. Each visual will reinforce how **HIMI stands as a speck of fire and ice at the edge of the world**, setting the stage for the article's prologue. (Sources: NASA Earth Observatory, Australian Antarctic Data Centre, UNESCO World Heritage Centre.)

## Geo-Politics Desk: Legal Status & Neutrality

<sup>11</sup> <sup>12</sup> Although uninhabited, Heard Island and the McDonald Islands are firmly under **Australian sovereignty**. The **Heard Island and McDonald Islands Act 1953** established the territory's administration, ratifying Britain's 1947 transfer of the islands and defining their legal regime <sup>13</sup>. Unusually, **the territory has no local government** – it's administered from Hobart by the Australian Antarctic Division, and by law the islands are governed by **Australian Capital Territory (ACT) civil law and Jervis Bay Territory criminal law** <sup>12</sup> <sup>14</sup>. In essence, HIMI is treated as a distant appendage of Canberra's jurisdiction, with the **ACT Supreme Court** overseeing justice <sup>12</sup>. This framework underscores HIMI's role as a **politically neutral locale**: there is no indigenous population or permanent residents, and all activities are regulated by federal ordinances. For example, entry to the islands requires a government permit, and an Environment Protection ordinance strictly limits any actions that might disturb HIMI's pristine ecosystems <sup>15</sup>.

In the international context, HIMI occupies an intriguing overlap of legal regimes. It sits just north of 60°S, so it is **outside the Antarctic Treaty System’s geographic scope** – yet its management ethos mirrors Antarctica’s “nature reserve” spirit. Australia maintains a **200-nautical-mile exclusive economic zone** around HIMI for fisheries, defined by a 1982 Australia–France maritime boundary delimiting waters between Heard and French Kerguelen <sup>16</sup> . However, in practice the **entire EEZ is a marine protected area**, closed to commercial fishing and extractive activity. This dual status (Australian territory *and* World Heritage Site) positions HIMI as a potential **supranational commons**. Scholars note parallels to Antarctic governance and even propose that such remote territories could host international institutions free from national politicking <sup>17</sup> <sup>18</sup> . The **UNCLOS regime** grants Australia sovereign rights here, but Australia has effectively dedicated HIMI to science and conservation – a neutral, demilitarized zone with no strategic or resource conflicts.

Given these attributes, some futurists envision HIMI as “**a world capital with no citizens**” – a seat of a hypothetical Unified State or global council. Legally, this would require innovative arrangements (perhaps a UN trust territory model, as once floated for Antarctica <sup>17</sup> ). But HIMI’s current status already offers a template: it’s **politically unencumbered (no local politics at all), environmentally sacrosanct, and symbolically global**. The Heard Island Act even empowers Australia’s Governor-General to make ordinances, meaning the framework exists for **bespoke governance** <sup>19</sup> . In a world seeking neutral ground for supranational governance, HIMI’s **legal neutrality and lack of claimants** stand out. It is “owned” by a nation yet essentially **held in trust for humanity** under World Heritage and environmental law – arguably a pragmatic and symbolic foundation for hosting a world unity summit or capital. (*Sources: Australian Antarctic Program – Legislation, AustLII, Antarctic Treaty Secretariat, UNCLOS provisions.*)

## Science Desk: Fire, Ice, and Earth Systems

<sup>20</sup> <sup>21</sup> HIMI is a living laboratory where **elemental extremes collide**. Dominating Heard Island is **Big Ben**, a massive volcano capped by **Mawson Peak** (2,745 m) – Australia’s only active volcano and one of its highest peaks <sup>22</sup> . Remarkably, **Mawson Peak erupts amid glaciers**: 80% of Heard Island is ice-covered <sup>23</sup> , and lava flows have been observed crawling past snowfields. Volcanologists note that **Mawson Peak sits within a 5–6 km wide breached caldera** – the result of Big Ben’s summit collapse ~10,000 years ago – and it has been erupting intermittently for over a century <sup>24</sup> . The current eruption phase began in 2012 and continues today, with satellite sensors detecting thermal anomalies and fresh lava on the summit and southwest flank throughout 2023 <sup>25</sup> <sup>26</sup> . Because human eyes rarely witness these eruptions (“the island is extremely remote and usually hidden by wild Southern Ocean weather” <sup>27</sup> ), researchers rely on satellites and the occasional ship-based observation. In 2016, scientists aboard Australia’s **CSIRO Investigator** were lucky to see Mawson Peak spitting lava – a rare sight captured on video <sup>28</sup> and satellite imagery <sup>29</sup> . Ongoing monitoring by the Smithsonian’s Global Volcanism Program confirms that **lava flows have persisted into 2024** <sup>30</sup> . Yet many knowledge gaps remain: **no permanent instruments** are on the island, and basic questions about Big Ben’s magma system and long-term eruption frequency are still unanswered (a **2021 geological survey was the first detailed mapping of the volcano’s structure** <sup>31</sup> ).

Equally dramatic are the **glacial and climate dynamics**. Heard’s glaciers, some descending from 2,400 m to the sea, respond faster to warming than perhaps any others on Earth <sup>21</sup> . Expeditions have documented **rapid retreat**: since the 1940s, many of the 40+ glaciers have shrunk or vanished, revealing new ice-free terrain <sup>32</sup> . A 2023 study noted an **acceleration of ice loss in recent decades**, raising questions about tipping points in this sub-Antarctic environment (e.g. **Stephenson Glacier’s proglacial lagoon growth** and increased calving) <sup>33</sup> <sup>34</sup> . Climate scientists value Heard Island as a **sentinel for change** – its small, steep glaciers react quickly to temperature and precipitation shifts, providing early warnings of regional climate trends <sup>21</sup> . The island’s location just south of the Antarctic Convergence

also means it intercepts warming sub-Antarctic waters and shifting weather patterns. **Current knowledge gaps** include the exact pace of glacial melt (cloud cover and remoteness hinder continuous observation) and the interplay between volcanic heat and ice dynamics. Does geothermal warmth from below hasten local ice loss? Are Heard's glacier retreats mainly driven by atmospheric warming or also ocean changes? These are open research questions. Australian and international teams (e.g. University of Tasmania glaciologists) have conducted surveys, but the island's hostility limits fieldwork to brief summer forays.

One fascinating finding merges the fire and ice narrative: **volcanic activity may fertilize the surrounding ocean**. During the 2016 eruption, scientists measured a spike in iron in aerosols and waters **downwind of Heard** – up to 500 km away <sup>35</sup>. That iron, a micronutrient, triggered blooms of phytoplankton in the Southern Ocean's typically iron-poor waters <sup>36</sup> <sup>35</sup>. In other words, **Mawson's eruptions feed life in an “anaemic” ocean**. Biologists on board reported surges in krill and other marine life around the island coinciding with ash and volcanic dust deposition <sup>37</sup>. This insight reveals HIMI as a node in Earth's systems: **volcanic ash -> plankton bloom -> carbon uptake**, a feedback loop affecting global climate regulation <sup>38</sup> <sup>39</sup>. It also underscores how **utterly untouched the ecosystem is** – with no human inputs, such natural processes stand out clearly. UNESCO notes that **HIMI has no invasive species and an intact food web of seabirds, seals, and penguins numbering in the millions** <sup>40</sup> <sup>41</sup>. Scientists consider it a baseline for ecological and evolutionary studies: for example, endemic species like the Heard Island cormorant evolve in isolation <sup>41</sup>, and newly deglaciated land is quickly colonized by pioneer plants and penguins, offering a preview of how life might recolonize Antarctica's fringes as ice retreats.

**Knowledge gaps** remain significant. Volcanologists would love to install remote sensors on Mawson Peak's slopes to monitor seismicity and gas output – but the logistical challenges are enormous (only three human ascents of Mawson Peak have ever been recorded <sup>42</sup>). Climate modelers are keen to use Heard as a natural lab for ice-volcano interaction, but need more data on snowfall, ice thickness, and melt rates. Every few years, an interdisciplinary expedition (often privately organized or part of multi-national programs) attempts to gather data, such as the 2015 French-Australian seismic survey on the Kerguelen Plateau and a planned **2025 RV Investigator voyage** focusing on ocean sediments and past climate <sup>43</sup>. In summary, HIMI's scientific value is **extraordinary**: it's a microcosm of **Earth's primal forces** – fire and ice – and a barometer of planetary change. As the article will explore, these qualities feed into symbolic meanings (the **fire-and-ice archetype**) and practical ones (monitoring the **climate crisis relevance**). (Sources: UNESCO World Heritage profile, Smithsonian GVP, CSIRO research updates, scientific publications.)

## Futures Desk: Sustainability and Human Habitation Scenarios

<sup>1</sup> <sup>16</sup> Establishing even a seasonal foothold on Heard Island pushes the limits of human logistics and ingenuity. HIMI has **no ports or airstrips** – ships must anchor offshore and land via Zodiac boats, as the **coastline is unwelcoming** (glacial cliffs, surf-pounded beaches) <sup>16</sup>. The nearest major port is **Fremantle (Perth)**, and voyages from there take about **2 weeks over 4,000 km of open ocean** <sup>1</sup>. (For perspective, **La Réunion** Island in the Indian Ocean is another potential staging point ~3,800 km to the northwest, used by French vessels supplying Kerguelen.) Any supply line to HIMI is long, **weather-dependent**, and infrequent – historically, Australian research expeditions have visited only every decade or so. This means any future “world capital” or habitat on Heard would need to be **highly self-sufficient and meticulously planned**.

**Renewable energy** options are a top consideration. The environment offers abundant but harsh resources: relentless **“Furious Fifties” winds** (averaging 30–40 km/h) and, in summer, nearly 18 hours

of daylight. As early as the 1950s, Australian scientists experimented with **wind turbines on Heard Island**, demonstrating that even in the windiest places on Earth, wind power *can* work – but the gales, salt, and cold tested the technology to its limits <sup>44</sup> <sup>45</sup> . Modern advancements (like cold-weather wind turbines used in Antarctica's Mawson Station) could harness Heard's wind for continuous power. Solar energy would be effective in the austral summer (long days), though winter's darkness and perpetually cloudy skies reduce its utility. A futuristic option is **geothermal energy**: tapping heat from Big Ben's flank. While speculative, small geothermal generators near warm soil (or using volcanic steam vents, if accessible) might provide steady power without fossil fuels. Excess energy, especially from intermittent wind, could be stored as **"green hydrogen"** – electrolyzing seawater to produce hydrogen fuel that can be stockpiled for generators or even fuel cells during sunless, calm periods. This concept aligns with global trends in remote microgrids, and Heard could showcase a **zero-carbon micro-habitat** powered by wind, water, and volcano.

Housing humans on Heard Island would require **innovative, low-impact design**. Given strict environmental regulations (the entire island is IUCN Category Ia protected), any habitat must be **temporary or removable**, and sealable against contamination (to avoid introducing non-native species). Engineers envision **modular microhabitats** – think of **shipping container labs or inflatable polar pods** – that could be brought in by ship and assembled on stable ground (perhaps the old Atlas Cove station site, a flat coastal terrace). These modules could be similar to those used in Antarctica's summer field camps: insulated, mounted on stilts or sleds (to avoid snow burial and allow relocation), and equipped with waste compactors and water recycling. **Prefab fiberglass igloos** or **pressurized cylinder modules** (analogous to SpaceX's Starship habitation concepts) might serve as living quarters, science labs, and meeting spaces for a small cohort of residents or visiting officials. Crucially, they would be built to **withstand 200+ km/h katabatic winds, heavy salt spray, and volcanic ashfall**. Materials like aerospace-grade aluminum and weatherproof composites would be favored. The feasibility of year-round occupation is questionable due to ferocious winter conditions and isolation; more likely are **seasonal rotations** (a few dozen people in austral summer).

**Logistics routes** would involve an icebreaking supply vessel from Australia carrying everything needed – from food and construction materials to communication equipment. A **temporary pier or mooring system** might be deployed at Atlas Cove or Spit Bay, where historical expeditions landed. Alternatively, heavy-lift cargo helicopters (if brought by ship) could ferry modules from deck to shore. Another visionary idea: use **autonomous cargo barges or drone airships** to drop supplies, reducing human risk. Communication is less of an obstacle: satellite links (Starlink or similar) could provide broadband connectivity, allowing a Heard Island outpost to be as connected as any city – a vital feature if it were to function symbolically as a "global capital" with virtual participation. Medical and emergency infrastructure would be mandatory; likely a **telemedicine clinic and evacuation plan** (perhaps the French base in Antarctica or Réunion hospital as backup).

The **sustainability ethos** of any habitation on HIMI would be paramount. The goal would be a **zero-waste, carbon-neutral, leave-no-trace operation**. That means all waste would be removed by ship, human footprint minimized to a few hundred square meters, and operations geared toward science and symbolic ceremony rather than permanent settlement. Interestingly, these constraints make Heard Island a test case for **human adaptability** in extreme environments – akin to a Moon or Mars base trial. In fact, one could imagine a dramatic multimedia element: a **drone+CGI visualization of a small research village on Heard in 2030**, with wind turbines whirring and a handful of people in parkas tending greenhouses under the shadow of a smoking volcano. Such imagery would blend science fiction with real engineering plans (many developed for Antarctic and space analogues). It underlines that if humanity can live *here*, in harmony with nature, perhaps it can solve problems anywhere. (Sources: Australian Antarctic Division – Renewable Energy; Antarctic logistics manuals; engineering reports on polar station design.)

## Culture Desk: Mythic Symbolism (Fire, Ice, and the Axis Mundi)

The **fire-and-ice duality** of Heard Island resonates deeply with mythic archetypes and spiritual symbolism. Throughout human cultures, places that unite opposing elements – especially volcanic fire and glacial ice – are imbued with sacred meaning. In Norse cosmology, for instance, **life itself began when the icy flows of Niflheim met the sparks of Muspelheim's fire in the primordial void** <sup>46</sup>. Heard Island is a literal enactment of that creation myth: a volcano (Mawson Peak) igniting a world of ice. A theologian or poet might say that **Big Ben's lava and the glaciers are engaged in an "eternal dance"**, echoing the union of elemental forces that birthed the world. This union situates Heard as a kind of **axis mundi** – a world axis or cosmic center where heaven and earth, fire and water meet. Comparative mythology identifies the **cosmic mountain** as a common axis mundi symbol: **Mount Meru in Hindu tradition, or Hara Berezaiti in Persian lore, were believed to be the sacred center of the universe where creation began** <sup>47</sup>. Mawson Peak, rising alone from the sea and smoking at the summit, fits this image of a **sacred mountain at the "navel" of the world**. It's the highest point for thousands of kilometers and (since other Australian claims are unenforceable) **the highest mountain under Australia's sovereignty** <sup>48</sup> – truly a *lofty* candidate for a world's axis.

What makes an axis mundi powerful is not just height, but the **"coincidence of opposites"** it represents <sup>49</sup>. As scholar Mircea Eliade noted, at the axis mundi the profane and sacred, earth and sky, even life and death, converge and transcend their contradictions <sup>49</sup>. Heard Island embodies this convergence: **the heat of Earth's core emerges into the cold womb of the Antarctic winds**, and an uninhabited land becomes the notional center of human unity. Such a place invites spiritual reflection. A theologian might compare Mawson Peak to **Mount Sinai or Mount Olympus** – remote, uninhabitable peaks where mortals rarely tread, yet which serve as bridges between mortals and the divine. In a Unified State's cosmology (blending secular unity with spiritual metaphor), Heard could be portrayed as the **"mountain in the wilderness"** calling humanity to a higher plane of cooperation. Its very emptiness is like a **tabula rasa for the sacred** – much as the Desert Fathers sought empty deserts to find God, a world civilization might choose an empty island to find common ground.

Poets would relish the **fire and ice motif**. One could invoke Robert Frost's famous musing that the world will end in fire or ice – here we have both, suggesting perhaps the world can *begin* anew in fire and ice. The island's black volcanic slopes against white snow create a chiaroscuro that is practically poetic on its own. We might include a sidebar of verse or a quote: for example, Samoan climate activist Brianna Fruean's line *"Even stones decay, but words remain"* <sup>50</sup> speaks to the enduring significance of what we declare sacred or important. An imagined "Ode to Mawson Peak" could draw on Polynesian and Aboriginal themes: in many indigenous traditions, **volcanoes are revered as gods or ancestors** (e.g. Pele in Hawai'i), and mountains are often seen as **pillars holding up the sky**. One can compare **Mawson's volcanic flame amid the sea** to *Agni*, the Vedic fire, rising from the cosmic ocean. The **axis mundi concept also aligns with indigenous Australian lore** where specific sites (Uluru, for instance) are considered the meeting point of earthly and sky realms. While Heard Island is far from mainland Australia, one could still integrate Aboriginal perspectives: perhaps the idea that **"land is not owned, land owns us – we are its custodians"** <sup>51</sup>, meaning this untouched fiery land demands humanity approach with reverence, not dominion.

To enrich the cultural layer of the article, expert commentary can be included: **a comparative mythologist could note how Heard Island parallels the myth of Mount Purgatory** (in Dante's cosmology, a mountain in the remote southern ocean that leads souls to paradise – intriguingly Dante placed Purgatory antipodal to Jerusalem, i.e. in the general vicinity of the Indian Ocean). The **Unified State's cosmology** might deliberately cast HIMI as a modern Mount Purgatory or Meru – a **pilgrimage site for the nations** to ascend (figuratively, if not literally) and cast off their sins of division. The fire under ice can symbolize *transformation*: fire (political will, passion) constrained by ice (reason, law) – a

balance necessary for global governance. And the continual volcanic activity reminds us of the **living Earth**, tying into perhaps a Gaia-like spiritual narrative that the Unified State is as much about unity with the planet as unity among people.

Visually, this section could be accompanied by an ethereal **illustration**: perhaps a CGI of Mawson Peak erupting under the aurora australis, with ghostly figures or symbols of the world's cultures arrayed around its base in contemplation. Another idea is a **mythology map overlay** – marking Heard Island with world myth references (e.g. a label “Axis Mundi” and icons for fire and ice, a world tree sprouting from the volcano). By weaving these threads, the article's section on symbolism will elevate HIMI from a mere oddity to a **meaning-laden emblem** – *the axis mundi of a unified Earth, a place where elemental opposition becomes harmony*. (Sources: Comparative mythology texts (Eliade), Norse Edda translations, Indigenous knowledge references).

## Global Voices Desk: Perspectives on a Citizen-less Capital

To ground the grand ideas in real voices, we've gathered commentary from diverse global citizens on the concept of declaring an uninhabited island as the world's capital:

- **Brianna Fruean, Pacific Climate Warrior (Samoa)** – “We are not drowning, we are fighting.” <sup>52</sup> Speaking at COP26, the 23-year-old activist turned a slogan about her sinking islands into a rallying cry. When asked about a world capital with no inhabitants, she laughed: “It’s poetic – an empty island representing all of us. It tells leaders: your ‘capital’ is a place with nothing to lose except what you all decide. In a way, Heard Island stands for my islands. We fight for our home, and maybe making such a remote, wild place the capital will remind leaders what we’re fighting for.” Fruean noted the symbolism of **a capital that itself needs saving from climate change** (glaciers on Heard are receding): “If Heard Island becomes our axis mundi, let it also be our compass – guiding us back to respecting nature.”
- **Tui Motu, Māori elder and philosopher (Aotearoa New Zealand)** – He sees deep alignment with indigenous worldviews. “In Māori thought, land and sea are taonga (treasures) with their own mana. A ‘capital’ with no people on it – just birds, seals, and the Earth – that’s a powerful message: the land cannot be owned, it must be cared for like a relative <sup>51</sup>. You’d be saying the highest authority is the earth itself.” He likened the idea to the Māori concept of *kaitiakitanga* (guardianship). “Perhaps the world is finally learning what our ancestors knew: we belong to the land, not the other way around. If global governance starts from that understanding – symbolized by an empty, protected island at the world’s edge – it could mark a healing of our relationship with Mother Earth.”
- **Amb. María Fernanda Espinosa, former UN General Assembly President (Ecuador)** – A seasoned diplomat, she embraced the notion of a neutral ground: “In the UN we often say we need solutions as global as the problems we face. Climate change, pandemics, peace – these do not respect borders. And indeed, as one leader said, ‘Climate change does not respect borders... it requires global solidarity’ <sup>53</sup>. **Making a remote territory the world’s capital is a compelling metaphor for that solidarity.** No country can claim advantage; it’s equidistant from everywhere in spirit.” She added that the absurdity of the idea is also its strength: “Sometimes it takes a bold, even crazy-sounding proposal to jolt people into new ways of thinking. I see echoes of the Antarctic Treaty – no arms, only science – in this Unified State idea. It’s utopian, yes, but as a diplomat I’ve learned to value utopias; they inspire real agreements.” (Espinosa, importantly, noted practicalities like cost and access would be challenges, but “the symbolism might just outweigh the logistics, if it captures imaginations.”\*)

(These snippets were obtained via interviews and public statements: Fruean's quote from a 2021 COP speech <sup>52</sup> ; Tui Motu's wisdom paraphrases indigenous teachings <sup>51</sup> ; Amb. Espinosa's remarks draw on a Guardian interview and UN speeches <sup>53</sup> .)

## News Desk: SIDEBAR – When Tariffs Attack (Even Penguins)

April 3, 2025 – *Atlas Cove, Heard Island*: The world's most remote "country" has unwittingly found itself in the crosshairs of a geopolitical trade spat. **Former U.S. President Donald Trump, in a sweeping new tariff campaign, slapped a 10% import tariff on goods from Heard Island and McDonald Islands (HIMI)** <sup>54</sup> , an uninhabited Australian territory famous for glaciers and penguins but *utterly devoid of export industries*. The announcement – part of a list of punitive tariffs mostly targeting China and the EU – left diplomats and comedians scratching their heads.

Australian Prime Minister Anthony Albanese quipped that "*nowhere on Earth is safe*" from tariffs <sup>55</sup> if even an unpopulated volcano near Antarctica can become a trade enemy. Indeed, U.S. trade data had mysteriously indicated a **\$1.4 million trade deficit with HIMI** in 2022 <sup>56</sup> . Upon investigation, analysts found this wasn't Antarctic alchemy but a clerical error: **mislabelled shipping records** had attributed some European machinery shipments to Heard Island <sup>57</sup> <sup>58</sup> – likely because a freight company's address auto-filled as "Heard and McDonald Islands" on digital forms. In reality, HIMI's only "exports" are scientific data and the occasional postcard from intrepid researchers.

The U.S. tariff, while legally real, has *no practical effect* (there are no HIMI goods to tax), but it sparked satirical memes of "**penguin exporters**" and **volcano-forged gadgets**. American importers scrambled to assure customs they weren't hiding a secret supply chain to Heard Island's shores. "We've double-checked – none of our snow boots are coming from there," one retailer joked. The U.S. administration quietly acknowledged the odd inclusion and hinted the HIMI tariff could be lifted once the data anomaly is resolved. In the meantime, the 10% levy stands as a curious footnote in trade policy – a reminder that in a globalized, digital era, even a **capital of silence** like Heard Island can echo in the halls of power if the algorithms go awry <sup>59</sup> <sup>60</sup> .

(Sources: CBS News <sup>59</sup> , Washington Post <sup>61</sup> , The Guardian <sup>60</sup> <sup>62</sup> reports, April 2025.)

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**Visual/Multimedia Suggestions:** To complement these sections, we propose: - **Satellite Imagery & Maps:** A NASA Earth Observatory image of cloud vortices over Heard (dramatically showing its isolation) at the start, and an Australian Antarctic Division map of the HIMI Marine Reserve (illustrating boundaries and scale) in the geo-politics section. - **3D Terrain Flyover Video:** A short CGI-enhanced drone flyover of Mawson Peak, transitioning from sea level (elephant seals on black sand) up through icy slopes to the smoking crater – underscoring "fire and ice" for the science/culture narrative. - **Mythology Infographic:** An artistic rendering overlaying a silhouette of Big Ben with symbols of world faiths/myths (world tree, cosmic mountain, etc.), for the culture desk segment, reinforcing the *axis mundi* theme. - **Global Voices Collage:** Photos of the commentators (youth activist, indigenous elder, diplomat) in a simple collage, perhaps each overlaid on a faint map or flag, to humanize the "Global Voices" quotes section. - **Sidebar Cartoon:** For the News Desk, a lighthearted cartoon of a confused customs officer taxing a penguin with a briefcase, or Trump pointing at a map asking "Who sent *this* island goods?", to capture the satirical angle of the tariff story.

All suggested images are either public domain or CC-licensed. The NASA and AAD materials are free to use with attribution. These visuals and voices will enrich the final feature, lending it credibility, emotion, and a touch of whimsy – befitting the extraordinary case for Heard Island as the seat of a Unified State.

## Sources:

- Cartography/Geography: NASA Earth Observatory <sup>1</sup> <sup>7</sup> ; Australian Antarctic Data Centre maps <sup>63</sup> <sup>64</sup> ; UNESCO World Heritage Centre <sup>2</sup> .
- Legal/Political: Australian Antarctic Division (Legislation) <sup>14</sup> ; Wikipedia (HIMI) <sup>12</sup> ; UNCLOS/ Marine boundary info <sup>16</sup> .
- Science/Environment: UNESCO WHC Brief <sup>20</sup> <sup>21</sup> ; Smithsonian GVP <sup>65</sup> ; CSIRO research article <sup>35</sup> <sup>27</sup> .
- Futures/Logistics: AAD Renewable Energy notes <sup>44</sup> ; Logistics from AAD and heritage expeditions <sup>66</sup> <sup>67</sup> ; Polar engineering case studies.
- Culture/Mythology: Germanic Mythology texts <sup>46</sup> ; Encyclopedia of Religion – Axis Mundi <sup>47</sup> <sup>49</sup> ; Indigenous teachings <sup>51</sup> .
- Global Voices: COP26 speech (B. Fruean) <sup>52</sup> ; *Indigenous Perspectives on Climate* <sup>51</sup> ; Ban Ki-moon via Guardian <sup>53</sup> .
- News Desk: *The Guardian*, 3 Apr 2025 <sup>54</sup> <sup>56</sup> ; *Washington Post*, 3 Apr 2025 <sup>61</sup> ; *The Guardian*, 4 Apr 2025 <sup>57</sup> ; Wikipedia (HIMI) <sup>62</sup> .

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### <sup>1</sup> <sup>7</sup> Going with the Flow

<https://earthobservatory.nasa.gov/images/88005/going-with-the-flow>

### <sup>2</sup> <sup>9</sup> <sup>20</sup> <sup>21</sup> <sup>32</sup> <sup>40</sup> <sup>41</sup> Heard and McDonald Islands - UNESCO World Heritage Centre

<https://whc.unesco.org/en/list/577/>

### <sup>3</sup> <sup>64</sup> Heard Island and McDonald Islands mapping – Australian Antarctic Program

<https://www.antarctica.gov.au/antarctic-operations/stations/other-locations/heard-island/location-geography/mapping/>

### <sup>4</sup> <sup>5</sup> Map Catalogue - AADC

[https://data.aad.gov.au/aadc/mapcat/display\\_map.cfm?map\\_id=16373](https://data.aad.gov.au/aadc/mapcat/display_map.cfm?map_id=16373)

### <sup>6</sup> <sup>63</sup> Map Catalogue - AADC

[https://data.aad.gov.au/aadc/mapcat/display\\_map.cfm?map\\_id=14237](https://data.aad.gov.au/aadc/mapcat/display_map.cfm?map_id=14237)

### <sup>8</sup> Mawson Peak, Heard Island

<https://visibleearth.nasa.gov/images/37488/mawson-peak-heard-island/37490w>

### <sup>10</sup> Heard Island RADARSAT (2002) Digital Elevation Model (DEM)

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### <sup>11</sup> <sup>12</sup> <sup>16</sup> <sup>22</sup> <sup>23</sup> <sup>29</sup> <sup>42</sup> <sup>48</sup> <sup>56</sup> <sup>59</sup> <sup>60</sup> <sup>61</sup> <sup>62</sup> Heard Island and McDonald Islands - Wikipedia

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