# Digital Humanities approaches to digitising, repatriating and exploring an historical Australian colonial archive

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Background: the Howitt & Fison papers



Tulaba, Howitt's main collaborator (left) with other Gunaikurnai men, names unknown, 1884



Howitt and Fison 1888, Bairnsdale, Victoria Centre for Gippsland Studies Pictures Collection, Monash University Research Repository

- over 7000 pages including correspondence, field-notes, circulars in Museum Victoria's Howitt Papers collection.
- 9 boxes of correspondence, articles, and primary data (13,200 manuscript pages including 400+ pages of images and postcards) in State Library Victoria's Howitt Papers.
- 6 Letterbooks, 800 pages each, in National Library of Australia The Papers of Lorimer Fison.
- approximately 800 pages of correspondence in Rochester University, USA.
- 2461 pages of Fison's correspondence together with 1000+ pages of drafts and primary data in St Marks Theological College Library in Canberra.



Get involved at https://fromthepage.com/tyay/howitt-and-fison-papers

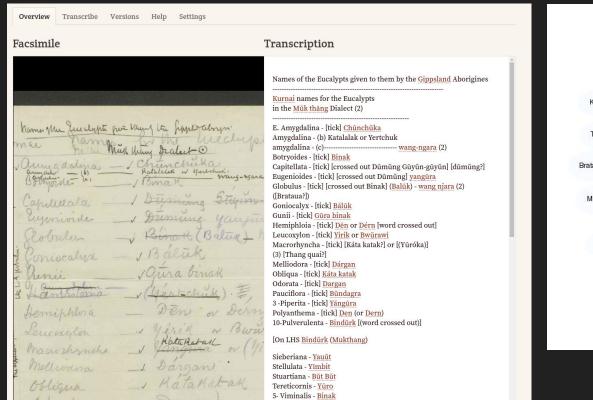


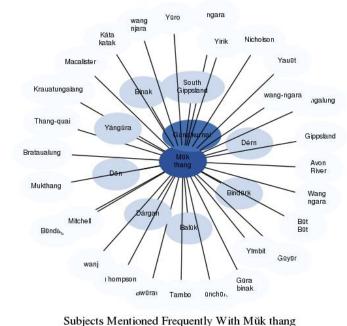


This project is a partnership between Museums Victoria, the Victoria State Library, First Nations Legal & Research Services, The Victorian Aboriginal Corporation for Languages, elders from a number of communities, Deakin University, La Trobe University, Western Sydney University, and ANU. We are especially thankful to Gunaikurnai Land and Waters Aboriginal Corporation for recent collaboration and permissions.



Project workshop 2019 with representatives from Gunaikurnai, Gunditjmara, Mukjarawaint, Dja Dja Wurrung, Yorta Yorta, Dieri, Wurundjeri, and Dhudhuroa communities.





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Some approaches

to sound-based search

(Research with Michael Falk)

## Approach 1: fuzzy search using 'soundex'

## **Howitt-Fison Corpus**

Search for Australian Words

Enter Search Term: Gunnai

Search

### 111 results found for 'Gunnai':

#### Kurnai,

String distance score: 2

... each class are subdivisions" of the original (\*) Kamilaroi and Kurnai, p.35, and Note, pp. 70 - 72. 17 classes. "This ...

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#### Kurnai,

String distance score: 2

... if these groups were hostile, and would (\*) Kamilaroi and <mark>Kurnai</mark>, pp. 33-34 18 not exchange brides,) and might well shed ...

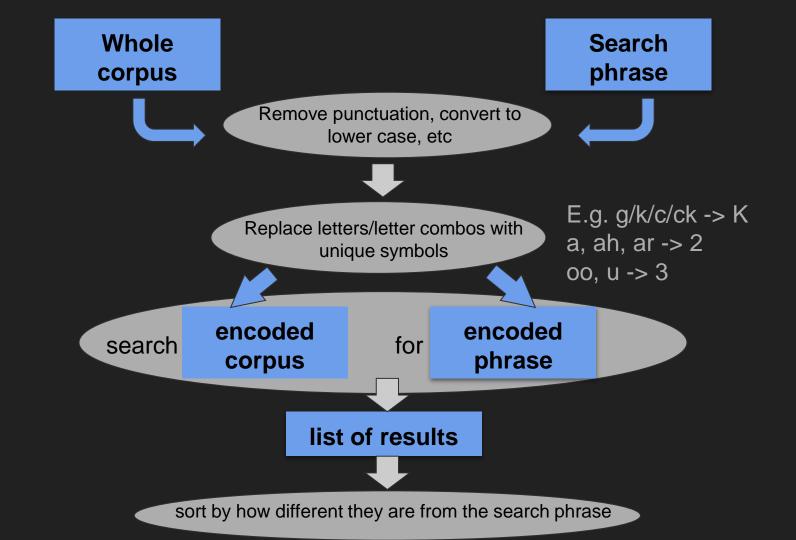
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#### Kurnai,

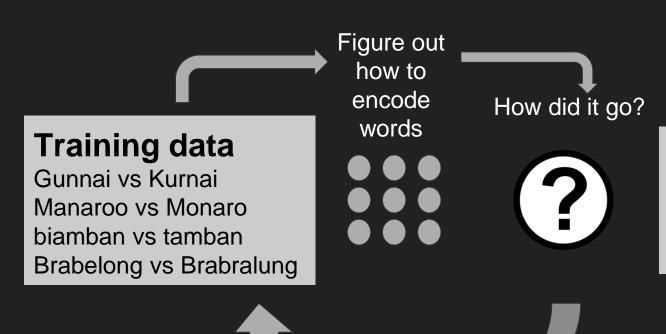
String distance score: 2

... p.136, Note. Gaion, the Dieyri Tribe, p.13. Fison, Kamilaroi and Kurnai, p.25. ...

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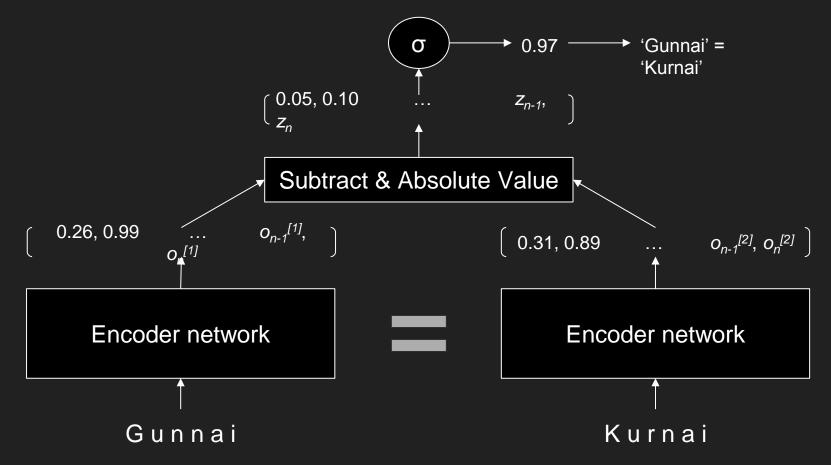
## Approach 2: fuzzy string match using machine learning



## **Test data**

Krauatun vs Kroathun ngŭrŭng vs nooring Thundung vs Thathung

## Siamese RNN architecture



## Results of the mini-project

Advantages and disadvantages of both

Could use a combination of the two

The machine learning approach could help us discover further sound 'correspondences' we should include in the sound-ex approach

Either way, it looks like it will be possible to allow people to find what they are looking for, without creating a potentially controversial 'standardised orthography'

# Some mini-projects involving the project's API

Using Google colab notebooks (like Jupyter notebooks but more Googley)

```
Castlereagh River
    Gilgandra
    Macquarie
    Youlbung
    Adelaide
    Camyr Allyn
    Clarence Town
    Eccleston
    Gosford
    London
    Maitland
    Manning
    Manning River
Let's try to geocode these:
    while i < len(placenames('Results')):
      place = placenames['Results'][i]['Title']
      geosearchterm = place.replace(" ", "+").encode("UTF-8", "replace").decode("UTF-8")
      geocodingurl = 'https://geocode.xyz/' + geosearchterm + '?json=1&region=AU&auth=125839689227871244352x4827'
      print(geocodingurl)
        with urllib.request.urlopen(geocodingurl) as url:
            if url:
                georesponse = json.loads(url.read().decode("utf-8", "replace"))
                longitude = georesponse['longt']
                print(longitude)
                latitude = georesponse['latt']
                print(latitude)
                folium.Marker([latitude, longitude], popup=place, tooltip=tooltip).add_to(m)
               time.sleep(2)
              except:
               print("broken")
        print("no luck")
      i=i+1
           //geocode.xyz/Bool+Bool?json=1&region=AU&auth=125839689227871244352x4827
    0.00000
    142.69611
    0.00000
    0.86668
     https://gegcode.xvz/Bungullv?ison=1&region=AU&auth=125839689227871244352x482
```