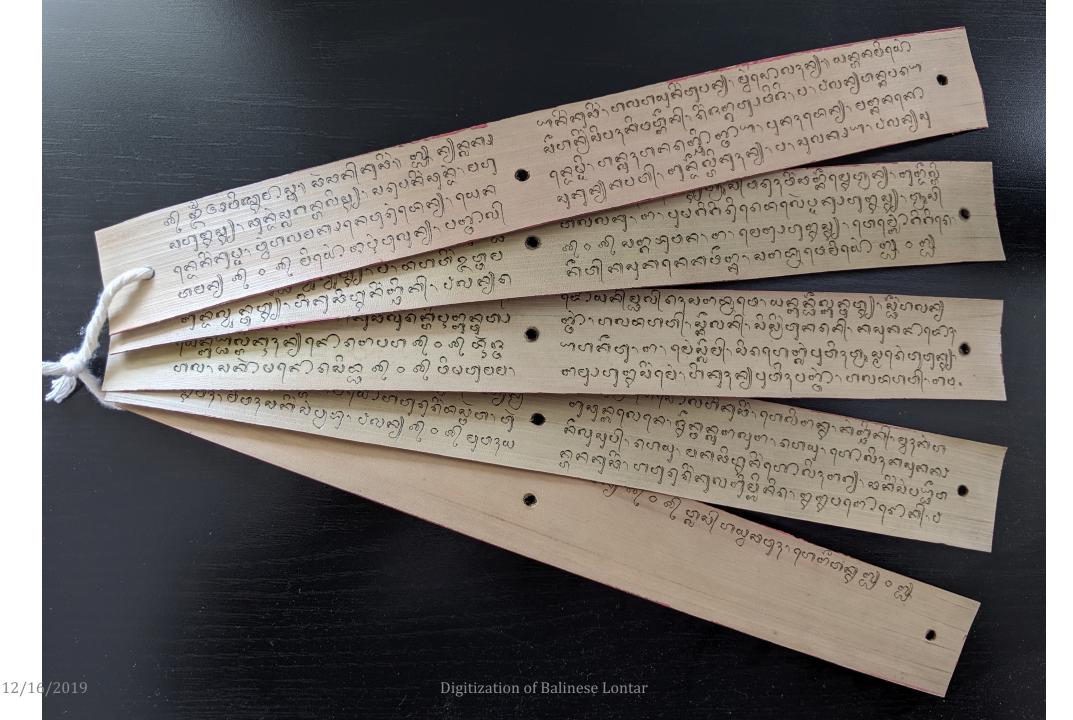




# Digitization of Balinese Lontar Manuscripts

David Kamholz, PanLex Project Director

San Francisco Center for the Book December 16, 2019



https://www.youtube.com/watch?v=-lCIwWwPP0I

## Balinese lontar

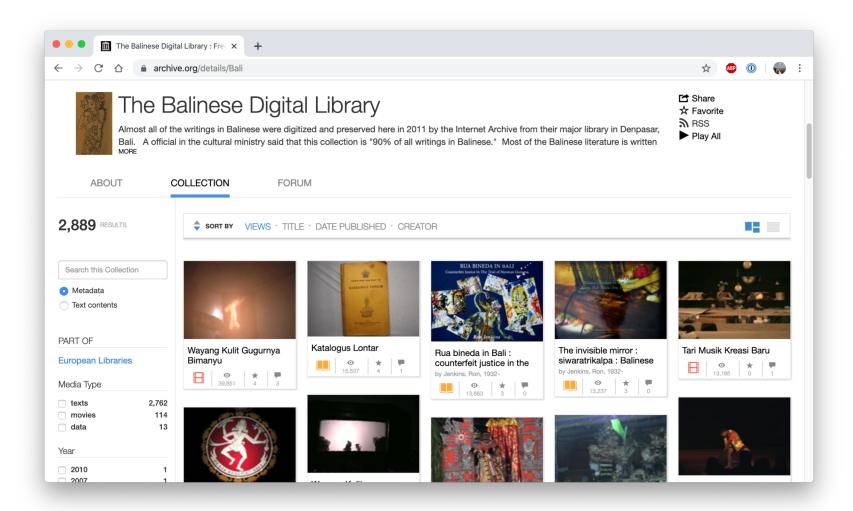
- Written in Balinese script (aksara Bali)
- Languages include Balinese, Old Javanese (Kawi), Sasak, and even Indonesian



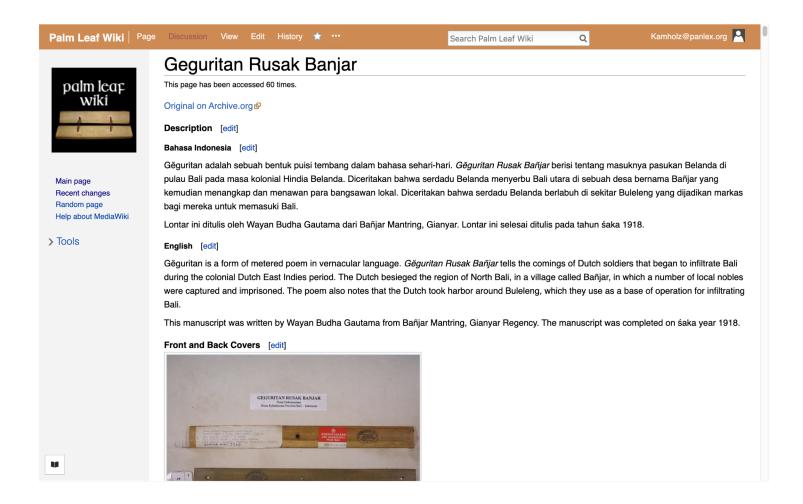
#### Genres of lontar

- Religious texts and mantras
- Magic
- Philosophy
- Chronicles and genealogy
- Horoscopes
- Medicine
- How-to guides
- Popular verse and stories
- Classifications of things

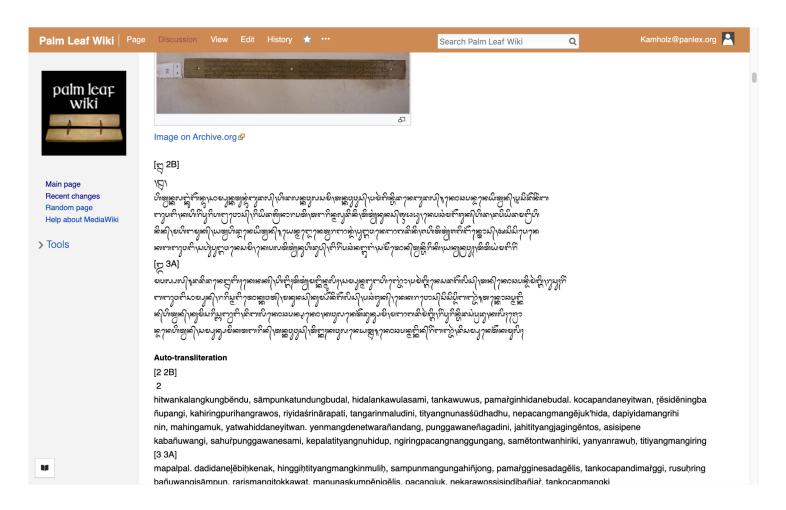
# Balinese Digital Library (2011)



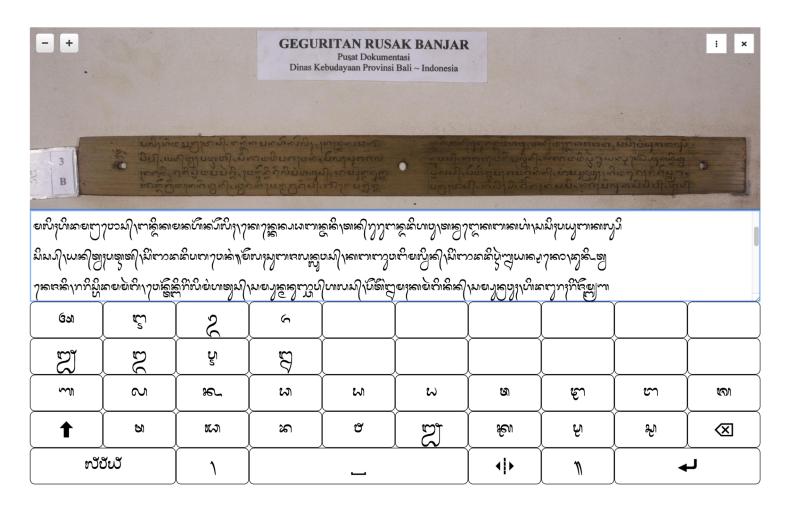
# Palm Leaf Wiki (palmleaf.org, 2019)



## Palm Leaf Wiki



## Palm Leaf Wiki



# Aksara Bali and technology

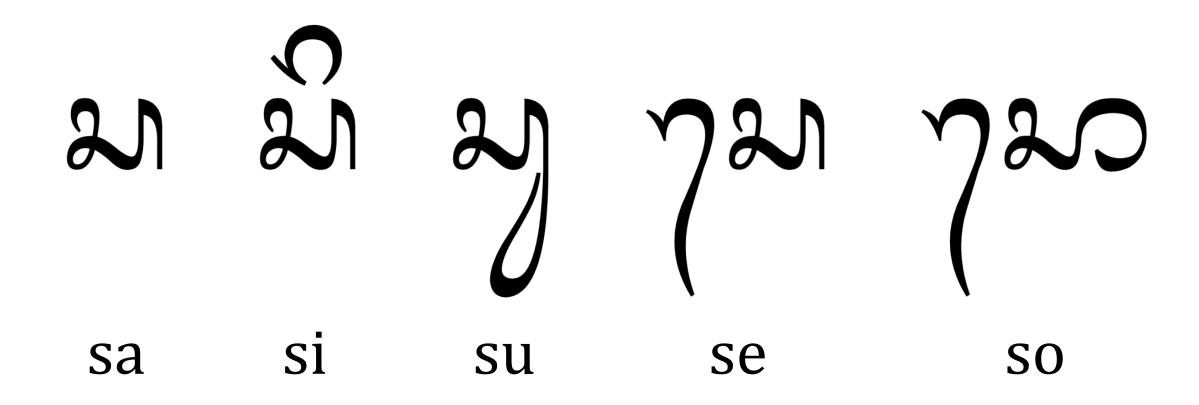
- Unicode support (since 2005)
- Fonts
- Keyboards
- Mobile support

⇒ PanLex had to improve much of this!

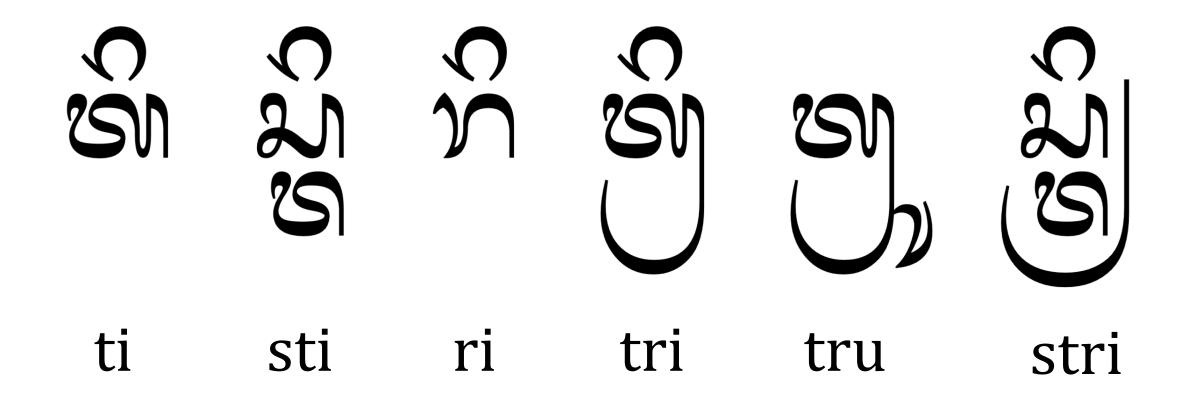
## Aksara Bali consonants

								り ここ	
na	na	ca	ra	Ka	aa	ta	sa	wa	la
			-		<b>U</b>	<b>C</b>	W		
ma	ga	ba	nga		pa	ja	ya	nya	

## Vowel combinations



## Consonant combinations



#### mantra



Vimala (correct)



Noto Serif Balinese (incorrect)

# Spacing adjustments



samba



sumba

## Live demo







## Palm Leaf Wiki: Results

- 3,000 leaves
- 92 complete works
- Examples
  - Awig-awig desa Silanjaya (village regulations)
  - Carcan kucing (taxonomy of cats)
  - Kakawin atlas bhūmi (world atlas poem)
  - Kawiśeṣaning bayu (recovery of inner energy using herbal remedies)
  - Pangayam-ayam (bettor's cockfighting horoscope)
  - Pangujanan (guide to rainmaking)
  - Tutur rare angon (developmental stages of human beings)





- "a cat whose body is white with a black spot on the right side is very good, especially if its tail is short: it brings happiness that shall always be with you"
- "a cat that is entirely black with a long tail is very bad, as it often draws blood from its owner; even if its tail is short, it is still quite bad"
- "a cat that is mute, that does not make a sound—do not be careless with such a cat, for it is very strong"