### Puzzle

In French information-seeking questions, the question term (wh) can be either fronted (wh-ex situ) or left in situ (1-2)

> (I) Où vas-tu? [ex situ]

(2) Tu vas où? [in situ]

Being always possible, the ex-situ option is often seen as the "default" option. Wh-in situ is more restricted in distribution, as it is impossible in embedded questions.

(3) a. Je me demande où tu vas.

b. \*Je me demande tu vas où?

Yet, in all other contexts, wh-in situ is grammatical, which suggests that the choice of this forms is not merely governed by syntactic factors alone. The question of what conditions the choice of wh-in situ remains a topic of continuous debate.

#### **Our Research Question:**

What role does discourse situation and the nature of the speaker- addressee interaction play in conditioning wh-in situ?

# Previous Research

Previous research suggested that wh-in situ is tied to both (i) strong presupposition and (ii) rising prosody [1], but both claims have since been challenged, see [3], [5].

Recent research sought to connect wh-in situ to information structure [5], [8], [9] and speaker-addressee pragmatics [4], [6].

Furthermore, although discourse situation was also taken to be important, corpus results in the literature, generally uncontrolled for size, vary a lot with no clear pattern for in situ [2].

Here we further probe the role of discourse situation (formality), the speaker/addressee relation, as well as the information state (familiarity/expertise) via a **corpus-study** and a forced-choice experiment.

#### References

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# Wh-In Situ in French as a Function of Discourse Factors Megan Gotowski and Viviane Déprez **Rutgers University**

#### **Procedure**

We analyzed corpora from the Enquêtes SocioLinguistiques à Orléans (ESLO) database, a collection of recorded interviews in a variety of situations/settings.

Corpora were categorized on formality of **discourse situation** based on (i) description of the corpus, and (ii) an independent measure of formality (tu/vous counts). We coded a sample of ~1,000 questions from each sub corpora.

Question were coded by types, and sample of wh-questions were extracted. Fragment questions were excluded. All non-subject wh-questions were coded as either fronted or in situ.

| ESLO 1                 | Repas 1<br>(Informal) |
|------------------------|-----------------------|
| Discourse Situation    | mealtime interactions |
| # of Informal Pronouns | 206                   |
| # of Wh-Questions      | 175                   |

| ESLO2                      | Repas 2<br>(Informal) |
|----------------------------|-----------------------|
| <b>Discourse Situation</b> | mealtime interactions |
| # of Informal Pronouns     | 205                   |
| # of Wh-Questions          | 132                   |

## Experiment

**Experimental Design:** Participants were given a context situation with an interlocutor description, prompting a dialogue. They were asked to select between a fronted and an in-situ question to continue the dialogue. We manipulated speaker/addressee familiarity (familiar vs. non-familiar) and addressee expertise (expert vs. non-expert), resulting in a 2X2 design.

Ex: Non-Familiar/ Expert Scenario: When in a store looking at jeans, and you say to the salesperson: Bonjour, ce jeans coûte combien / Bonjour, combien coûte ce jeans?

**Participants:** 82, recruited online from a French university. The study was created and hosted on Ibex Farm.

**Materials:** 16 target questions (4 per condition) + 16 fillers for a total of 32 questions. **Results:** 

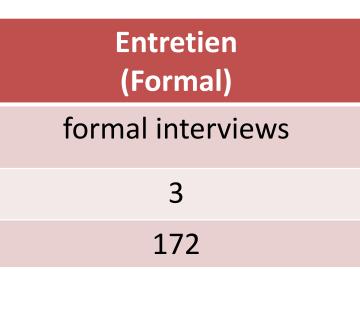
- Significant effect of familiarity (p < 0.05) speakers are more likely to select wh-in situ when the addressee is a known person in some capacity.
- Significant effect of expertise (p < 0.01) speakers produced more in situ when addressees were "non-experts" (perhaps suggesting the role of discourse setting here too).
- Overall, participants selected more wh-in situ questions!

|            | Familiar | Non-Familiar |
|------------|----------|--------------|
| Expert     | 180      | 160          |
| Non-Expert | 235      | 168          |
| Total #    | 415      | 328          |

100% 80% 60% 40% 20% 0%

Raw Counts of Wh-In Situ Responses per Condition

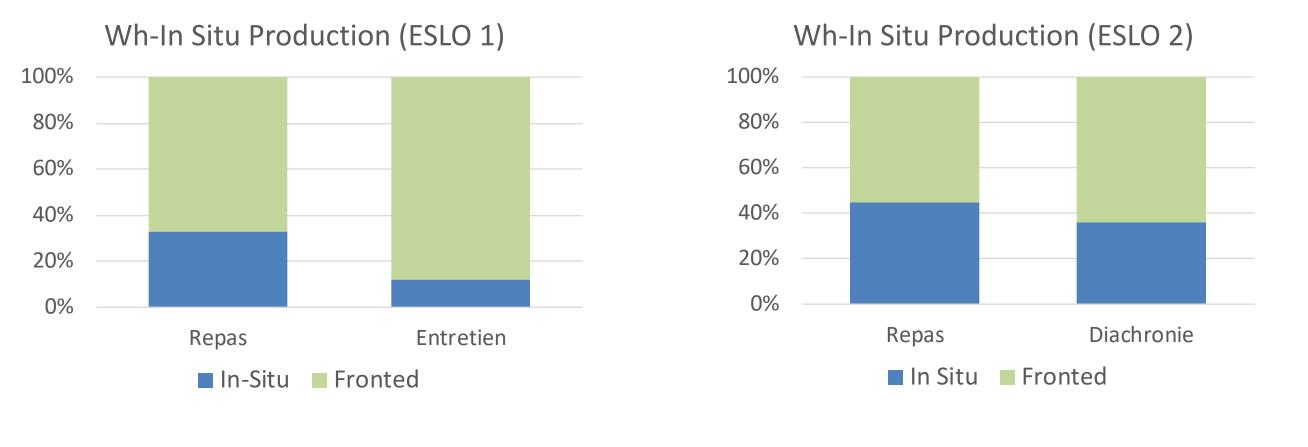
# Corpus-Based Analysis (ESLO)

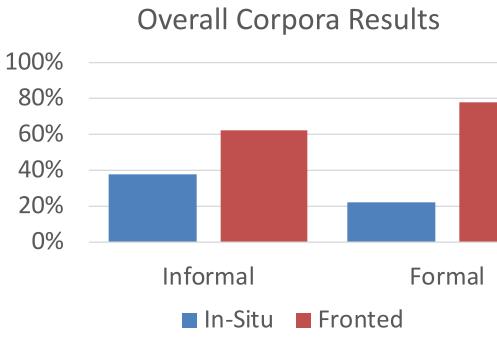


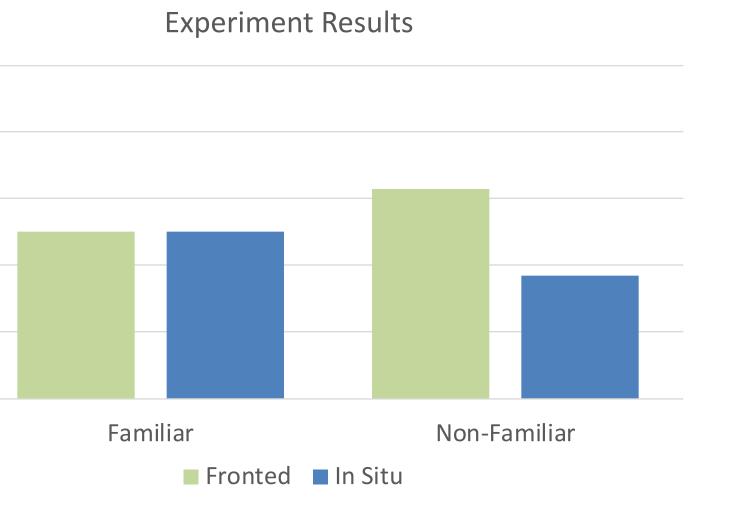


For ESLOI, comparing the production of wh-in situ, we found a difference in rates between corpora (33% in situ for Repas vs. 12% for Entretien). This difference is statistically significant (p < 0.00I), as confirmed via a mixed effects logistic regression model.

For ESLO2, we found the same trend, but not a significant difference in rates (45% vs. 36%), based on a small sample.



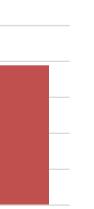




The choice of in-situ increases in informal situations where speakers are familiar with one another- but this alone does not exclude fronted wh-questions, which are overall preferred in naturalistic contexts.

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#### Results



A mixed effects logistic regression model reveals a significant effect (p < 0.05) when ESLO I + 2 are evaluated together, with corpus as a random effect.

#### Conclusions

Although wh-in situ is intuitively seen as the more informal choice, this has not been confirmed in previous research. We suggest the need for a more nuanced picture.

Experimental data confirms that familiarity increases the likelihood of wh-in situ, and that expertise is a relevant variable. Expertise, however, increased ex-situ (contra Engdahl 2006/Myers 2007).

✤ In none of these contexts is either form "required" – rather preference reflects the interaction of multiple pragmatic factors.

#### Remaining Questions

I. How does (in)familiarity interact with discourse context (current sample is too small to address this)? 2. Is there a diachronic shift that points to increased rates of in situ?

### Acknowledgements