



Documentation of Solega (Dravidian), with a focus on traditional ecological knowledge

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‘Ethnobiology’

- Folk taxonomies of plants and animals
- Relationships between biological knowledge and myths
- The use of a particular resource
- Descriptions of landscape, various aspects of local ecology
- Applied aspects of ethnobiological knowledge

Why document biological knowledge?

- Very relevant to daily life
- Ease of elicitation
- Range of speech genres
- Plenty of material
- Often-neglected part of language study

Language documentation – basic criteria

- ‘speech genres’ - relatively stable utterance types peculiar to each sphere of communication (Bakhtin, 1986)
- ‘Spontaneity’ of communicative events - exclamatives, directives, conversations, monologues and ritual language (Himmelman, 1998)

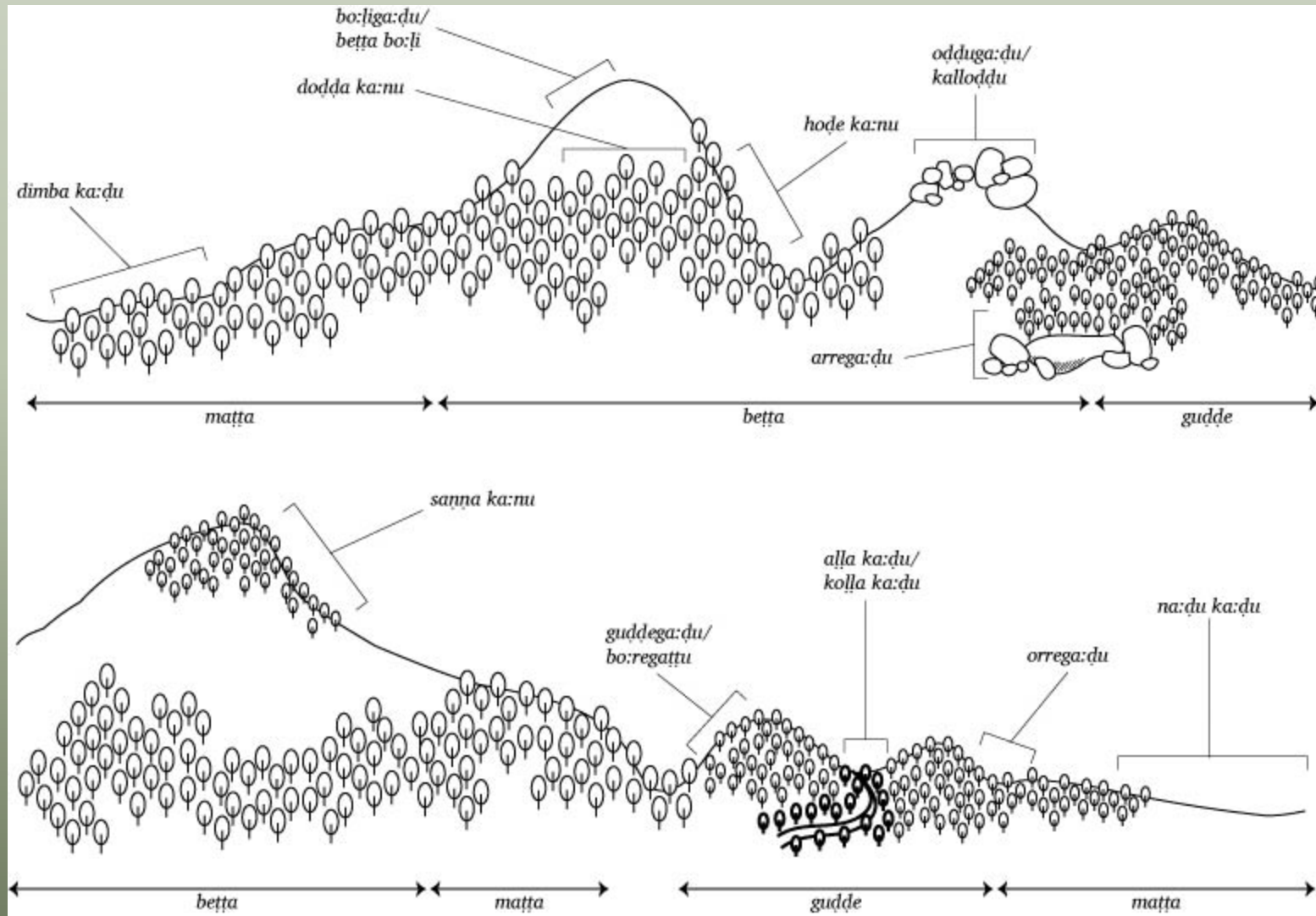
BAKHTIN, MIKHAIL. 1986. The problem of speech genres. *Speech Genres and Other Late Essays*. Austin: University of Texas Press.

HIMMELMANN, N. P. 1998. Documentary and descriptive linguistics. *Linguistics*, 36.161-95.

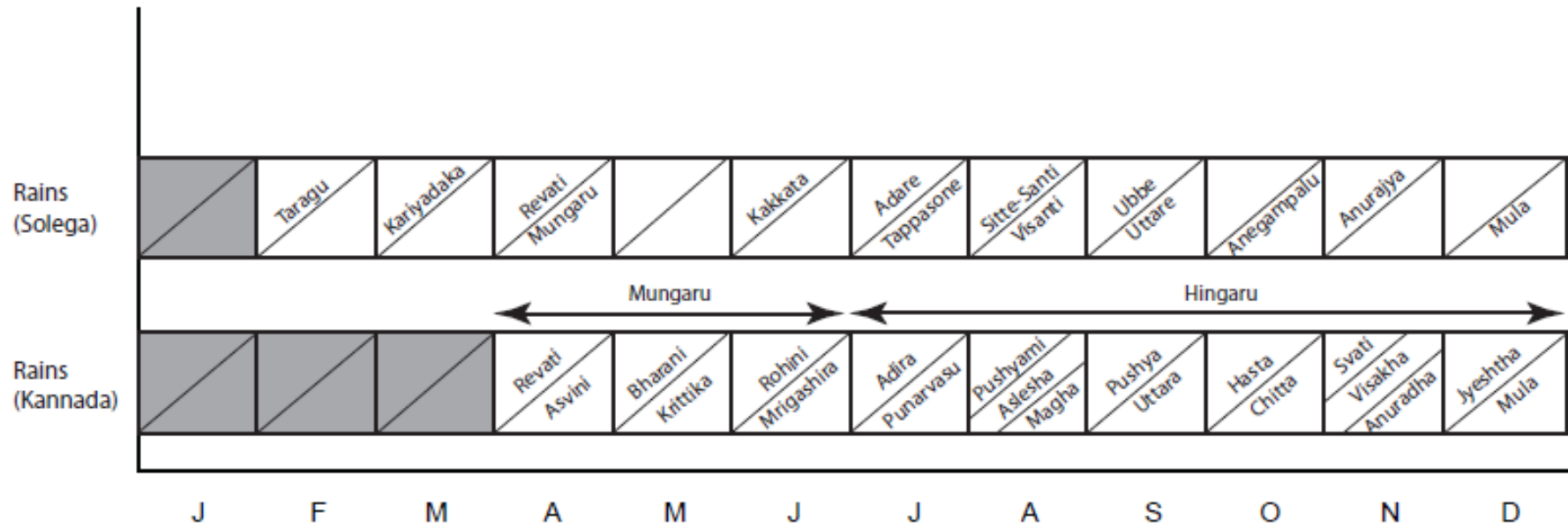
Lexicon

- Significant chunk of lexicon relates to biological phenomena/entities.
- e.g. Solega – 400+ plant names, ~20 forest types, ~100 bird names, ~40 mammal names, ~50 invertebrates
- Most ‘threatened’ part of lexicon (lifestyle change, climate change, invasive species, overexploitation)
- Main source of difference between Solega and Kannada

Lexicon - landscape types



Lexicon – rains/seasons



Lexicon – elephant classification



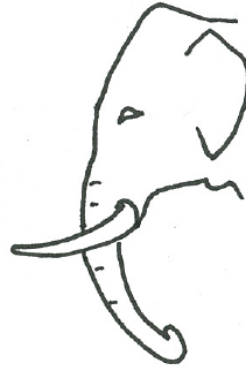
ko:rea:ne



i:lugomba



thoṭṭilugomba



*saḷegomba/
neṭṭa:gomba*



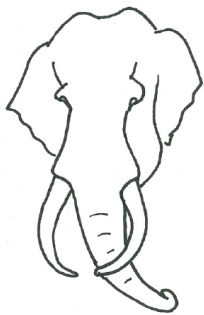
saṇṇa kombina:ne



moḷegomba:ne



baka:rā



ku:ḍugomba



kattarigomba



murigomba



oṇṭigomba

Lexicon – more than just a word list

the web of use – hearing, again and again, which signs go with other signs to form larger units, including patterns of paraphrase – and secondly, *the process of ostension* – of illustrating what some words mean by ‘pointing out’ from the language itself to objects in our shared world.

Evans, Nicholas and Sasse, Hans-Jürgen (2003). Searching for meaning in the Library of Babel: field semantics and problems of digital archiving. In Linda Barwick, Allan Marett, Jane Simpson and Amanda Harris (eds.), *Researchers, Communities, Institutions, Sound Recordings* Sydney: University of Sydney.

Lexicon – more than just a word list

- Need ‘paralinguistic’ data, such as photographs, uses, cultural significance, known ecological links, scientific ID

dolli mara  – a kind of rainforest tree

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dolli mara ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ ಡೊಲಿ ಮರಾ – a kind of rainforest tree



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dolli mara ಡ ಡ ಡ ಡ ಡ ಡ ಡ ಡ ಡ ಡ – a kind of rainforest tree, *Careya arborea* (Acanthaceae).



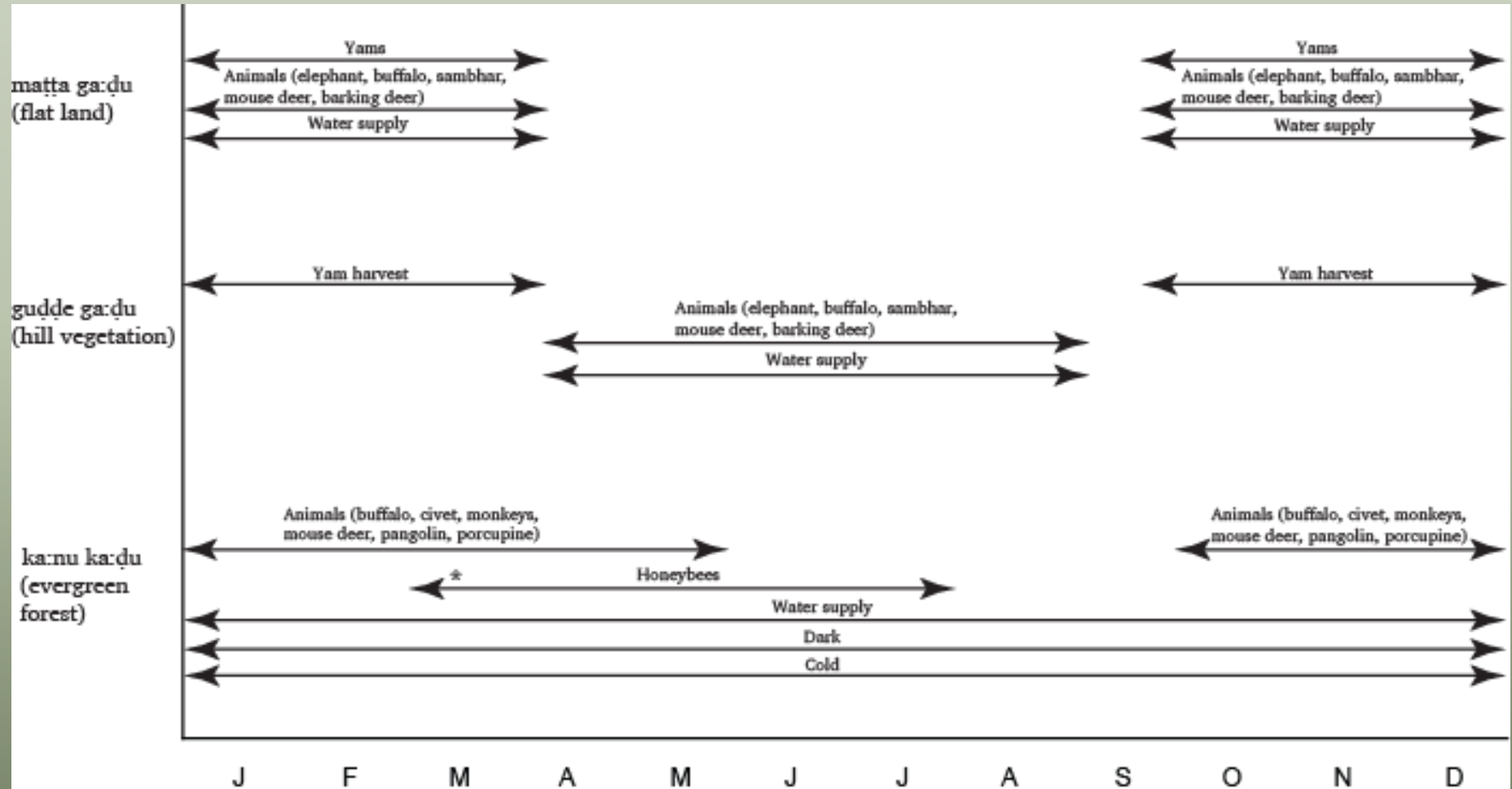
Ecological knowledge – more than just the lexicon

oḍḍuga:ḍu

- Physical description (*kalloḍḍu, ba:ri ba:ri tadira oḍḍu*)
- Place names (*aḍkugallu, e:ru kallu*)
- Local plants and animals (*kaṛaḍi, huli, muḷḷandi, balla tale giḍa*)
- Resource use (*je:nu*)
- Cultural information (*“oḍḍiga ho:gadakka a:ga:dille, kaṛaḍi ade!”*)



Ecological knowledge – more than just the lexicon



Knowledge of animal behaviour

*ondu maravo: murritave, bu:r-
endave, ada hiḍiya bahudu.
matte kīvīya ondu taradalli
moṭṭakko moṭṭakko moṭṭakko
endu hoḍda:de. a: saddadalli
hiḍitivī nā:vu. ondu ondu a:ne
alli murda:de, adave:
murda:de. kirri enda:de, idalli
goḍrrr enda:de, e:vadondu
sadda koṭṭa:de. i: he:lu boddo
boddo boddo boddo endu
surda:de. a: tara nanaga
gotta:gi idu a:netta, be:re
oṭṭo:gõ enda:ki oṭṭo:itivī*

They'll shake a tree, you hear
"bu:r", that's how you know.
Then they flap their ears,
making the sound "moṭṭakko...
moṭṭakko... moṭṭakko". That's
how we know they're there.
The elephants trumpet, going
"kirri" or "goḍrrr", one of
those sounds. They make the
sound "boddo boddo boddo
boddo". That's how we know,
"There are elephants here, lets
go elsewhere," and we go
away.

	Condition (26/03/09)						
Tree	baḷlu (bare)	eḷa:ku (new leaves)	ele (leaves)	muggu (buds)	hu: (flowers)	ka:yi (unripe fruit)	haṇṇu (ripe fruit)
matti	✓						
bejja	✓						
honne		✓					
aranelli		✓					
ka:ḍugeru	✓						
buḷuga		✓					
bu:ta:ḷe					✓		
i:raṇṇa	✓						
oluge	✓						
kagga:li	✓						
toṭṭi	✓						
anase			✓		✓		
sauravi:lu		✓					
kara:va:di			✓		✓		✓
kallicci			✓				
biḷicci			✓				
beṭṭasaṇḍe			✓				
bu:ra			✓				
udi:					✓		
kincaga					✓	✓	
araviḷu			✓		✓		
ke:silu			✓			✓	
torrema:ū			✓	✓			
kaīyebe:u			✓		✓	✓	

Knowledge of seasonal cycles

hejje:nu honne hu:.i-na ʔa:im bar-t-ade

A.dorsata P.marsupium flower-GEN time come-NONPST-3sg.N

“The giant honeybee arrives in the time of the honne flower.”

kaḍḍi:je:nu maraḷi hu:.i-na ʔa:im bar-t-ade

A.florea Indigofera.sp. flower-GEN time come-NONPST-3sg.N

“The dwarf honeybee arrives in the time of the *marala* flower.”

Changes to the forest ecosystem

- Land clearance by fire banned in 1990s
- Invasive weed – *ro:jana kaḍḍi* (*Lantana*)

Consequences:

- Grass species hard to find:
ba:ṇe hullu, ko:ḷi hullu, jabba:ru hullu, pi:ki hullu, na:ralu hullu, abbu hullu, navaṇe hullu
- Changes to animal behaviour



Changes to the forest ecosystem

*ondu sari na:vu ka:ḍu benda:ga,
minciga hu: andare gaṇava:da
hu: buḍtittu a:ga, yelli no:ḍdare
biri minciga hu:. adu namma
avaru - namma hengisaru - alli
ho:da:ga avarige ishṭa bartittu,
“idu ho:gu na:nu muḍiya be:ku”,
a:genta a: hu: muḍkoṇḍ???
muḍdu uṭṭu ka:ḍiga ho:gva:ga.
i:ga hu: gaḷu ondu illa. a:ga da:rili
ho:gta:idda:ga a: hu:ina ba:ri
gamala bartittu ya:kandare adu
mu:kigella:we ta:ktittu???* hu:.
*a:va:ga ka:ḍella pu:ra ondu tara
gamala bartittu. i:va:ga a:
gamala onduwe baralla*

After you lit a fire, the fragrant *minciga* flowers would bloom, wherever you looked, there'd only be *minciga* flowers. Among our people – our women – they would want the flowers, [so you'd say to yourself], “I need to go pick some”, and you'd do so when going to the forest. You don't get any flowers now. Back then, while walking along a path, you could really smell the perfume of the flowers; the whole forest would smell like that. It doesn't anymore.

Avoiding biases

- ‘Indigenous’ knowledge, not western science in the local language

ka:nu ka:ḍu

- always cold and dark
- occurs on the flat tops of hills
- continuous stretch of forest
- rivers with year-round water
- very large trees: *ha:le, thuruve, kakkilu, bikkilu, bellaḍe, ku:ma:ũ, kende, soravilu, aravilu, hebbe:u, aravilu kende, ne:ri, koḷa:ma, mi:na*
- few animals like to live there: buffalo, *bekku, kotti* (civet?), monkey, mouse deer, pangolin, porcupine



Conclusions

- The biological/ecological knowledge of a language community is an important part of its cultural heritage
- Documenting this knowledge ensures that many culturally-relevant aspects of the spoken language are also documented
- Language dealing with biological themes may be the most endangered semantic domain; needs to be made a priority

Thank you!

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