

IN THIS STREET who else?
 IN THIS HOUSE who else?
 IN THIS CITY who else?
 FOOD-SHARING who else?
 EVENT who else?
 JOB XYZ who else?
 STARTUP who else?
 UNIVERSITY who else?
 PHONE REPAIR who else?

FLAT-SHARE who else?
 CRAFTSMAN who else?
 BOOK CLUB who else?
 SPORTS who else?
 RELIGION who else?
 DATE who else?
 SEX who else?
 MUSIC who else?
 SCOOTER who else?

HOBBY who else?
 SKILL XYZ who else?
 SALE who else?
 LOAN who else?
 REFUGEE who else?
 SYM who else?
 CLOTHING SWOP who else?
 SCHOOL who else?
 HAIRCUT who else?

TAXI who else?
 RIDESHARE who else?
 APARTMENT who else?
 IT HELP who else?
 CLEANER who else?
 LAUNDRY who else?
 SALE who else?
 CAR who else?
 CONCERT who else?

WHOELSE?

QUIENMÁS?

还有谁?

QUI D'AUTRE?

WER NOCH?

KTO EЩЕ?

CYCLE COURIER who else?

IN THE COMPANY who else?

CYCLE who else?

BOARD GAME who else?

EVERY NLU LISTENS DIFFERENTLY...

We make Siri & Alexa talk with each other!

A unified language between human and artificial intelligence as accounting principle for AIs

who else? is **Universal Grammar for AI**: We standardize how voice user commands are represented between AIs, using the smallest common denominator available in language - "who else?" relationships.

who else? is the proposal of an **accounting principle for human language**: There are 500 different ways of telling an AI to order a Taxi, Pizza or Apartment. But in which way will tell 1 AI the other AI about it?

who else? solution is to provide the **shortest, yet semantic explicit taxonomy** to annotate language-based request: **Taxi** who else? **Food** who else? **Apartment** who else?

who else? is a compression and data federation principle. Similar **like MP3 for Digital Audio or Hypertext for Text Internet**, for the first time human language becomes interoperable and linkable.

Keywords: Voice Interfaces Universal Grammar, Explainable AI, Language Interoperability

THERE IS NO TRUTH IN NLU It's a problem every AI listens in a different way



Request: "Huuuuuuungry, Alexa, I am soo hungry - call me a pizza."

Text to Speech	NLU 1 Google "I am in Hungary, where is Pizza?"	NLU 2 Nuance "I am hungry, call the pizzaria"	NLU 3 Alexa "? Alexa error"	NLU 4 Bosch "I am hungry, order me a pizza"	NLU 5 Mycroft "Did you mean Delivery"
Accuracy	86%	91%	21%	55%	

Problem: Today`s NLU (Platforms) handle data in their proprietary output formats

Proposal

WHOELSE?
 QUIENMÁS?
 还有谁? Protocol
 QUI D'AUTRE?
 WER NOCH?
 KTO EЩЕ?

Pizza

who else?

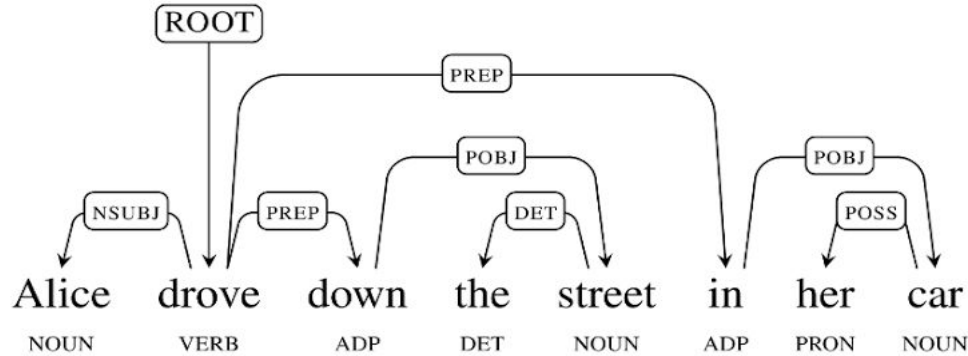
Privacy by design
 encoding of language

Intent: Pizza
 Content: per whoelse.ai
 Accuracy: Checksum (minimum: 80%)
 Meta Data: Location, Bid | Call, Radius
 Namespace: Open | Private

whoelse.ai

TECHNOLOGY LICENSE who else? enables AIs for a simplified encoding of spoken user commands

Google Syntax Net



<https://opensource.google.com/projects/syntaxnet>

NLP
Natural Language
Processing

Alice

Street

who else?

Alice

Car

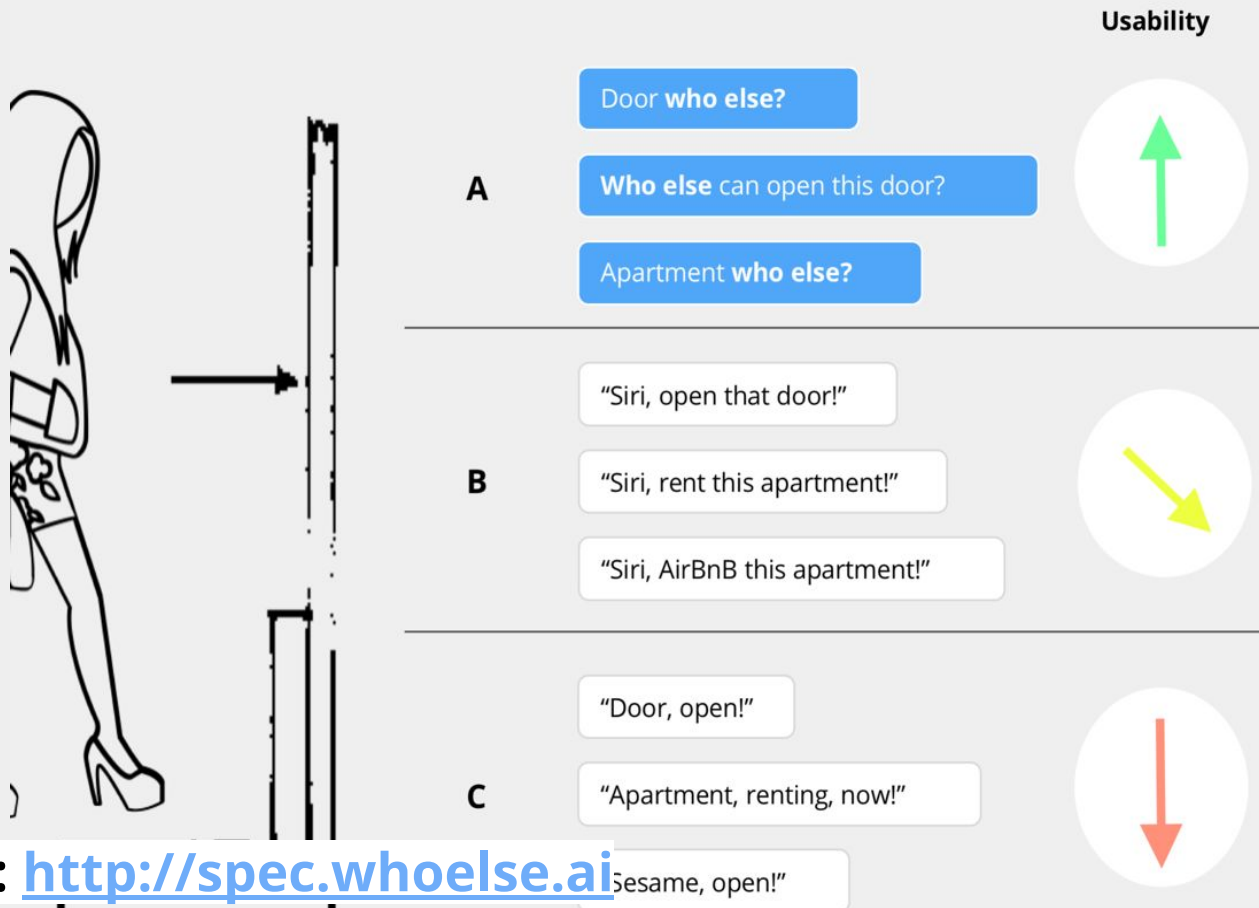
who else?

NLE
Natural Language
Encoding

- AI Privacy by Design
- AI Efficiency Enhancing

who else? Protocol

who else? is a brand designed for easier and more efficient language usability in IoT



Read more: <http://spec.whoelse.ai>