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## **Australian Government**

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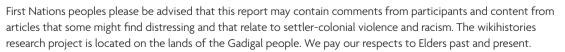


### **EXECUTIVE SUMMARY** INTRODUCTION O1 WHAT AUSTRALIAN PLACES ARE INCLUDED IN WIKIPEDIA? How does Wikipedia represent Australia

as a place? Which language edition has the most

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HOW AUSTRALIAN PLACES ARE REPRESENTED ON WIKIPEDIA

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his year, the wikihistories team set out to understand how well Wikipedia represents

Australian places and what kinds of editing practices drive those representations.

Examining 35,000 articles about Australian places and interviewing volunteer editors, we found that English Wikipedia reflects an anthropocentric and neo-colonial image of Australia as a place.

English Wikipedia's representation of Australian places is anthropocentric. The further you move from the cities, the fewer articles there are. Across Australia's arid centre, there are very few articles indeed. Not only are there more articles about Australia's large cities on English Wikipedia, but editors devote considerably more attention to them.

English Wikipedia's representation of Australian places is neocolonial rather than conservative. The cities, towns, and administrative divisions founded by European settlers guide the creation, editing and reading of Wikipedia articles. First Nations, ecological, or cosmopolitan senses of place need to fight or negotiate to find room within this nationalist

European structure. In contrast, there are articles about fictional Australian places on English Wikipedia including "Erinsborough" from Neighbours.

Interviewing editors and examining editing practice we found that editors have differing motivations for editing, beliefs about Wikipedia, reflexivities about their own position, commitments to diverse perspectives, and relationships to the places they edited articles about. This heterogeneity exists within an editor cohort dominated by tech-savvy, white, educated men, echoing previous studies on Wikipedia editor demographics.

Affective and interpersonal relations drive editing practice around place articles. Emotional drivers include: editors' feeling pride in a place and wanting to write about it; the feeling of shame or defensiveness about settler-colonial history; and experiences of discomfort in what can and cannot be written about on Wikipedia. Wikipedia editors sometimes collaborate genially with one another, but many editors reported how conflict with other editors shapes how they write about place.

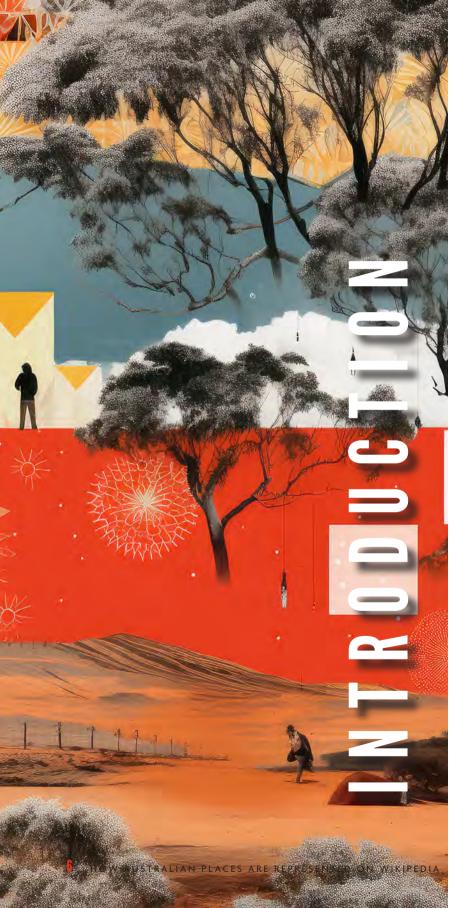
Controversy and conflict are the result of disagreements over the representations of places and are a common occurrence on Wikipedia. Among the most contentious issues on Australian place articles included republicanism, colonisation and the inclusion of First Nations place names. Many Wikipedia editors' experiences of contentiousness include burning out, running out of energy, and being drained.

Some editors avoid contentious articles entirely, reducing the numbers of those editors (especially those with experience) editing such articles. Editors often avoid including negative aspects of a place (e.g. discriminatory Australian government policy and violence against First Nations peoples) in articles when it is uncomfortable. Others see it as their responsibility to include First Nations' perspectives, even though they report being met with heavy resistance.

The result is that although there is enthusiasm about including marginalised voices and filling in gaps on Wikipedia, this is being met by a spectrum of reluctance, hesitation, discomfort, sanitisation and also active resistance and racism. Understanding what Wikipedia's strengths and weaknesses are, and how knowledge is produced on the platform is

vital to evaluating the information it produces. The site and its associated platforms are core components of the knowledge ecosystem, used to train large language models like ChatGPT and as a data source for Google infoboxes and voice assistants like Siri and Alexa. As a result, Wikipedia's representations can have significant effects on what is known and understood about Australian places.

For Australian readers the research provides insight into the contention around the history and understandings of Australian places and the markers of "Australianness". For government policymakers there are implications for education curricula, especially in incorporating critical digital literacy skills in using Wikipedia and understanding its role in the wider digital and knowledge ecosystems. And, for Wikimedia Foundation and Wikipedia editors there are significant implications for policy and practice in relation to engagement with First Nations content and experience.



## 'THE LAND AND SEA NOT EMPTY SHED THAT MAN HAS BUILT. THERE'S SOMETHING IN IT'

—Matthew Dhulumburrk with Mark Dreyfus (Northern Land Council), quoted in Rose (1996, 8)

e navigate to, from, around and inside places using our digital devices today. Places are increasingly datafied. They are "made of bits as well as atoms" (Graham and Zook 2013). These digital representations of place sit alongside the knowledges that enliven place. Whereas knowledge exists in the body and in the flow of everyday practice, information is an abstraction. Information about places are selective representations of knowledge that can never fully embody what we know. Despite this, information - increasingly digitised - is powerful in driving what places become. Place information can influence property prices, tourism, quality of life and our sense of belonging.

In our digitally mediated experience of the everyday, a single platform provides much of the data used to explain and augment place: Wikipedia. Wikipedia is consistently in the top ten most popular websites in the world. With almost 7 million pages, 1.5 billion unique device visits and 13 million edits per month, English Wikipedia is the largest and most-read reference work in history. It is built and maintained by the contributions of its volunteer editors and funded through readers and other donors.

Wikipedia is the encyclopedia that "anyone can edit" at any time. These affordances lead many to believe that Wikipedia covers everything. But Wikipedia hasn't covered everything yet. What's more: we can see trends in what Wikipedia

doesn't cover (or covers weakly). These trends indicate Wikipedia's biases... its "known unknowns".

Previous studies of Wikipedia articles about places have demonstrated that Wikipedia tends to cover fictional places from popular culture more extensively than large parts of the Majority World. Professor Mark Graham from the Oxford Internet Institute found in 2009 that "there [were] more Wikipedia articles written about the fictional places of Middle Earth and Discworld than about many countries in Africa, Asia, and the Americas" (Graham, 2009). Subsequent studies found that Wikipedia was reinforcing global inequalities as the platform was far more likely to represent places, people and topics from the Global North than the Global South (Majority World) (Graham et. al. 2014).

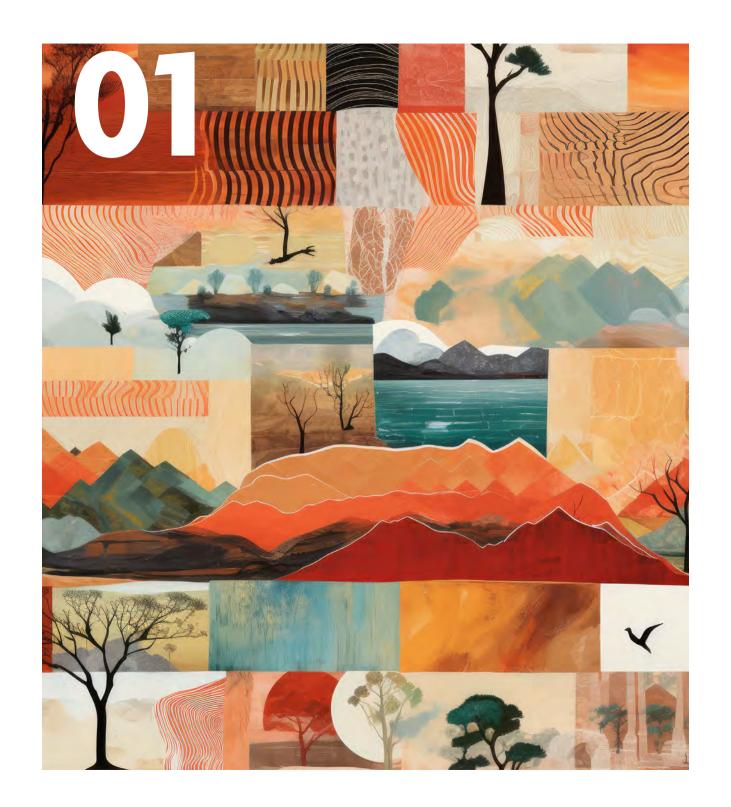
But what of a single country like Australia? How well does Wikipedia cover Australian places? Are there any trends in what are covered well, less well or not at all? What explains these differences if "anyone can edit" Wikipedia?

Geographical scope is rarely studied at the national level, but this is exactly the focus of the wikihistories project, an Australian Research Council-funded Discovery Project investigating how Wikipedia represents Australian people, places and events. Last year we examined how Wikipedia represents Australian people (Falk, Ford, Tall and Pietsch 2023). This year we examine how Wikipedia represents Australian places in a large-scale mixed methods analysis. This included an analysis of over 35,000 articles about Australian places on English Wikipedia and over half a million edits to those articles. It also included in-depth interviews with a number of editors of Australian place articles and the analysis of selected articles' content.

The objectives of the wikihistories project are to analyse the scope of entries relating to Australia on Wikipedia in order to understand who and what is systematically omitted. We do this because representations of people, places and events on Wikipedia are important. Wikipedia contributes to the nation's story. How Wikipedia represents places influences our relationships to place. Wikipedia is the world's premier source of facts and has a significant impact on how people view the world.

We also do this because, although Wikipedia is generally a high-quality source on people, places, events and things, it is not perfect. Like all sources, it represents a partial or biased view. Understanding this partiality is crucial to being able to evaluate what Wikipedia tells us about the world and bring a critical lens to the information that is based or trained on Wikipedia, such as generative AI tools like ChatGPT, Google search and infoboxes, and voice assistants like Alexa.

When searching for information on Wikipedia, it is helpful to understand why places are represented in the way that they are. It's helpful because Wikipedia articles about places don't necessarily represent all views connected to a place. Instead, Wikipedia's information is the (current) result of negotiation among editors and their affective responses to the subjects they are writing about. In addition to care, deliberation, responsibility and passion for place, Wikipedia itself is a place rife with conflict and derision. Learning that Wikipedia articles about places are shaped as much by technical affordances as social and personal relations is key to understanding what Wikipedia produces.



# WHAT AUSTRALIAN PLACES ARE INCLUDED IN WIKIPEDIA?

35,077 Australian places have an article on English Wikipedia. We calculate this figure using Wikidata's query engine. Using Wikidata, we find every physical location or geographic feature that has the property country:Australia. Using Wikidata, we retrieve coordinates for each place. Using English Wikipedia, we retrieve the text of each article and the number of edits.

It is important to note that together, Wikipedia and Wikidata construct space in a particular way. According to this perspective, space is made up of physical locations and geographical features. Each feature or location is assigned a Wikidata ID, a Wikipedia article, and a set of coordinates. In this familiar model of space, the earth is a continuous surface, upon which individual places can be precisely located.

Wikipedia's spatial system is typical, and interoperates with other digital systems. For example, a visitor to the Wikipedia page for Townsville can view data derived directly from the Australian Bureau of Statistics, such as the population or area of the city. If the visitor clicks on Townsville's co-ordinates, they will be taken to the city's geohack page, which connects the Wikipedia article to dozens of other compatible systems, such as Google Maps and NASA Worldwind. If the user clicks Tools — Wikidata Item, they will arrive at Townsville's Wikidata page, which links them to other-language Wikipedia articles about Townsville, and also links to Townsville's record in other databases, such as VIAF, GeoNames and the National

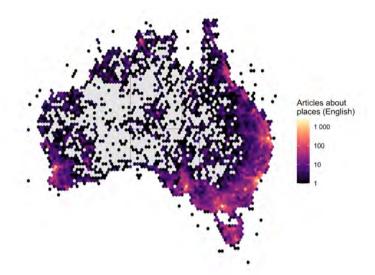
<u>Library of Latvia</u>. Wikipedia is part of a vast network of systems that all cooperate to construct the space of the Earth in a certain way.

This way of constructing space is not the only way. In particular, it is inconsistent with many of the ways that First Nations people construct space. We will return to these differences later in the report.

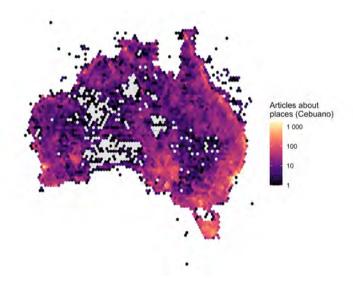
## How does Wikipedia represent Australia as a place?

English Wikipedia constructs Australia from a human, and more specifically white-settler perspective. Figure 1 shows the distribution of place articles across the continent of Australia. There are many articles about the large capital cities of Perth, Adelaide, Melbourne, Sydney and Brisbane, whose central areas appear as bright yellow hexagons on the map. There may be more than 1000 articles describing places in each of these cities. The further you move from the cities, the fewer articles there are. Across Australia's arid centre, there are very few articles indeed.

It may seem obvious that Wikipedians should focus their attention on cities and other places of human habitation. But this is not the only way. Figure 2 shows the distribution of Australian places in Cebuano Wikipedia. As shown in Figure 5,



**Figure 1:** All Australian places in English Wikipedia that lie on or near the Australian mainland. Each hexagon represents an equally-sized zone of the earth's surface, and is coloured to represent how many articles are written about places in that zone.



**Figure 2:** Like Figure 1, but for Cebuano Wikipedia. Since Cebuano Wikipedia focuses on geographic features rather than human habitation, its place articles are more evenly distributed across the continent.

discussed later in this report, Cebuano has a much stronger focus on natural features than English Wikipedia does. Since natural features such as rivers, knolls and valleys are distributed evenly across the landscape, Australian places in Cebuano Wikipedia are distributed more evenly across the continent.

The human focus of English Wikipedia is accentuated in Figure 3, which visualises edit activity. Not only are there more articles about Australia's large cities on English Wikipedia, but editors devote considerably more attention to them. There are numerous small regions near the big cities where human editors have made more than 100,000 edits. To put this in perspective, the total number of human edits in the dataset is 1,497,647. A few regions with more than 100,000 edits each form a significant part of this total.

In sum, English Wikipedia is strongly anthropocentric. The places that matter are human places. More than this, they are white-settler places. English Wikipedia's focus is on the cities, states and country of Australia, as established by predominately British settlers in the Eighteenth and Nineteenth Centuries.

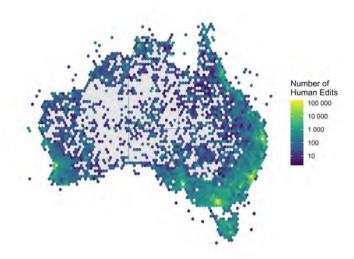
## Which language edition has the most Australian places?

Wikipedia is available in more than 300 languages. You might expect that English Wikipedia would have the most articles about Australian places—but you'd be wrong. Figure 4 shows that Cebuano Wikipedia has by far the largest number of articles about Australian places. Tens of thousands of Australian places, such as Molecap Hill,

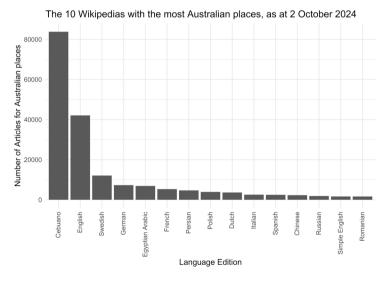
<u>Dindum Island</u> and <u>Mount Finlayson</u> <u>Range</u>, have articles only in Cebuano Wikipedia. Why is this?

It is *not* because the speakers of the Cebuano language in Philippines are obsessed with Australian geography. It is because virtually the whole Cebuano Wikipedia has been written by a bot, <u>lsibot</u>, programmed by the Swedish linguist Sverker Johansson. 1sjbot was historically responsible for a large portion of Swedish Wikipedia too, and despite efforts by Swedish Wikipedians to delete its formulaic articles, lsjbot is still responsible for many Swedish articles about obscure Australian places, including <u>Dawes National Park</u> and Lake Baker. The story is similar on Egyptian Arabic Wikipedia. Egyptian Arabic Wikipedia contains thousands of articles about Australian places because of one editor, Mahar Asaad Baker, who describes in a published booklet how they wrote 1.6 million articles by downloading data from Wikidata and converting it into Masri text for the site.

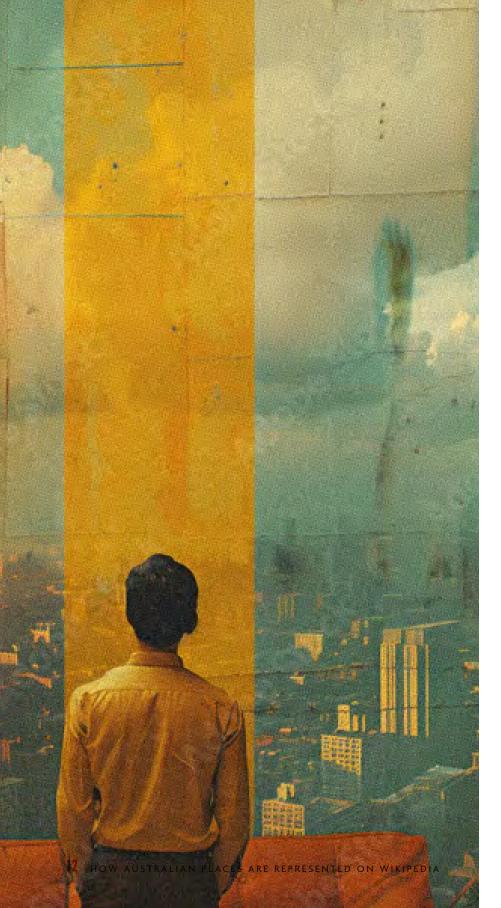
How is it possible for simple software to generate so many factually accurate articles about Australian places? Read any article by 1sjbot, and you will see how thoroughly geography has been datified in the 21st century. A global database, geonames.org records basic data about millions of place names. lsjbot browses geonames.org to find places without Wikipedia articles. When it finds a missing article, 1sjbot extracts basic information from geonames.org, such as the type, name, and co-ordinates of the place. The bot then combines the basic information with publicly-available climate data



**Figure 3:** This map counts the number of edits rather than the number of places in each hexagon. English Wikipedia's editors focus their attention overwhelmingly on metropolitan centres and surrounding regions.



**Figure 4:** The Cebuano and Swedish Wikipedias have many articles written by a software program, Isjbot. Swedish Wikipedians have in recent years deleted most of Isjbot's articles, but the small community of Cebuano editors in the Philippines have not done so in their encyclopaedia.



from NASA Earth Observations.

datasets, and uses this climatic map to determine the place's Köppen climate classification. Is jbot takes advantage of geospatial data to create articles about the earth's physical geography.

We will see that the human editors of English Wikipedia describe places more humanistically.

## What is included in articles about Australian places?

To see how Wikipedians describe individual places, we closely analysed three articles at three geographical scales: the national (Australia), state (Tasmania) and local (Katoomba).

All three follow a similar structure, foregrounding economics, politics and geography. A key function of each article is to locate each place in relation to other political and economic entities on the surface of the earth. The Infobox locates each place politically and physically: a map; locating coordinates, some information about the relevant government for the area. The first few paragraphs-the 'lead section'-is crucial: several editors we spoke with suggested that most people only read the lead section so it is the section that must do the heavy lifting. For these three articles, the lead section mentions the place's geographical location, history, and notable characteristics. Notable characteristics are typically economic or political. For instance, Katoomba "is a base for bush and nature walks," while Australia is "a major non-NATO ally of the United States" To prove the notability of these facts, Wikipedians often rank

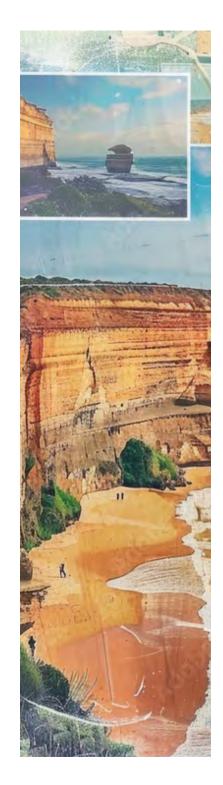
them. For instance, Tasmania is the "most decentralised state in Australia" with 42% of its land earmarked as "protected", while Australia has "one of the highest per capita incomes globally" and ranks "highly" for quality of life, health and education, and civil liberties.

The article headings also contribute to locate each place in space and time: history, geography, demography, culture. The Australia and Tasmania pages have sections on government and economy, the Katoomba page includes sections on tourism-a major industry in Katoomba-and heritage listings. This small sample suggests that Wikipedia's editors are primarily focussed on locating and ranking places on the surface of the globe. What matters most is how a place fits into the geographical and political divisions of the human world. On the one hand, this is an objective focus—the meaning of a place to its inhabitants is relatively unimportant. On the other hand, this is an anthropocentric focus—the meaning of a place to non-human entities is at best only secondary.

We also looked at another kind of Australian place representation: that of fictional Australian places. The category for 'Fictional populated places in Australia' contains 19 places. Three have their own article: Erinsborough, the suburb of Melbourne where TV soap 'Neighbours' is set; Mount Thomas, the rural setting of TV show 'Blue Heelers', and Summer Bay, the coastal town where TV soap 'Home and Away' takes place.

There is also the category 'fictional locations in Australia' of which there is only one: the Speewah. While there is a Speewah property in the Northern Territory, "the Speewah" refers to 'an imaginary Australian cattle station or place used as a setting for tall stories of the outback' (Knowles 2006). The Speewah "moves", according to the needs and contexts of the storyteller. It is an idea that has some resonances with how Australian place articles themselves function on English Wikipedia.

THIS SMALL SAMPLE SUGGESTS
THAT WIKIPEDIA'S EDITORS ARE PRIMARILY
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WHAT MATTERS MOST IS HOW A PLACE FITS
INTO THE GEOGRAPHICAL AND POLITICAL
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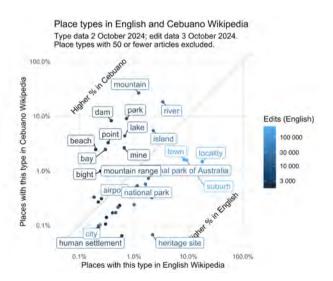




## WHAT EDITING PRACTICES DRIVE THIS PARTIALITY?

f we compare Cebuano and English Wikipedias, we see that human and bot editors have different priorities. Broadly speaking, Cebuano Wikipedia is bot-authored, while English Wikipedia is human-authored. In English Wikipedia, places of human occupation make up a bigger proportion of the total. Towns, localities, cities, urban parks and villages all make up a larger proportion of the place articles in English Wikipedia than in Cebuano Wikipedia. By contrast, in bot-authored Cebuano Wikipedia, geographical features such as mountains, lakes, bights and hills make up a much larger share of the Australian place articles. This difference is even more pronounced when we consider edit statistics on English Wikipedia. Consider articles about cities. Cities account for only 0.24% of the Australian places on English Wikipedia (0.10% in Cebuano), but they have received 5% of the human edits. Not only are human editors more likely to create articles about places with a strong human connection. They are also more likely to spend their time editing them.

English Wikipedia is strongly anthropocentric, at least compared to the geographical databases that form the basis of bot-authored Cebuano Wikipedia. As we saw in the close analysis of articles for Australia, Tasmania and Katoomba, English Wikipedia prioritises human over physical geography.



**Figure 5:** This shows all the types of places that have at least 50 articles about them in English and Cebuano Wikipedia. The types are positioned on the graph according to the percentage of articles of that type in the dataset. Types below the line have a higher proportion in English Wikipedia than in Cebuano Wikipedia, and vice-versa. The brighter blue the label, the more often places of that type have been edited in English Wikipedia.



## Who edits Wikipedia articles about Australian places?

This research is the first to engage with who edits articles about Australia on English Wikipedia. To do so is inevitably challenging. Wikipedia editors contribute under pseudonyms (called usernames) and, in some instances, "anonymously" (where edits are represented using their IP addresses). Participants described experiences where they were unsure whether, in contentious debates, they were arguing with a group of people or one person using a variety of usernames. The latter is called sockpuppetry and, even though it is forbidden on Wikipedia, it is difficult to control. Although not involved in sockpuppetry, at least one editor involved in this project has two usernames. Anonymity is taken seriously. Charlie<sup>1</sup> suggested that other Wikipedians may not want to participate in the research as it would reveal their identity to the research team. Some other participants were careful about mentioning other people's usernames and asked us not to mention that they had to the editor in question.

The Wikipedians we spoke with had some assumptions about who edited Australian place articles on Wikipedia: the dominant suggestions were that they were white men across a range of ages who were tech-savvy, had access to a computer and were well-educated. "Wikipedia is overwhelmingly white, and then, within that, it's overwhelmingly white male," Ellis said. Gabriel and Lucas said the same thing, both adding they felt Wikipedia editors were generally "conservative-leaning." In terms of ages, both David and James "assum[ed]" Wikipedia editors were men in their 30s and 40s, with David adding that Wikipedia had

"always been attractive to university students." Conversely, Blake—who is one of the few editors interviewed for this research that attends offline Wikipedian gatherings—and Lucas felt a significant proportion of editors contributing to Australian place articles were retirees.

Available time and tech savviness were common suggestions. James argued that Wikipedia "favoured people that either had a lot of time on their hands or [are] tech savvy." To participate in Wikipedia, Ellis said, you need a computer, "some level of education" and regular access to the Internet. With that said, even Wikipedians can't be positive as to who is contributing. After Jack had described who he thought edited Australia place articles, he concluded "but maybe that's not true". Nate was equally unsure. "Sometimes I don't know how old they are. I don't know whether they're male or female. I don't know what they do when they're not editing Wikipedia," he said.

The tech-savvy, white, educated and men-dominated demographic suggested above was reflected in our interview cohort. One participant identified as a woman and one participant identified as non-binary. As Ellis and James suggested, the people we spoke with were technologically adept: most interviews were conducted over Zoom and, as the interview progressed, the participant would often simultaneously check Wikipedia revision histories, their edits, or a relevant Wikiproject throughout to assist in answering questions. David made an edit to Wikipedia as we were speaking. Interview participants were academics, librarians, postgraduate students, lawyers, high school teachers, bloggers, community workers, and store managers, although several are retired now. Two had PhDs and a majority have a university education.

The people we spoke with are not homogenous. There is a picture of Wikipedia editors that has emerged in recent years. In this picture, Wikipedians are rigid, inflexible about enforcing Wikipedian policy, and resistant to other ways of producing knowledge outside of a rationalist, Eurocentric, written source-based approach. What emerged in the research is

more complex. The editors we spoke with encompassed a wide range of positions on how and what Wikipedia should be. Certainly, a few were very committed to rules and Wikipedia policy. Conversely, several were aware of common perceptions about Wikipedians and were reflexive about their position and practice. As Ellis described,

I'm bringing my own unconscious biases to everything I do. I can't change the fact I'm a white, middle-aged, middle-class male. Okay, no matter what I try to do, that's always going to follow my thinking. So yeah.

But, you know, you do the best you can.

Jack was similarly aware of how his experience as a white man may influence his editing practice. Finally, Gabriel and Lucas were openly interested in broadening Wikipedia through their editing practice and representing marginalised aspects of place, such as queer, disabled and First Nations histories and experiences of a place. To make things even more complex, some people we spoke with demonstrated a mix of the above attitudes:

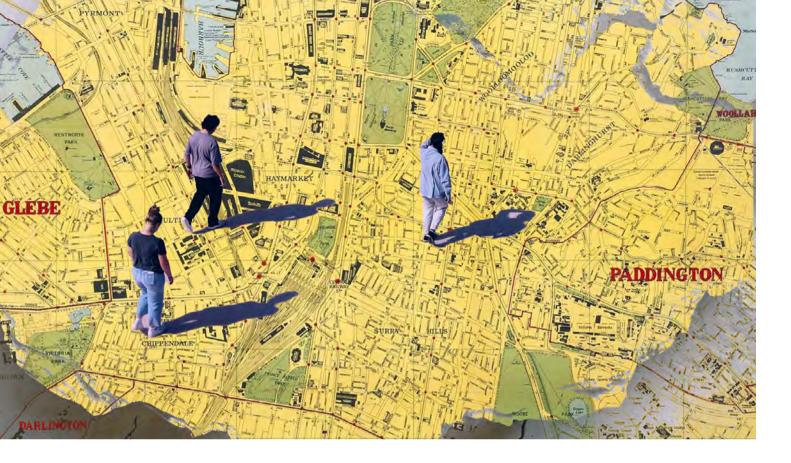
on one hand, while simultaneously acting to resist the incorporation of First Nations placenames on the other, as described later in the report.

concerned to support diverse perspectives

## Why do Wikipedia editors edit Australian place articles?

For some people, editing a Wikipedia page about an Australian place is personal: they are writing about a place in which they live now and/or grew up. James has been editing Wikipedia for 20 years and started editing through a mixture of curiosity and interest in Wikipedia's new technology. An equal motivation, however, was "a sense of pride. Sort of liking Tasmania, liking living there, wanting Tasmania to be presented well". Gabriel described editing the Tasmania page as editing about something "close to my own heart". For Jack, editing Wikipedia is, in some ways, a conversation he is having with his younger self: "I add stuff to Wikipedia that I think I wish I knew about," he said.

<sup>1</sup> Participants have been de-identified for this report. All names are pseudonyms.



Some Wikipedians edit Australian place articles as part of their usual Wikipedia practice and not about an interest in a specific place. Charlie is interested in demographic data and so will update multiple place articles when new Census data is released. Likewise, Nate focuses on copyediting across a number of articles, fixing errors in spelling, punctuation or appearance.

For other editors, there is a sense of Wikipedia's role in the wider knowledge ecosystem and the "big responsibility of Wikipedia," as Blake described it. Blake recounted once hearing Siri, a voice assistant, tell "something really awful like, you know, it'll say 'Oh the demonym of Tasmanians is, you know, two heads." His response was inflected with personal responsibility: "I panic and go 'Oh is that on Wikipedia?!." It's one of the reasons Blake keeps an eye on all the "state" pages, including Tasmania. Judy has a longer-term view and describes her commitment to ensuring Australian places, particularly smaller places, are represented on the Internet and for posterity. Judy treasures almanacs and "old gazetteers" and

feels that Wikipedia has similarities: "I'm leaving the equivalent thing behind, that this stuff will survive me."

The motivations, practices, and experiences of editing Australian place articles vary according to the place and whether or not the article is a "main page". Bill and David both pointed out that editing practices for main pages—such as Australia or Tasmania—are different to working on smaller pages. Not only are main pages more contentious, they also often "attract a certain sort of edit and edit style" such as small alterations to expression or punctuation, rather than significant new contributions, mostly as a result of how long the article has existed in its current form and its size.

The variety in editing practice is evident when examining the analysed pages. Of all the Katoomba article editors interviewed, only one had a personal connection to Katoomba. All other editors were "practice-focused" editors: they update demographic data across many articles; they focus on copyediting rather than content; or they tend

to pop a fact into any Wikipedia page if they come across something interesting in their everyday reading. In these instances, their Wikipedia foci and practices led them to edit to the Katoomba page. The Australia article editors interviewed for this research were usually high-edit Wikipedians with extensive experience and have contributed to the page—among many others—at some point.

The editors of the Tasmania page who participated had more placially-specific motivations for contributing to the page. All were Tasmanian.

who participated had more placially-specific motivations for contributing to the page. All were Tasmanian.

As discussed above, David, Gabriel and James mentioned pride in and love for Tasmania as motivations for contributing to the article.

Gabriel and James also pointed towards a perception of Tasmania as underrepresented on Wikipedia and in Australia generally. Tasmania, Gabriel said, is an "under-served topic" and can "often be completely forgotten about by the rest of this country."

Only one of the Tasmania page editors still lives in Tasmania, a fact that did not surprise any Tasmanian interviewed for this research. "All of my friends left," said Ellis. David, James and Blake suggested a similar experience. When asked whether contributing to the Tasmania Wikipedia page was a dimension of his experience of having migrated away from Tasmania, Ellis said it was one of his initial motivations to become involved. David didn't say that, exactly, but pointed out "as often happens in a diaspora situation, in some ways it becomes more important after you leave." Unlike the contributors to the Australia and Katoomba page, Tasmania page editors interviewed for

this research were more personally connected to the topic, were more interested in Wikipedia as a medium of asserting what they saw as underrecognised aspects of a place, and—in some instances—used their work on Wikipedia as a tangential but real ongoing connection to place.

## What drives conflict around Australian places?

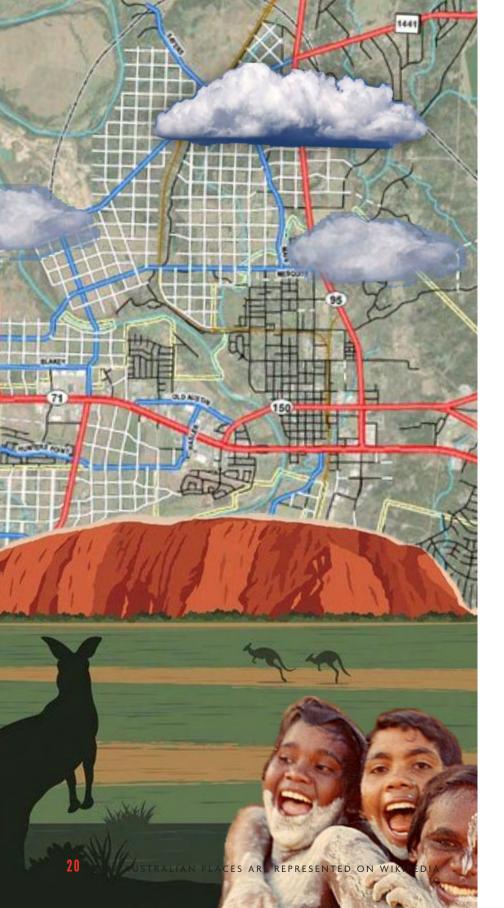
Some Wikipedia pages are more controversial than others. Wikipedia contributors have argued for years over whether Pavlova was invented in Australia or New Zealand. Other pages inspire little debate. It is not easy to locate or rank contentious articles using computerised methods. Contention

can take many forms: editors might "revert" (i.e. undo) one another's edits; they might debate topics in-depth on Wikipedia Talk pages; they might abuse one another "off-wiki"; they might accuse one another of misconduct, and be subject to administrative redress. For simplicity's sake, we focus just on the first manifestation of contention, when Wikipedians revert each others' edits.

In Figure 6, we have attempted to find 10 highly contentious places using a simple metric. The figure shows the 10 Australian places that have been edited at least 50 times, with the highest ratio of reverted edits to human edits. For example, the little article on Barmah. National Park has only had text added to it 70 times, but more than half (39) of those edits have been reverted! The reason is a long-running dispute

Article	Edits	Reverts	Reverts per Edit
Giru, Queensland	<u>65</u>	<u>59</u>	0.91
Eungai railway station	<u>53</u>	<u>47</u>	0.89
Eastgardens, New South Wales	<u>62</u>	<u>49</u>	0.79
Nambucca Heads railway station	<u>37</u>	<u>23</u>	0.62
Barmah National Park	<u>70</u>	<u>39</u>	0.56
Castle Cove, New South Wales	<u>120</u>	<u>65</u>	0.54
Home Hill, Queensland	<u>161</u>	<u>81</u>	0.50
Shalom House	<u>67</u>	<u>33</u>	0.49
Repatriation General Hospital, Daw Park	<u>37</u>	<u>18</u>	0.49
Howard Springs, Northern Territory	<u>76</u>	<u>36</u>	0.47

**Figure 6:** These 10 articles have the highest ratio of "reverts" to "human edits" in the dataset, of all articles with more than 50 edits. Are they the most contentious articles in the dataset? That question is impossible to answer by such a simple measure.



over whether horses in the national park should be considered as "wild" or "feral." This debate reflects a deep anxiety in Australia about the moral value of European settlement. Some White Australians see the horses (or brumbies) as part of Australia's European heritage. Others view them as an invasive species that represent the destructive history of European colonisation. Other examples in Figure 6 reflect similarly emotional conflicts in Australian society. The page for Howard Springs was subject to an "edit war" during the pandemic, when one editor wished to redefine the local COVID-19 Quarantine Facility as a "Concentration Camp." The page for Airport Drive, meanwhile, was subject to an altogether less emotional dispute: the editors could not agree which other roads intersect with this Melbourne motorway.

As these few examples demonstrate, Australian places can inspire many kinds of dispute: disputes about Australia's colonisation, disputes about civil liberties, disputes about arid matters of geographical fact. Sometimes apparent disputes are actually simple vandalism, as in the page for Giru, Queensland whose Infobox has been vandalised numerous times to place the city "1,283 km (797 mi) NNW of Miley Cyrus."

### **Editors' experiences of** contentiousness

Lucas stopped editing Wikipedia in the end. "To still have to be making these arguments," he said, "it's just really, really frustrating. And yeah, I just ran

out of energy for it." Other editors have increasingly avoided topics that are likely to attract contentiousness. Bill no longer edits main pages, what he calls "overview pages," such as the Australia page: "I haven't got anywhere near them for over 10 years. It's usually a minefield." David agreed that pages like Australia and Tasmania were often more contentious. In his ANTERSTRUCTURE STRUCTURE OF THE PROPERTY OF TH experience, "the bigger the article, the more traffic,

the more edit wars." He also stays away from those pages now: "being on bigger pages with battles. I guess I've been, if not burnt.... at least sort of. I've got tired of that." James said the same thing. "You just you end up you keep going to less and less controversial topics to avoid edit wars," he said. Nate was an exception: he continued to participate in contentious discussions, including utilising formal review structures when he felt it was necessary.

Interviewees had and continue to have a range of responses to these experiences of contentiousness. Burning out, running out of energy, or being drained was one response. "The contentious stuff," Ellis said, "is emotionally draining." Judy and Lucas both spoke of the fatigue of working on a contribution, only for it to be immediately changed. "I'm not going to write it," Judy said, "because, you know, even though I've got what appears to me to be a reliable source, someone will come along and just change it." Lucas described some edit wars as "satisfying" but ultimately it became "more frustrating than anything else." "They're not fun," James said. Gabriel said that most of their discussions with other editors have been "very antagonistic and not particularly pleasant, to be frankly honest."

Considering how many of the editors involved in this research had actively and increasingly avoided contestation over their careers, the obvious question becomes: if not them, who? Participants didn't agree on who was "edit-warring" on Wikipedia. "Most edit wars are with a well-meaning but

> misguided, usually new editor," David said. Lucas, on the other hand, felt the ongoing contestations came from experienced editors: "they would be users with a name who have been established for quite a while. And those would be the people who would be a problem." David suggested a lot of the contestation resulted from a friction around what Wikipedia is for: "officially, Wikipedia is meant to lag everything else. It's meant to lag the news and

the books. There's a fair percentage of people who want Wikipedia to lead the way."

Bill felt place articles "were one of the least problematic areas of the whole Australian project." His view was the exception. Of the other editors interviewed, there was very little disagreement about what the hot button topics were. As with the contentiousness of the Barmah National Park article, the contentious topics that editors identified reflect a deep anxiety about the ongoing understandings of European colonisation. "Some of the things that always tend to get disputed is stuff about Indigenous people, stuff about Mabo and stuff about the Republic," Jack said. "The frontier conflict is obviously one of the big ones," Judy noted. Editors occasionally used the word "culture" to describe what they tried to avoid. James said he stayed away from politics and "culture war stuff" and David didn't engage with "culture" on Wikipedia as it "is probably too difficult." In both instances, the editors were talking about First Nations and settler-colonial histories and aspects of place.

...THE CONTENTIOUS TOPICS THAT EDITORS IDENTIFIED REFLECT A DEEP ANXIETY ABOUT THE ONGOING UNDERSTANDINGS OF EUROPEAN COLONISATION.

AUSTRALIA



## Case study: First Nations place names

Nearly every editor we spoke with mentioned the inclusion of First Nations place names on Wikipedia as contentious. Editors involved in interviews came from various positions. Lucas, Blake and Gabriel actively worked to incorporate and maintain First Nations place names on Wikipedia. Indeed, it was Lucas' main focus for his editing practice. Then there are people who try and stay out of it. James said, "one part of me wants to kind of go! Let's get the Aboriginal names correct. But I can also imagine that that would be quite heated." As mentioned above, Judy also avoids work on First Nations place names as she feels contributions in that area usually are changed very quickly. Nate and David have both contested the inclusion of a First Nations place name in a Wikipedia article on more than one occasion.

First Nations place names generate so much interest for several reasons. James feels it is, in part, because "the names for things is such a Wikipedia-type territory, like it's just naturally Wikipedia." Finding the source, chasing down the most accurate name, and categorisation all accord with central aspects of the Wikipedia platform and the inclinations of many of those who edit the articles. Blake and Lucas both felt that racism is a factor for some editors who resist the incorporation of First Nations place names. There is, Blake stated, "some really awful, toxic sort of pushback on those things. Just for, you know, I guess what is almost really racist reasons."

The principal way that editors can attach a First Nations name to a place is the "native name" system. There are two ways a Wikipedian can assign a "native name" to a Wikipedia article. They can insert <a href="Template:Native\_name">Template:Native\_name</a> into the text of the article; or they can fill in the "native\_name" field in articles "Infobox." These two approaches to dual-naming can be seen on the articles for <a href="Naarm">Naarm</a>, <a href="Boorloo">Boorloo</a> and <a href="Deerubbin">Deerubbin</a>.

Figure 7 shows all the places in the dataset that have been dual-named on Wikipedia. 2,261 places in the dataset have been dual-named, or about 6% of the total. This is of course a small quantity, given that the entire Australian landmass had been

occupied and named by Aboriginal and Torres Strait Islander people for tens of thousands of years prior to European settlement.

There are two obvious flaws to Wikipedia's dual-naming system.

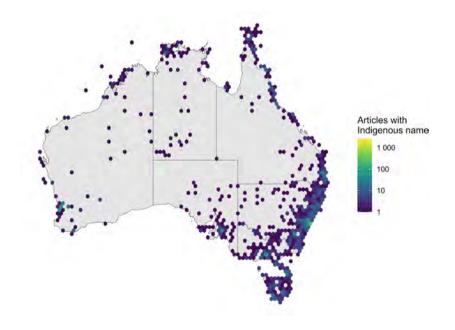
Offensive terminology: The term "native" is offensive in Australia. Australian Wikipedians know this. The members of Wikiproject Australia have cautioned other editors not to use the term in the text of articles, although they have not attempted to remove the term from Wikipedia's software. Of course, Template:Native\_name is not only used in an Australian context. The article for the Italian city of Florence, for example, gives "Firenze" as the "native name."

**European priority:** The dual-naming system prioritises the European construction of place. Invariably, the article on English Wikipedia gives the settler name as the primary name. Thus a visitor to **Boorloo** will be redirected to an article entitled "Perth." More deeply, for a place to even exist in Wikipedia, it first needs to exist in the European system of spatial divisions. When Europeans occupied Australia, they divided the landmass up into colonies, parishes, cities and later into states and suburbs, largely ignoring the structures that already existed in Aboriginal and Torres Strait Islander societies. The best that dual-naming can do is to attach a First Nations name to one of these places established by settlers.

## Do emotions drive Wikipedia editing?

Not all editors felt that emotions influenced their Wikipedia edits. The Wikipedians who mostly undertook routine edits—updating Census data, as Charlie does, or copy edits, as Nate does—mentioned less affectively charged experiences of editing Wikipedia pages. Others resisted the idea that their affective relations to a place had influenced their editing. When we asked Ellis whether he'd had any emotional reactions when writing about Tasmania, he was emphatic: "'no, no! None at all".

Other editors were more open to the role of affect and emotion in their editorial practice in writing about Australian places. "I think anything to do with the history", Gabriel said, "can be quite fraught with emotions. Because, especially, when you're dealing with really traumatic events that are still close in the memory of a lot of people." For Gabriel, the collapse of the Tasman Bridge and the 1967 Tasmanian bushfires are "still very raw in the memories of people that I know and love. And so, yeah, certainly, those are emotionally fraught at times." Judy agreed, saying "there is stuff you just feel you can't write. It would be too distressing to write that stuff."



**Figure 7:** Like Figure 1, but showing only those places with a First Nations name. They form only a small portion of the total.



"Discomfort" was not a word not often used in interviews: only Lucas mentioned it as a significant dimension in editing Wikipedia pages, specifically in the context of settler-colonial violence. Despite this, discomfort is perhaps the most evident affective relation throughout the interviews and, this research finds, in how negative aspects of a place are discussed in Wikipedia articles. When we asked James if there was anything he wished people didn't know about Tasmania, he answered.

Maybe we're just all used to being more transparent these days so there aren't necessarily things we want to keep secret or quiet. Maybe it's more that... you think the Port Arthur Massacre is too... we want to put it in proportion, maybe? But that's not keeping it secret, that's not keeping it down low. It's putting it in proportion.

This is a different dynamic to one of outright exclusion. It is not wholeheartedly, as James says, a desire for secrecy or hiding. For James, it is a question of proportionality. But it's interesting to consider James' comments in light of the one sentence about the massacre in the Tasmania article. The brief description of the event is literally enveloped within a wider point about the (positive) gun reform laws that were implemented as a result of the tragedy. The picture of Port Arthur is captioned with a mention of its World Heritage status. This representation feels "in conversation" with—and maybe even acting counter to-the prominence James mentions.

Gabriel's discussion of how fraught it can be to engage with negative or painful aspects of a place is enlightening here. While a significant focus of Wikipedia research is on what is missing from Wikipedia (Redi et al. 2020; Adams et al. 2019; Martini 2023), this research finds that an equally important dimension is the discussions that are included but obscured or diminished. The role of affect is central.

## The expression of complexity

There is a trend across the three articles studied for this report of using language to diminish the negativity of an aspect of an Australian place. This narrative strategy is consistently used in two specific areas across the three pages: discriminatory Australian government policy and violence against First Nations peoples. In both of these areas, the subject of who was responsible for discrimination and violence—white European colonists or white Australians—is obscured.

Throughout the Australia page, discriminatory historical government policies are approached in two ways. The first is they are primarily described in the context of when they ended. The mention of the 1967 Referendum describes it as when "Indigenous Australians were fully included in the census." There is another way of saying this: First Nations peoples were not included in the Census or counted as citizens before 1967. One of two mentions of the White Australia policy uses a similar device with the description focusing on the cessation of the White Australia policy and ensuing increased migration and cultural diversity. The language used in both of these examples emphasises the "positive step" of removing a racist policy, rather than engagement with the racist policy itself. The actor is also often absent in these sentences. For example, the Australia article states that "following Federation in 1901, a strengthening of the White Australia policy restricted further migration from these areas," instead of "the Australian government strengthened the White Australia policy after Federation in 1901."

These language devices are equally apparent in discussions of colonial and white Australian violence against First Nations peoples.

#### From the Australia page:

"Indigenous population declined for 150 years following European settlement, mainly due to infectious disease."

"[...] as settlement expanded, thousands of Indigenous people died in frontier conflicts while others were dispossessed of their traditional lands."

From the Tasmania page:

"The ["Black-Line"] campaign failed and was abandoned seven weeks later, but by then Tasmania's Aboriginal population had fallen to about 300 [...]"

The actor, in these sentences, is absent. First Nations people "died," their "population declined," they were "dispossessed," and their population "had fallen." In every instance here, the language avoids stating what is inescapable: that white people killed, dispossessed and displaced First

Nations people. The language distances white people from culpability and, in some instances, implies that the deaths of First Nations people following invasion or specific colonial campaigns was potentially correlative, not caused.

Not all editors write about negative aspects of Australian place in this way: Jack and Lucas both gave specific examples of how they tried to counter what Lucas described as "whitewashy" language. The use of these language devices when describing negative aspects of Australian place are, however, relatively consistent across the analysed pages. This approach is at odds with Wikipedia policies, let alone the recommendations for First Nations inclusion in Wikipedia (Thorpe, Sentance & Booker 2023; Carlson & Rana 2024). As with the example of discomfort in the previous section, this is once again not wholesale absence. It is sanitisation: the inclusion of an aspect of an Australian place that cannot be completely omitted and must therefore be diminished, implied and shrouded in the passive voice.



#### **Omissions**

The report has focused on the multitude of ways that aspects of a place are diminished or obscured. In the Katoomba page, there is an example of how an aspect of place can be excluded entirely. In 1957, Darug and Gundungurra peoples were forcibly removed from their homes in Garguree, also known as the Gully, a tract of land in the middle of the town of Katoomba. This removal is entirely absent from the Katoomba page, despite a paragraph describing Garguree, how it has been declared an Aboriginal Place<sup>2</sup> and how it is an "area with a long history of occupation by the Gundungurra and Darug" peoples. The linked page on "Catalina Park" uses the same narrative devices identified earlier in the report in the Australia and Tasmania pages to imply the forced removal of people from their homes without stating it: "[the Darug and Gundungurra's] relatively peaceful co-existence was shattered when the area was developed as a tourist park."

2 An "Aboriginal Place" is an official designation from the NSW Government denoting 'places of spiritual, historical, and Environment 2022).

Only one of the editors we spoke with was local to the Blue Mountains. Peter no longer edits Wikipedia that much: he started when he was working as a night security guard with a lot of time to kill and now he has other online mediums he focuses on. "I wish I'd known at the time a little bit more about the Gully," Peter said. For non-locals editing the page, the description of Garguree probably wouldn't raise any red

The Katoomba page is about as non-contentious as it can get. There have been 696 edits and only 18 reverts in its 22-year history. The last comment on the "Talk" page was in 2007. The page appears straightforward. Yet, it is this "straightforward" page that contains one of the most significant omissions identified in this research. In some ways, the apparent noncontentiousness of the Katoomba page intensifies the effects of the omission, both on the article itself and, in all likelihood. across the Internet.

To engage with place in the Australian context is inevitably an engagement with settler-colonialism. This research concludes that First Nations histories, current experiences and voices remain marginalised on Wikipedia, reflecting the literature

(Thorpe, Sentance & Booker 2023; Gallert et al. 2016; Bjork-James 2021). There are other omissions as well. Lucas argued that "basically any non-white experiences or non-dominant experiences are omitted." Gabriel felt that Wikipedia was "quite a hostile space to marginalised people" and that there is "a really frustrating lack of space, I suppose, to me in all three elements: being a regional Australian; being queer; being disabled. None of them feel like something that Wikipedia really guite welcomes a lot of the time"

Gender was also mentioned explicitly. Jack felt that the Australia page showed biases stereotypically involved with men and not much that reflected "the fact that there's a lot of, like, female reinterpretations of history and stuff at the moment." The fact that, despite attempted purposive recruitment, we only recruited two people who didn't identify as men is, in itself, revealing.

There are equally omissions that result from the conceptualisation of space and place that underpin Wikipedia. The Wikipedia construction of space, identified in an earlier section, is not the only way to conceptualise space and place. In particular, the Wikipedia conceptualisation is inconsistent with many of the ways that First Nations people construct space. We are not the right people, and this report is not the right document in which to give a full and careful account of the many ways First Nations people understand space. But we can indicate how First Nations concepts of Country fail to register as "places" in the system.

Country contrasts with the Wikipedia notion of "place" in at least two ways. First, Country is not a "physical location" or "geographic feature:" it is "multi-dimensional—it consists of people, animals, plants, Dreamings; underground, earth, soils, minerals and waters, surface water, and air" (Rose 1996, 8). Second, Country is a local rather than a universal concept: "The fact of localised knowledge is itself Law. This system does not invite people to assume that they can or should know everything" (Rose 1996, 13). Since it is holistic and local,

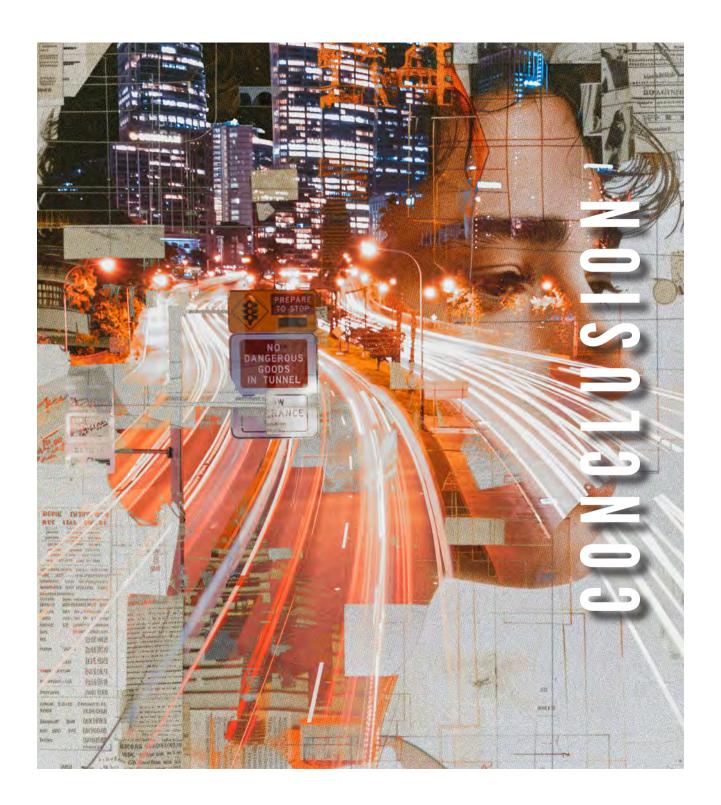
Country conflicts with Wikipedia's physical/geographical and universal construction of space.

As a result, Country is not represented as a place in Wikipedia, and does not figure in our dataset. The Wikipedia spatial equation, 1 place = 1 article, breaks down in Australia.

> The closest Wikipedia comes to representing Country is in its articles about Aboriginal and Torres Strait Islander peoples and languages. For example, the articles about the Arrernte people and Pitjantjatjara people indicate the extent and importance of their countries, but their countries are not represented as places in our dataset. In Wikipedia's terms, these are articles not about places, but about peoples.

TO FNGAGE WITH PLACE IN THE AUSTRALIAN CONTEXT IS INEVITABLY AN ENGAGEMENT WITH SETTLER-COLONIALISM. THIS RESEARCH CONCLUDES THAT FIRST NATIONS HISTORIES, CURRENT EXPERIENCES AND VOICES REMAIN MARGINALISED ON WIKIPEDIA...THERE ARE OTHER OMISSIONS AS WELL.

social, educational, natural resource use or other types of significance to Aboriginal people' (NSW Department of Planning



ikipedia has become a crucial site in which some of the core questions about Australian place and Australian identity are being categorised and debated. The acknowledgement and inclusion of First Nations peoples, knowledges and histories, settler-colonialism, republicanism: these are constantly categorised and discussed on Wikipedia. Rather than a fringe process that is far-removed from the concerns of Australians who don't edit Wikipedia, these discussions are actively influencing how these aspects of Australian identity and place are represented and constructed in the wider knowledge ecosystem.

Wikipedia editors understand the importance of Wikipedia better than most. They understand that information on Wikipedia informs the wider knowledge landscape and the knowledge they include on Wikipedia may endure beyond them or even Wikipedia itself as a platform as a result. Universally, editors interviewed for this research believed in and care about the Wikipedia project: it is why they devote countless hours to the platform for free. It is, to an extent, why the contestations discussed in this report are so charged: Wikipedia editors believe in the project and understand how lasting the effect of the platform can be.

As demonstrated throughout this report, the Wikipedia representation of Australian places is anthropocentric and neocolonial. Rather than the result of a systematic approach or one particular factor, this representation emerges as the result of a complex amalgam of categorisation, editor practices, affective relations, Wikipedia policies and norms, as well as some of the conceptualisations that Wikipedia is founded on, such as a Western-centric understanding of space and place. What emerged from this research is more complex than the idea of gaps in what is and isn't on Wikipedia: it is equally what is half-said or implied, what

editors themselves find hard to say, and what isn't understood as an omission because the framework Wikipedia is based on doesn't work with ideas outside of Western epistemological traditions, such as *Country*.

This matters because how a place is represented on Wikipedia affects what is known about a place. It is important to illuminate these processes. When a place or information about a place is missing from Wikipedia or when a place seems to be mis-classified or even unclassifiable that doesn't indicate an objective idea of their lack of importance or notability. What Wikipedia represents and doesn't represent is the contingent result of negotiation. As shown in this report, Wikipedia editors are heterogeneous and have a broad range of views, approaches and practices. Editors are regularly discussing, debating, arguing and wrestling with how to represent the world from a range of possibilities. Sometimes those with the most endurance will win such arguments. Sometimes arguments don't even happen because Wikipedia's policies and culture exclude certain people and their knowledges outright (as is the case for many forms of First Nations knowledges).

The findings of this report have important implications for Australia. For Australian readers, the research provides insight into the strengths and weaknesses of Wikipedia articles about Australian places. For government policymakers, there are implications for education curricula, especially in incorporating critical digital literacy skills in using Wikipedia and understanding its role in the wider digital and knowledge ecosystems. Finally, for Wikimedia Foundation and Wikipedia editors there are significant implications for implementing the recommendations of Thorpe, Sentance and Booker (2023) and Carlson and Rana (2024) to improve policy and practice in relation to engagement with First Nations content and experience.

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