

RESEARCH GROUP ΔIALING

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HOW AI CAN SAVE ENDANGERED LANGUAGES: THE CASE OF CAPPADOCIAN GREEK AND WOOLAROO

Endangered languages

- 7,151 living languages in the world
- 3,045 languages are endangered (42,58%)
- Endangered when users "begin to teach and speak a more dominant language to their children." (Ethnologue)
- Degrees of endangerment (Unesco):

Safe	Vulnerable	Definitely Endangered	Severely endangered	Critically endangered	Extinct
English	Basque (France, Spain)	Quechua of Santiago del Estero (Argentina)	Tamazight (Tunisia)	Dyirbal (Australia)	Dalmatian (Croatia)



Endangered languages (map by Ethnologue by SIL International)



Image Anete Lusina

Woolaroo: Google's contribution to the preservation of endangered languages

- Open-source photo-translation app
- Google Cloud Vision API
- Picture → translation in target language
- 10 endangered languages/dialects: Yugambeh, Yiddish, Tamazight, Rapa Nui, Nawat, Māori, Calabrian Greek, Sicilian, Louisiana Creole, Yang Zhuang
- Collaborations with language institutions
- promote language learning and preservation

Why images in language learning?

- Practical: ambiguity of homonyms, e.g. 'ball': round object, social gathering for dancing, etc.
- Benefits the comprehension and acquisition of foreign vocabulary (unless the learner overestimates the power of images)
- Words in their context are easier to memorise and to use in communication
- Gamification = fun → people learn faster when they believe they are playing

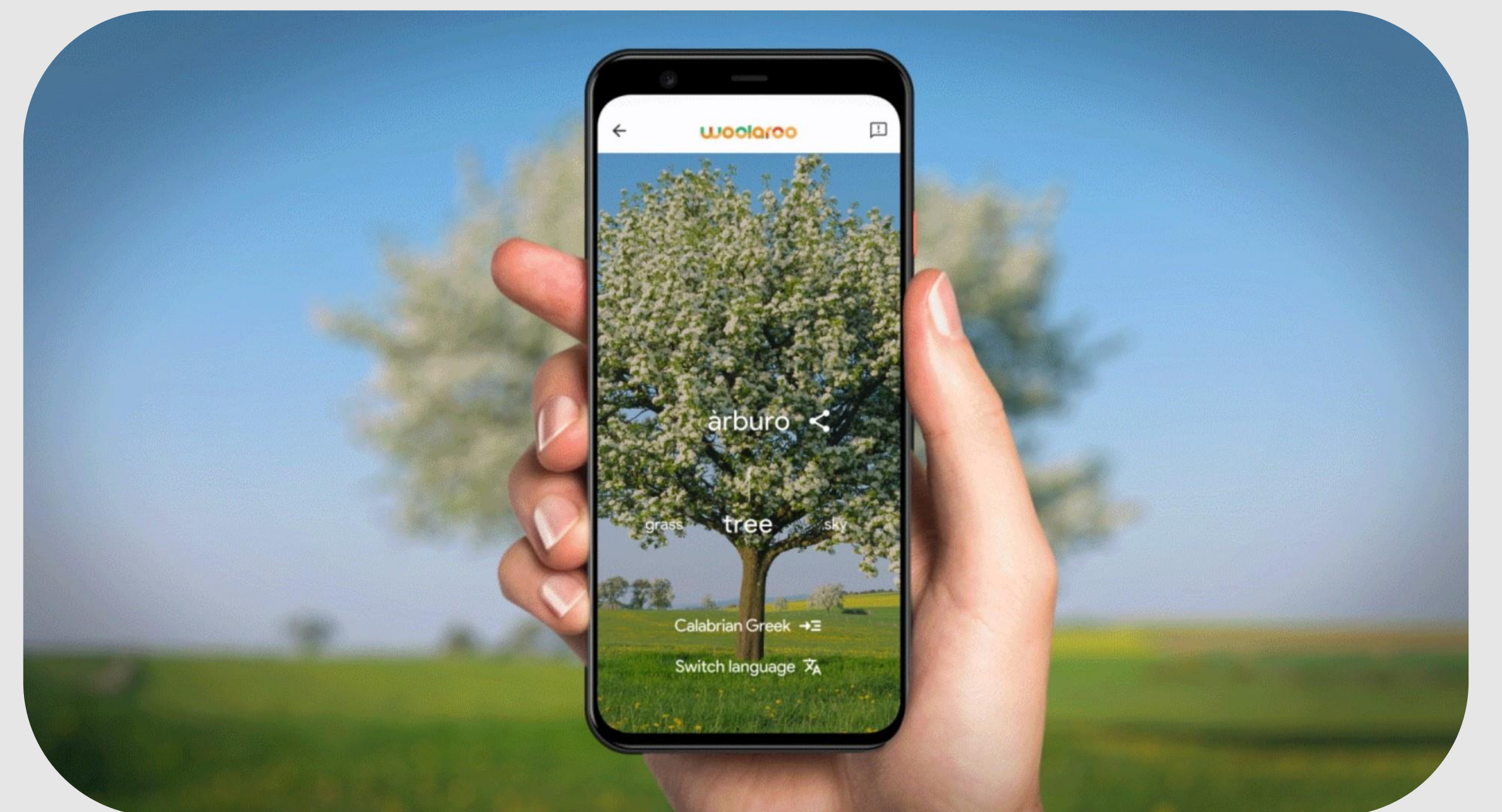


Image @ Google



Image Mehmet Turgut Kirkgöz

Cappadocian Greek in Woolaroo

- Dialect of Modern Greek, spoken in Cappadocia (Turkey) until 1924 (Greek-Turkish Population Exchange)
- Turkish influence: "heavy structural borrowing" (Thomason & Kaufman 1988)
- Critically endangered: only a few hundred speakers in Northern Greece (subdialect 'Mišótika')
- Partnership: providing Cappadocian translation of vocabulary and recordings by native speakers
- Outreach of research on Cappadocian Greek word order (2020-2024)

Get access to Woolaroo via this code:



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