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Spacer

Negotiating Without Revealing Preferences



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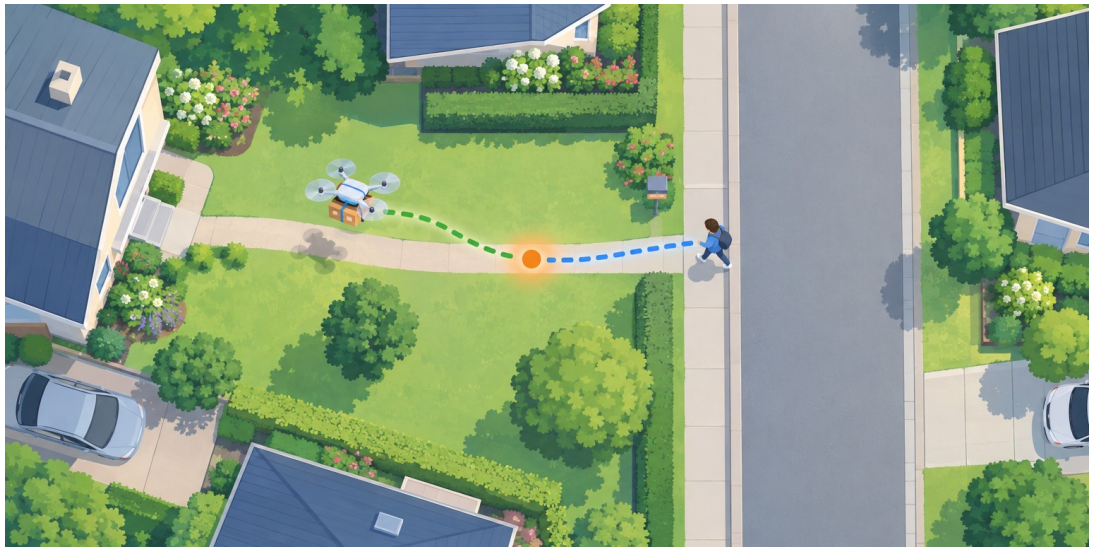
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Where should we meet?



Rider and robotaxi agree on a pickup point



Resident and delivery drone agree on a hand-off point

Each side has its own reasons. Close, quiet, safe to stop, not in front of my door.

Hiding scores does not hide preferences

Your reasons are private.

A meeting point can say where you live, work, or which clinic you visit.

So you share only places, never scores.

WHAT STILL LEAKS

01 **Which points you propose**
you rarely offer a place you dislike

02 **In what order**
the opening offer tends to be your favourite

03 **The route you take**
your path to the spot gives it away

OUR APPROACH

You and the robotaxi negotiate

01

Evaluation

You and the taxi each rate the candidate points, privately.

You: what matters to you.

02

Negotiation

Suggest or accept, in turns. Places, never scores.

You: suggest or accept.

03

Navigation

Each side travels to the agreed point on its own.

You: walk to the spot.

EXAMPLE **Taxi** suggests P1 · **You** suggest P4 · **Taxi** suggests P3 · **You accept P3**

First signs: less given away

SO FAR, IN SIMULATION

Deals stay good.

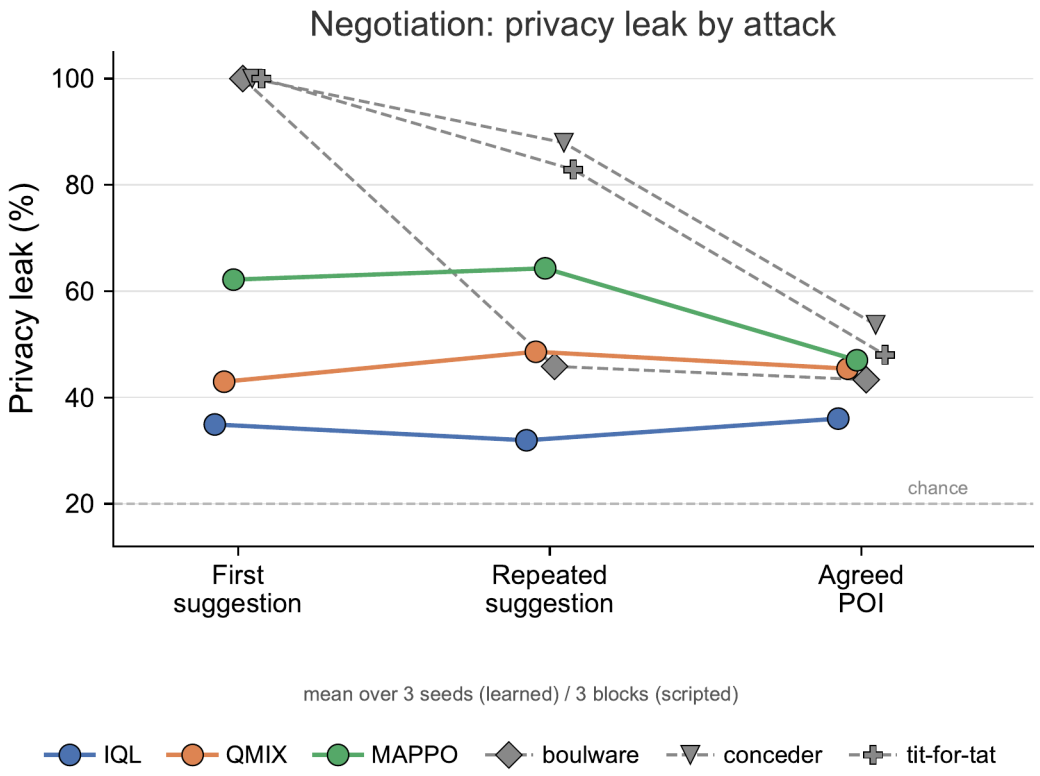
91-100% agreement, quality close to scripted negotiators.

Opening offers leak less.

35-62% against 100% for scripted. Chance is 20%.

WHAT WE WANT TO FIND OUT

Can the leak go down to chance without a worse deal?



Observer guesses your favourite. Lower is better. Grey: scripted.

The route still points at the spot

SO FAR, IN SIMULATION

Arrival is reliable.

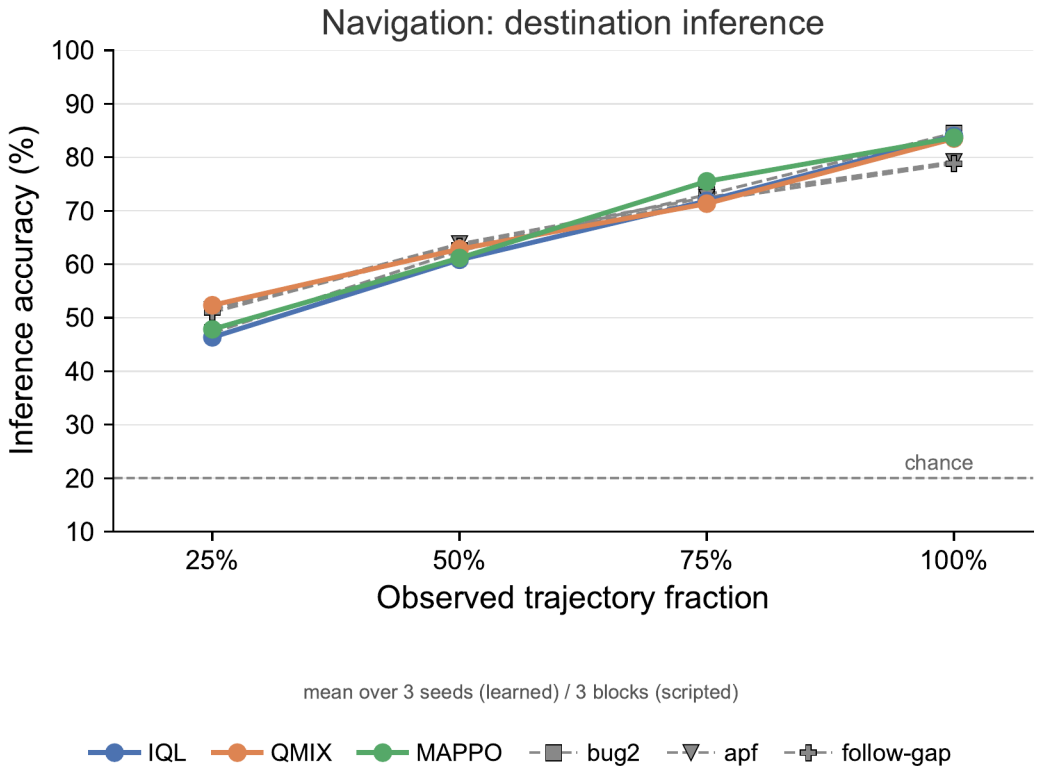
Learned navigators match scripted ones.
MAPPO arrives 90% of the time.

The route gives it away.

About half guessed a quarter of the way in, about 80% by arrival.

WHAT WE WANT TO FIND OUT

Can a route reach the spot without announcing it early?



Observer guesses the destination from part of the route. Grey: scripted.

OPEN QUESTIONS

Where we want your perspective

Trust in the machine
What is the taxi learning about me as we talk?

Transparency vs. privacy
Explaining the deal is what leaks the preference.

Repeated encounters
Does the leak add up over daily trips?

Adversarial services
What if the taxi is just profiling me?

Above all: how do people negotiate with a vehicle, and what privacy do they expect?

Thank you

Questions?

01 Hiding scores is not enough. Behaviour leaks.

02 Early signs: learned negotiators leak less.

03 The route is still an open privacy channel.



Project page

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