

#### A primer on Indigenous economic history and Indigenous economic futures

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#### Acknowledgement of Country

We acknowledge and celebrate the First Australians on whose traditional lands we meet and work, and whose cultures are among the oldest continuing cultures in human history.

Image: Namadgi National Park. Photograph by Adrian Brown, Ngunnawal man, Country ranger, ACT Parks and Conservation Service.



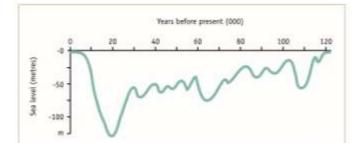
#### **Motivation**

- Brief introduction to Australian pre-history
- Primer to hunting and gathering/proto-farming economy & implications for population
- Noel Butlin's role in identifying the effect of colonisation on Indigenous Australians
- Institutional economics & transaction costs
- Reflections on legacy for Indigenous futures

   Need for collaboration between Indigenous
   community and economists



#### Migration and deep history revisited



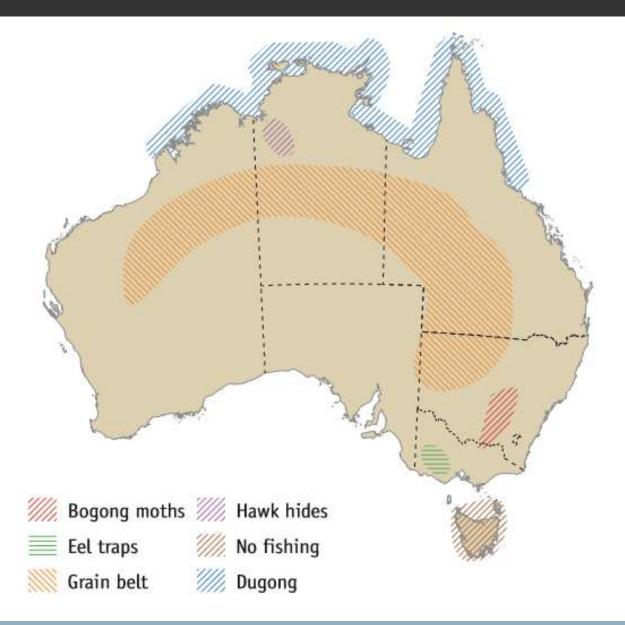
- Least cost route
- Other possible routes
- Early Pleistocene sites in Australia (Sahul)
- Pleistocene archaeological sites in Asia (Sunda)
- - Landmass at 50 m below present

Sahul

Lake Carpentaria



Specialised Indigenous economies on country





# Fire-stick farming and Indigenous land management

- Rhys Jones coined term fire-stick farming in 1969
- Gammage (2011) emphasised 'mosaic burning', patch burning' and 'firestick farming' enhanced productivity of land to create and orderly landscape, abundant, convenient, and, in many ways providing predictable resources 'superior to farming'
  - Silica build up after repeated fire-stick farming meant that the grass sites had to be rotated (mosaic burning)
- Pascoe's (2013) Dark Emu attempts to reclaim this economic history from an Indigenous perspective
  - written sources often colonial and from non-indigenous research



#### Using fire to hunt kangaroos

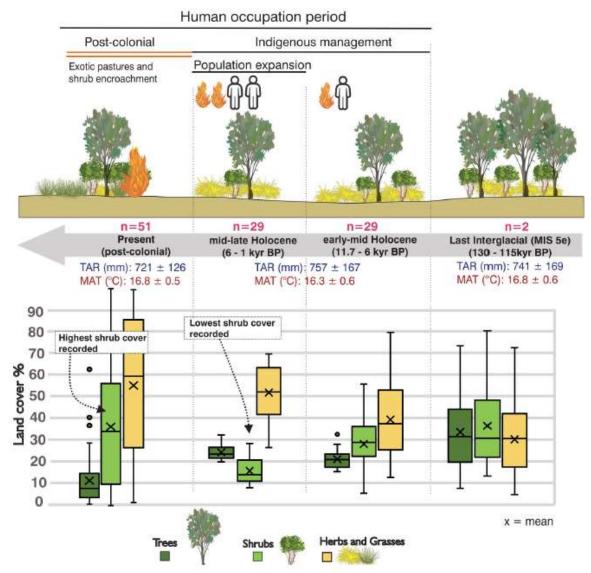


Joseph Lycett, (National Library of Australia). See Gammage (2011)



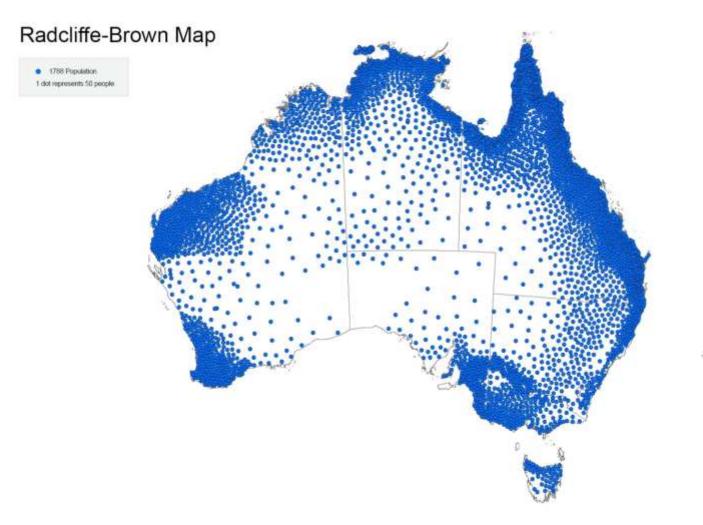
The effect of Indigenous land Management:

Mariani et al 2024.Shrub cover declined as Indigenous populations expanded across southeast Australia. *Science*. 386 (6721): 567-573





#### **Indigenous Population Density 1788**



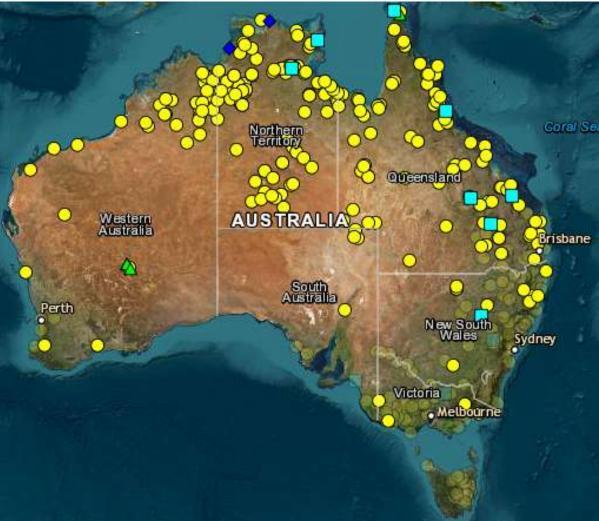


### **Massacres 1788-1850**





### **Massacres 1850-1930**



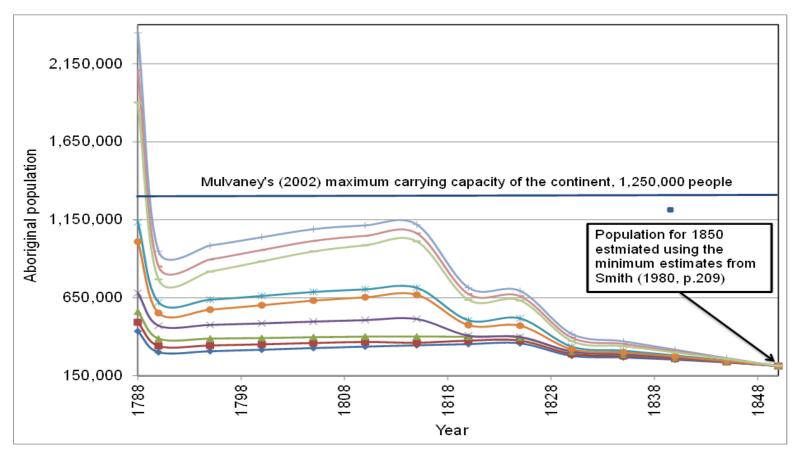


### Economics of the Takeover (Butlin 83,94)

- Economic interest in the takeover process must be recognised as a major determinant of the outcome
  - All colonial actors had an incentive to marginalise Indigenous people, if not commit murder and massacres
- Disruption to Indigenous population through disease and frontier violence (Butlin referred to the latter euphemistically as 'resource loss') means that:
  - Carrying-capacity estimates of pre-contact population density can be substantially underestimated and Radcliffe-Brown's estimate of at least 300k is too conservative
  - Butlin invented a new back-casting method to illustrate that existing estimates were too low



#### Revisiting Butlin's estimates (Hunter 2015)

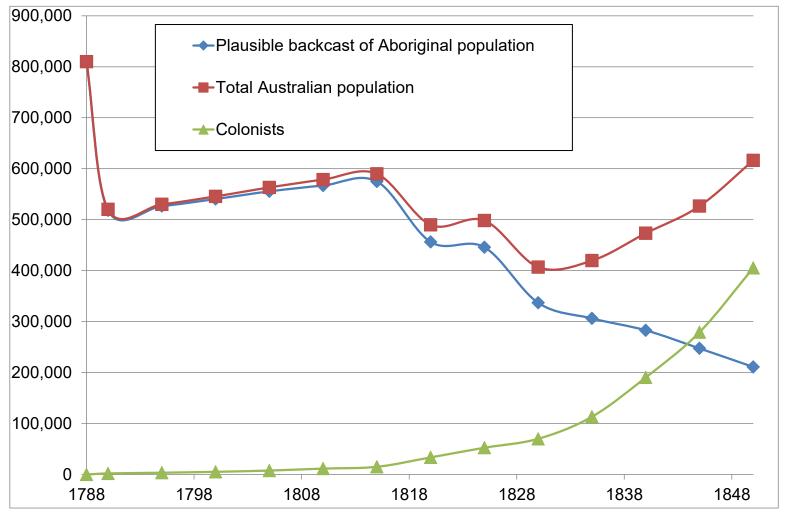


Note: The top three population trajectories are those implied by the assumption of smallpox with a high range mortality rate of around 60 per cent with some variation in the mortality for other diseases identified in Butlin, *Economics of the Dreamtime*. The next three population trajectories are based on the assumption of smallpox with a mid-range mortality rate of around 50 per cent, while the bottom three population trajectories assume a low range mortality of around 30 per cent.

Source: Hunter, BH (2015) 'The Aboriginal Legacy', Chapter 4 in Simon Ville and Glenn Withers, 73-96



#### Aboriginal & Colonist populations, 1788-1850



Sources: Hunter, B.H. and Carmody, J. 2015. 'Estimating the Aboriginal population in early colonial Australia: the role of chickenpox reconsidered', Australian Economic History Review, 55(2): 112–138



#### Precolonial Indigenous population revisited

- Tallavaara et al. (2018) modelled average huntergatherer population densities across the world using pre-agricultural net primary productivity, biodiversity, and pathogenic stress:
  - > Model includes 68 Indigenous Australian case studies, but
    - Data based on population densities estimated for discrete points in space rather that the whole area over which Indigenous people lived and acted
      - Tallavaara et al's own modelling shows that the relationship between population density and the regressors varied systematically between high and low productivity areas
    - ✓ Need to account for spatial autocorrelation (Blige Bird and Codding 2021)
    - ✓ Burger and Fristoe (2018) argue that should account for access to marine and aquatic resources

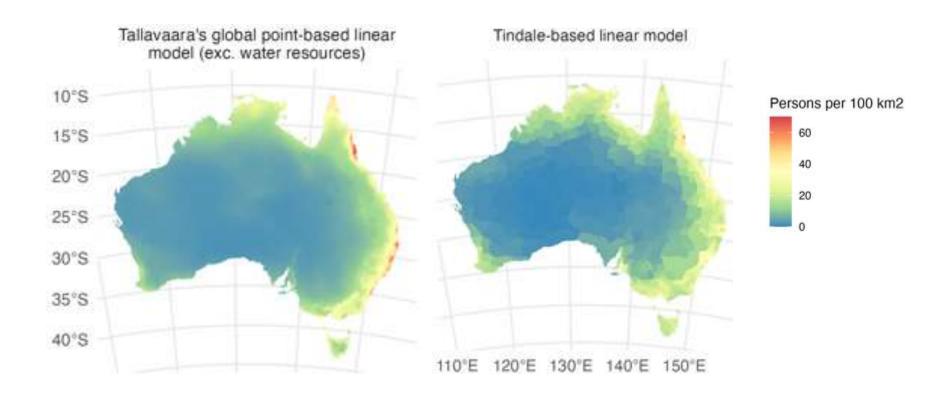


# Improving spatial estimates of population density

- Adding variables such as distance to the coast, nearest perennial river, and nearest waterhole based on Australian literature
- Accounting for spatial autocorrelation in observations
- Attempting to take into account the circular mobility patterns of Indigenous people over their country rather than assuming residential sedentarism
  - Using Tindale (1974) territorial boundaries of Aboriginal groups as the areas over which economic activity occurs
- Improving the quality and spatial resolution of environmental and climate data
  - Sensitivity test of data from outside Australia and unreliable data

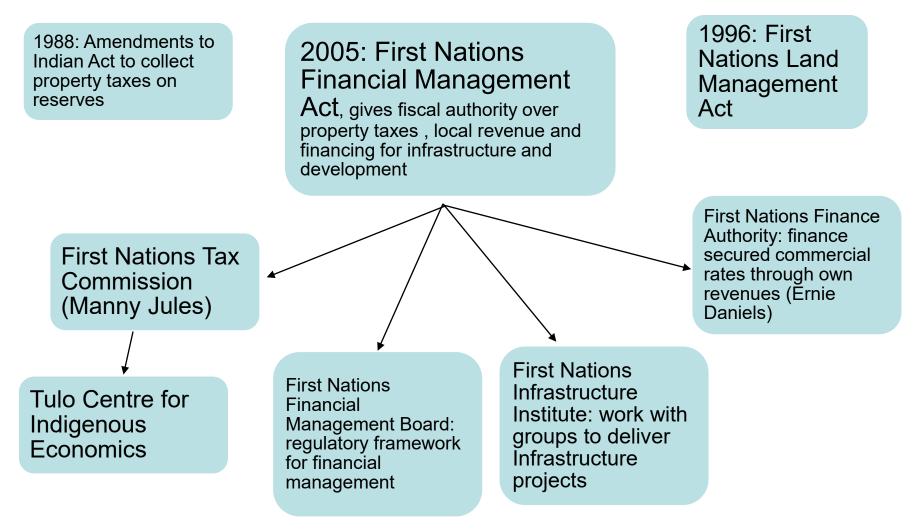


# Geography of Indigenous population before colonisation





#### **First Nations Institutions in Canada**





#### **Transaction costs**

- Ronald Coase used transaction cost to explain why firms exist and analyse externalities
  - Transaction costs for buyers and sellers in the market: (including bargaining, monitoring and enforcement costs)
  - Firms are governed by fiat because they minimise transaction costs & it is more efficient than using traded goods and services
- New Institutional Economics use transaction costs, rules of the game and norms (such as trust) to explain institutions (North, Williamson)
- Ostrom studied Indigenous institutions to understand stable common property regimes



## Indigenous Knowledge (IK)

- CAEPR (2019) Report for IP Australia review of approaches to market valuation of aspects of IK (excluding copyright), with a view to undertaking a quantitative valuation of the current and **potential** market value
- IK encompasses:
  - Traditional Knowledge the practices, know-how and skills developed by Indigenous communities, including knowledge about the properties and uses of native genetic resources
  - Traditional Cultural Expressions traditional artworks, designs, and stories may be covered by copyright law
  - Sometimes referred to as Indigenous Cultural Intellectual Property (ICIP)

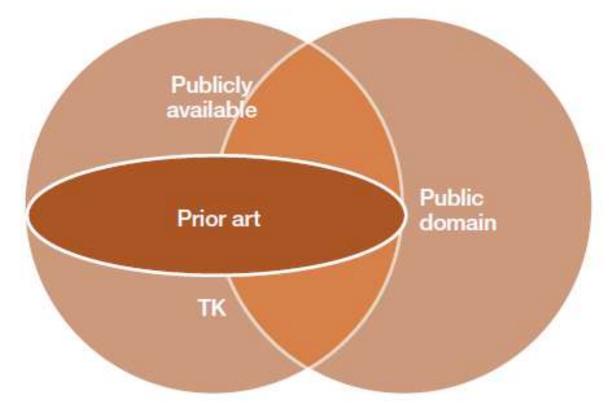


#### ICIP is affected by more than IP Laws





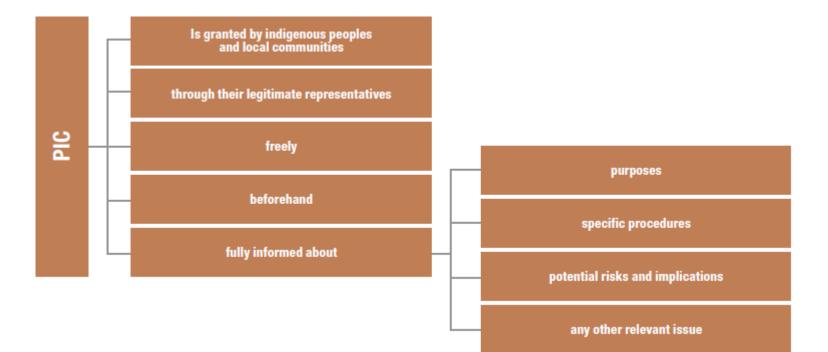
#### Documenting IK and the public domain



Documentation of oral traditions entails risks to culture, but provides defensive IP protections and potentially positive IP protection



# Prior Informed Consent (PIC) & documentation process





#### Economics is inter-cultural in nature

- Markets contain Indigenous and non-Indigenous agents and both need to understand and transact with one another (NB, for creating successful Indigenous businesses)
- Need for non-Indigenous economists to work with Indigenous community to build their capacity for economic self-determination
- Indigenous enterprises may be the best way to protect ICIP because of high transaction costs of safely using IK in open market?



# Thank you

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#### Comments can be provided to: Boyd.Hunter@anu.edu.au