A Persona-based Analysis of Politeness in Japanese and Spanish

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'(i) Ms. Yamada will have a lecture tomorrow;
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Spanish

(2) *Profesor, ¿tien****e*** ***usted*** *horas de oficina mañana?*
professor have.3P.SG you.POL hours of office tomorrow
'Professor, do you have office hours tomorrow?'

Introduction

Guiding questions

- How much inter- and intra-speaker variation is there in the use of politeness forms in Japanese and Spanish?
- What is the source(s) this variation?
- What is the nature of these politeness features? Are they comparable in Japanese and Spanish?

Goals of this talk

- Present data that highlights variation in each language.
- Develop a Bayesian pragmatic model for how politeness interacts with various contextual factors simultaneously.
- Illustrate how Bayesian inferences (statistical learning) allow for the creation of specific personas of discourse participants.

Roadmap

Background
- Japanese
- Spanish
- Interim Summary and Desiderata for Model

A Bayesian Dynamic Pragmatics Account
- Dynamic Pragmatics
- Discussion

Dynamic update as persona-learning

Theoretical Implications and Future Work
- Extending our Model
- Conclusions

Background

Japanese: Subject Honorifics

(3) a. *yamada-san-wa asita koogi-o* ***sur****-u.*
Yamada-Ms.-TOP tomorrow lecture-ACC do-PRS
'Ms. Yamada will have a lecture tomorrow.'

b. *yamada-san-wa asita koogi-o* ***nasar****-u.*
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'(i) Ms. Yamada will have a lecture tomorrow;
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- Truth conditionally, (a) and (b) are equivalent
- (b) delivers secondary information that the speaker expresses their respect for the referent of the subject (= *Ms. Yamada*)

Japanese: Addressee Honorifics

(4) a. *yamada-san-wa asita undoo-o sur-u.*
Yamada-Ms.-TOP tomorrow exercise-ACC do-PRS
'Ms. Yamada will do exercise tomorrow'

b. *yamada-san-wa asita undoo-o si-**mas**-u.*
Yamada-Ms.-TOP tomorrow exercise-ACC do-AH-PRS
'(i) Ms. Yamada will do exercise tomorrow;
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'(i) Ms. Yamada will do exercise tomorrow;
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- Again, at-issue meaning is equivalent in (a) and (b)
- (b) delivers secondary information that the speaker expresses their respect for the addressee (= *Ms. Yamada*)

Japanese: Initial Assessment

- Traditional Japanese linguistics has tacitly assumed that SH and AH as instances of the same honorific property.
- Their differences have not been the target of theoretical investigation (Kikuchi 1997 [1994]).
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- If politeness meanings are regulated by same principle, SH and AH should pattern together.
- This does not happen (AH without SH):

(5) *asita* *happyoo-o* *si-**mas**-u-ka?*
tomorrow presentation-ACC do-AH-PRS-Q
'(i) Are you having a presentation tomorrow?;
(ii) the speaker respects the addressee ($<$ *-mas*).'

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   - T: based on familiarity/confidence
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- Prescriptive factors govern use
- Discourse-based corpus studies show intra-speaker variation allows for personal identity creation dependent on context (Helinks, 2015; Fernández-Mallat, 2020)

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- All three forms employed: (1) *usted*, (2) *vos*, (3) *tú*
- Variation shows navigation of authority and care, alongside other lexical discursive markers and intonation (Prieto et al., 2011)
- Such variation is observed in institutional contexts, as well (Fernández-Mallat, 2020).

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Similarities

- General consensus on when to use politeness-oriented expressions
  - SH and *usted* make reference to social hierarchy
- Strategic violation of socially expected politeness is permitted
  - SH, AH and Spanish personal pronouns allow speaker to perform certain identities, within limits

Intermin Summary

(7) **Teacher-Student Test**
Can a teacher/president (someone with a higher social status) use the honorific form to a student/employee (someone with a lower social status) without intentionally violating the expectation in the society?

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2. **Posterior condition**: by (not) being produced by the speaker, a politeness-oriented expression changes the context in a certain way.
3. **Relation with social/pragmatic factors**: more than one factors contribute to the choice of the politeness-oriented form. When a language has more than two honorific systems, each system may have different weights to these factors.

A Bayesian Dynamic Pragmatics Account

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Our departure point

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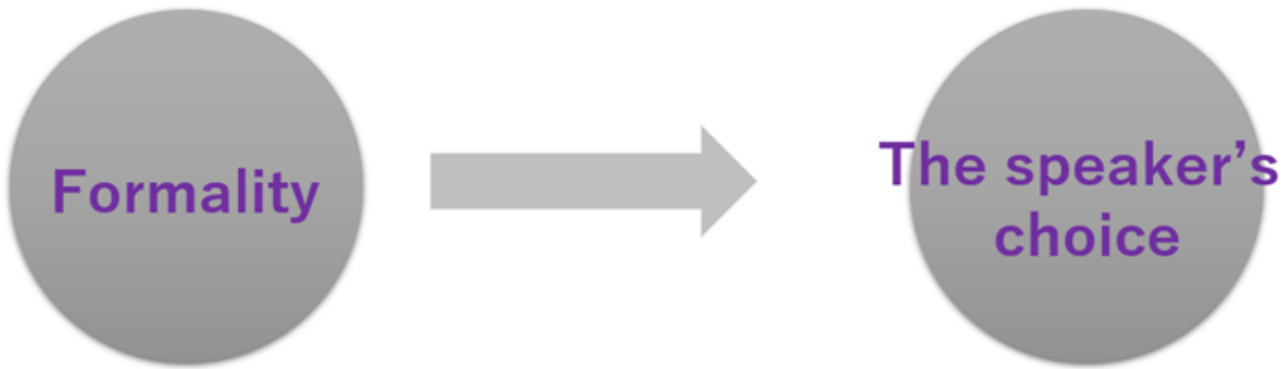

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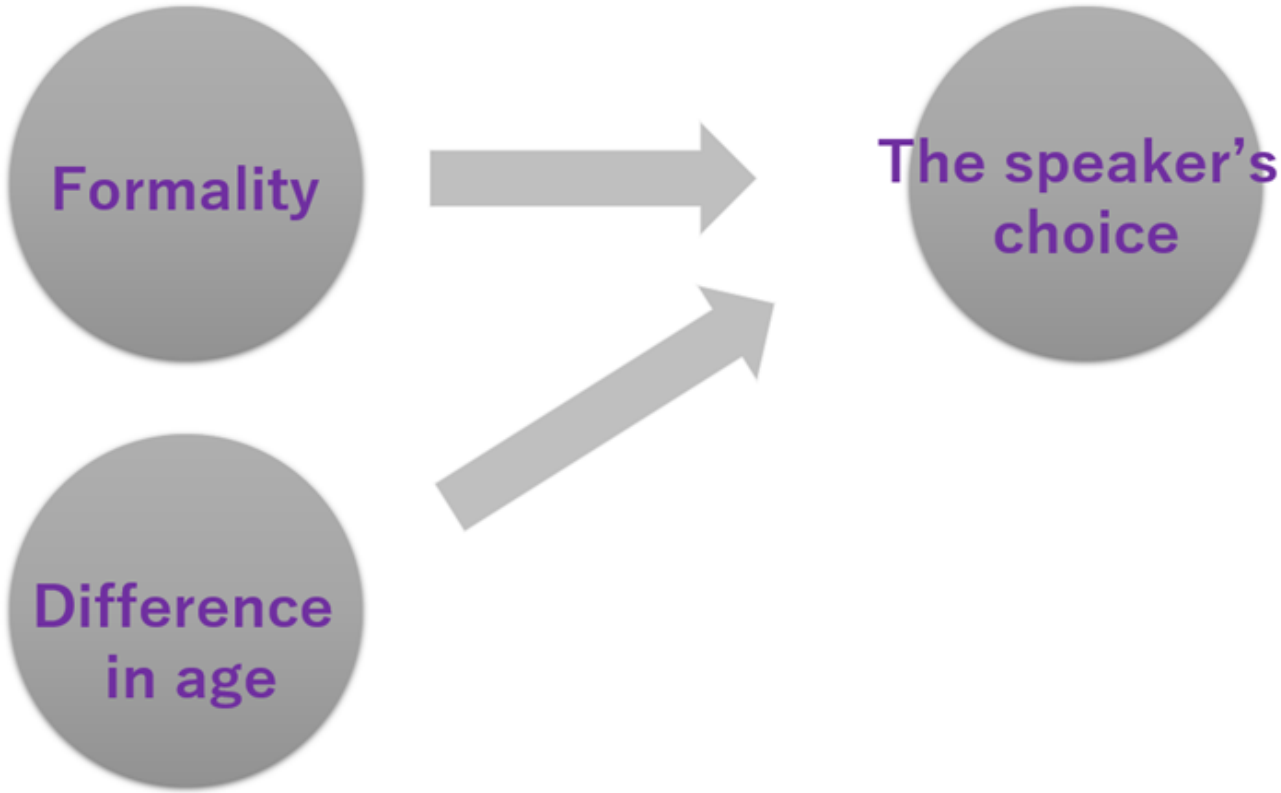

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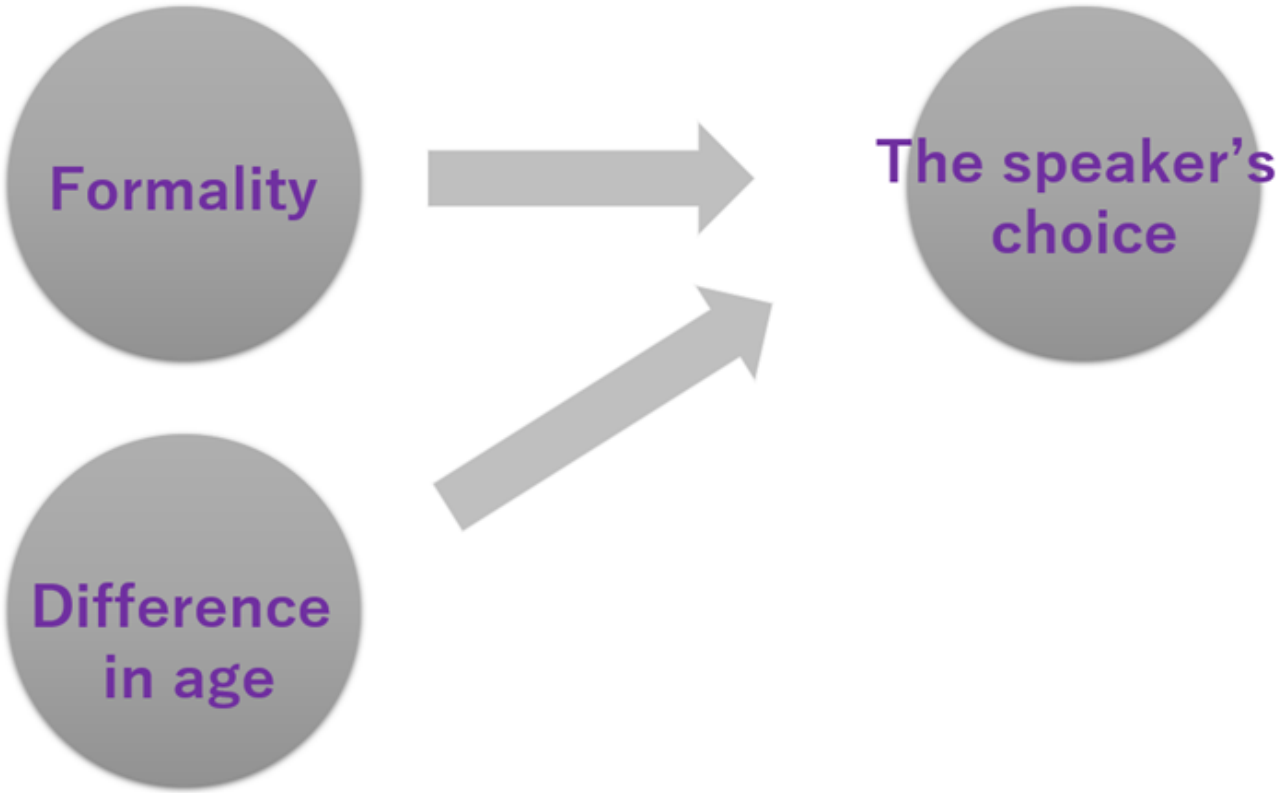

- How can we model their pragmatic profiles?

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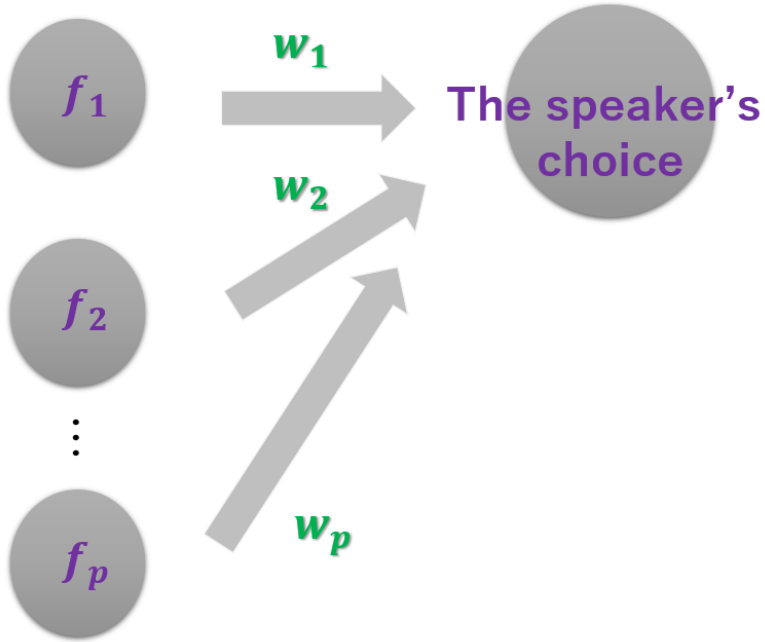

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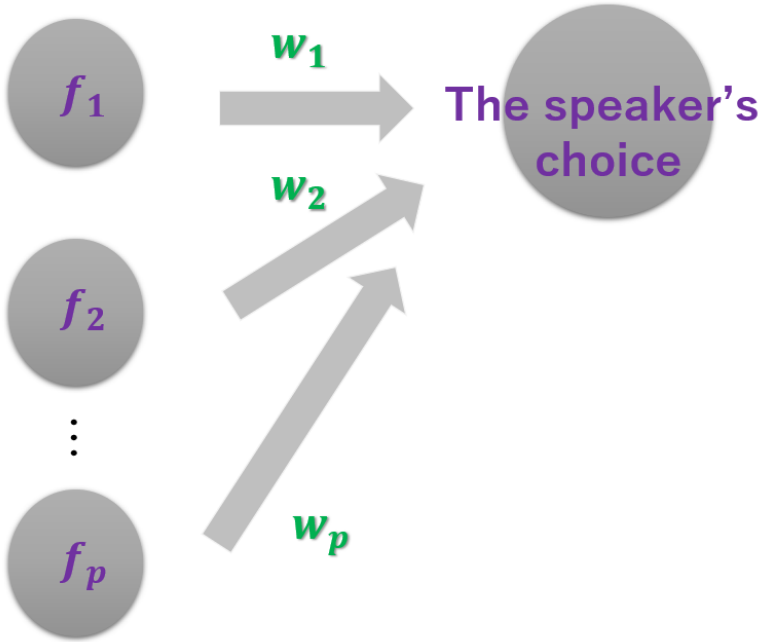

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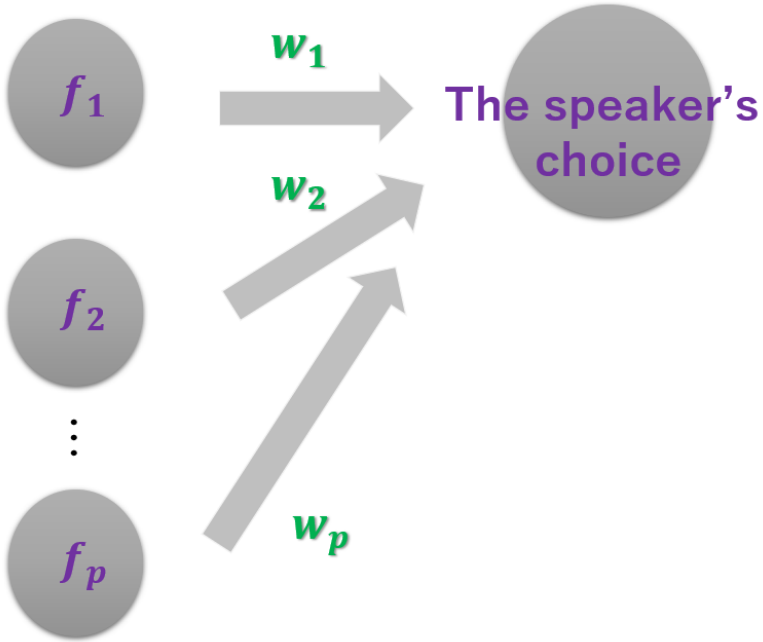

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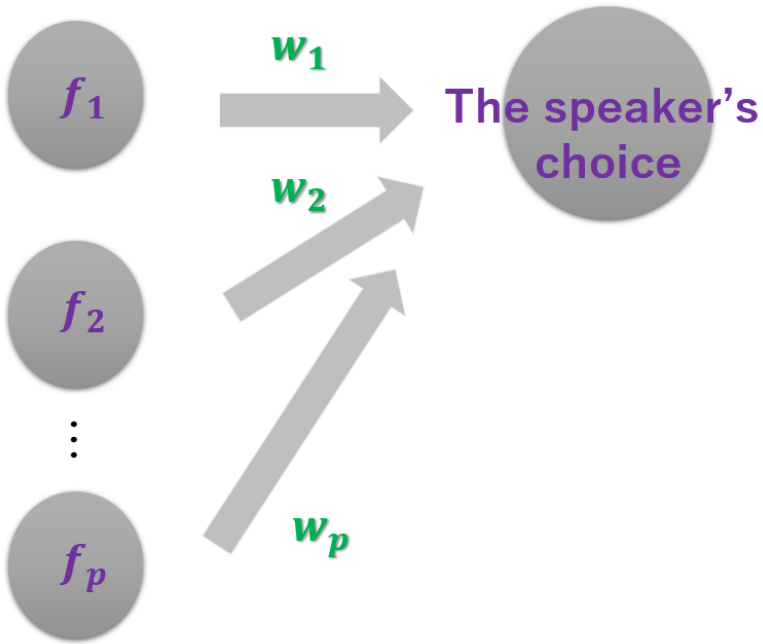

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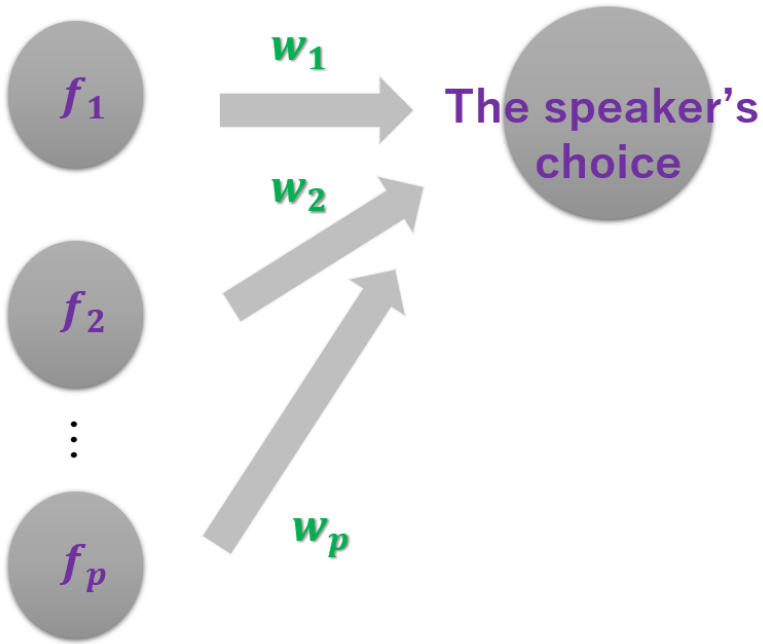

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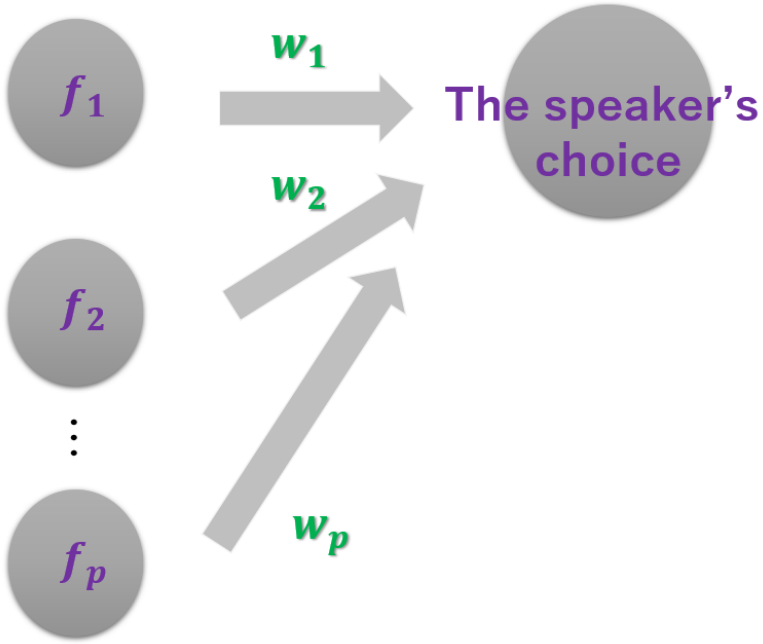

For Japanese, we use $\mathbf{w}^a$ for AHs and $\mathbf{w}^s$ for SHs.

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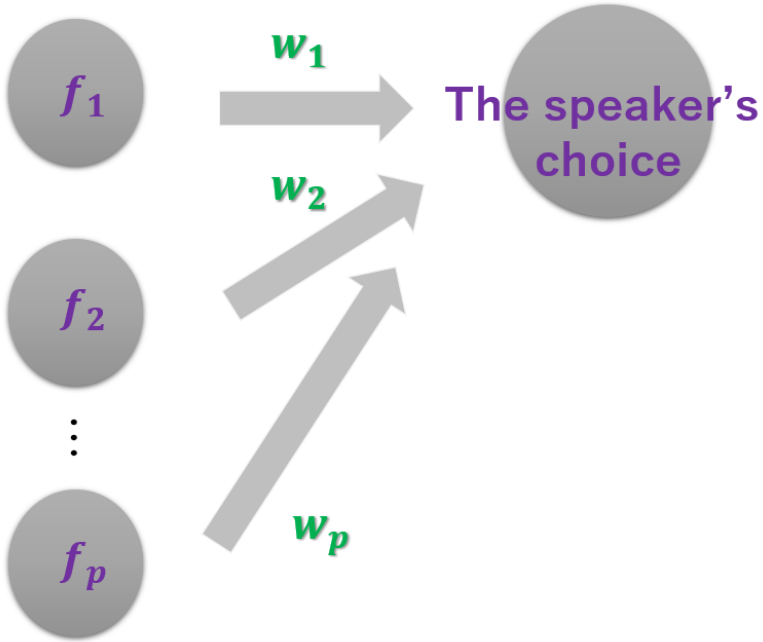

For Japanese, we use $\mathbf{w}^a$ for AHs and $\mathbf{w}^s$ for SHs.
For Spanish, we use $\mathbf{w}$.

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Structured Discourse Context

(9) Structured Discourse Context (Version 1 out of 3)

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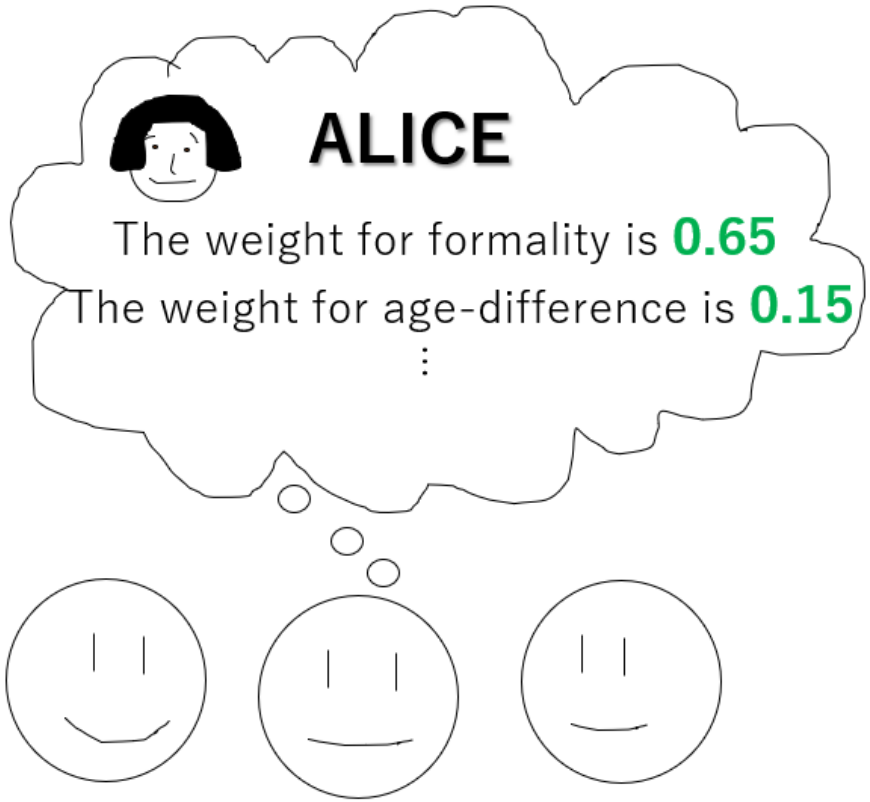

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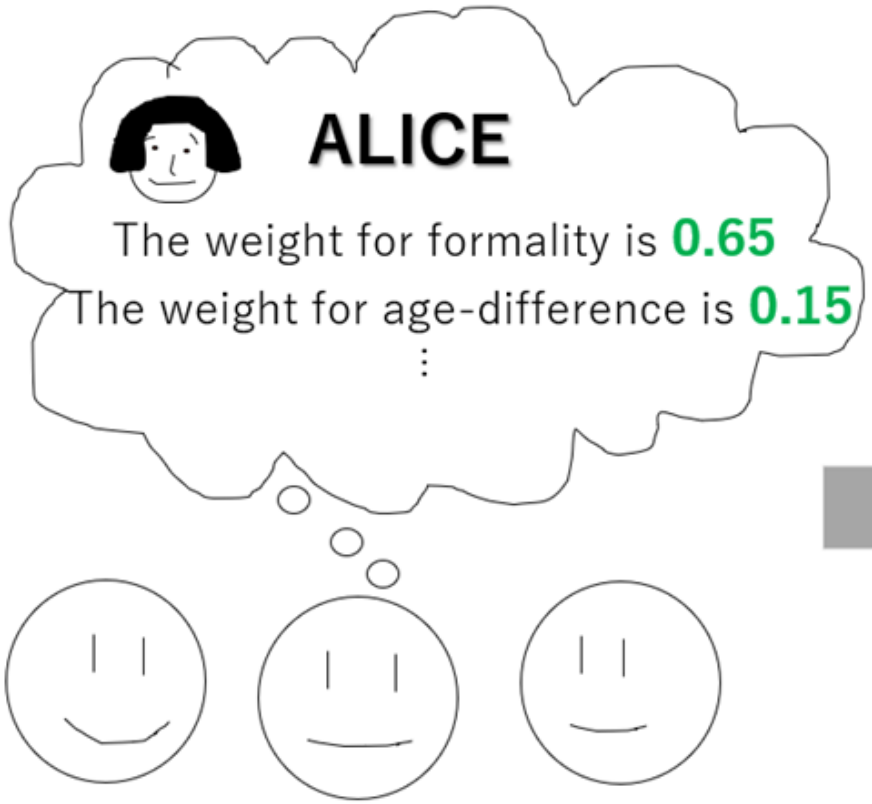

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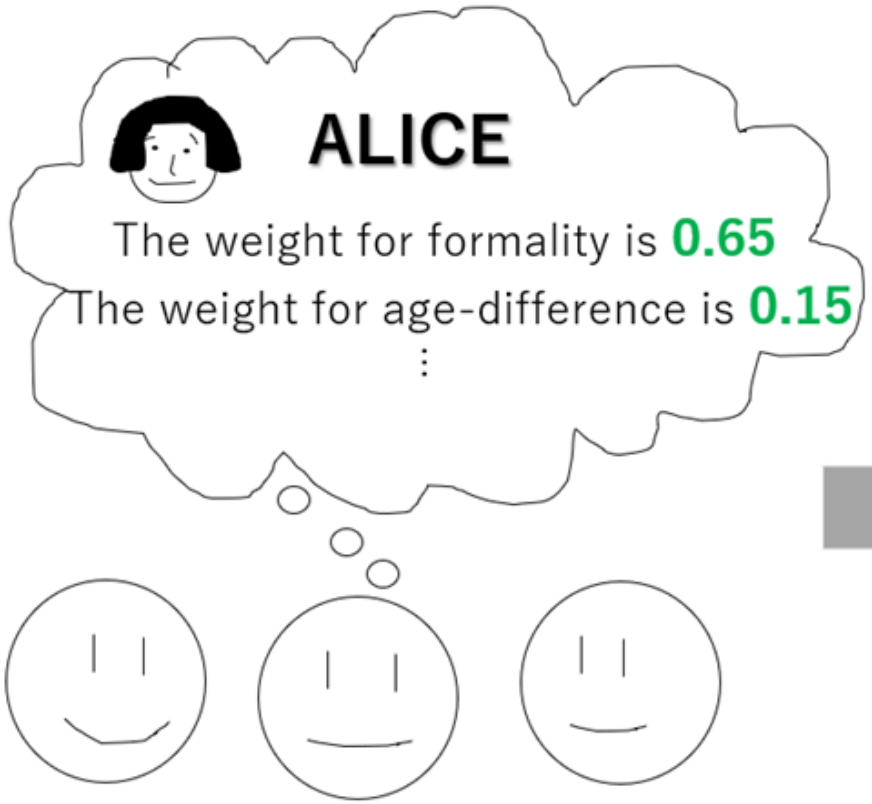

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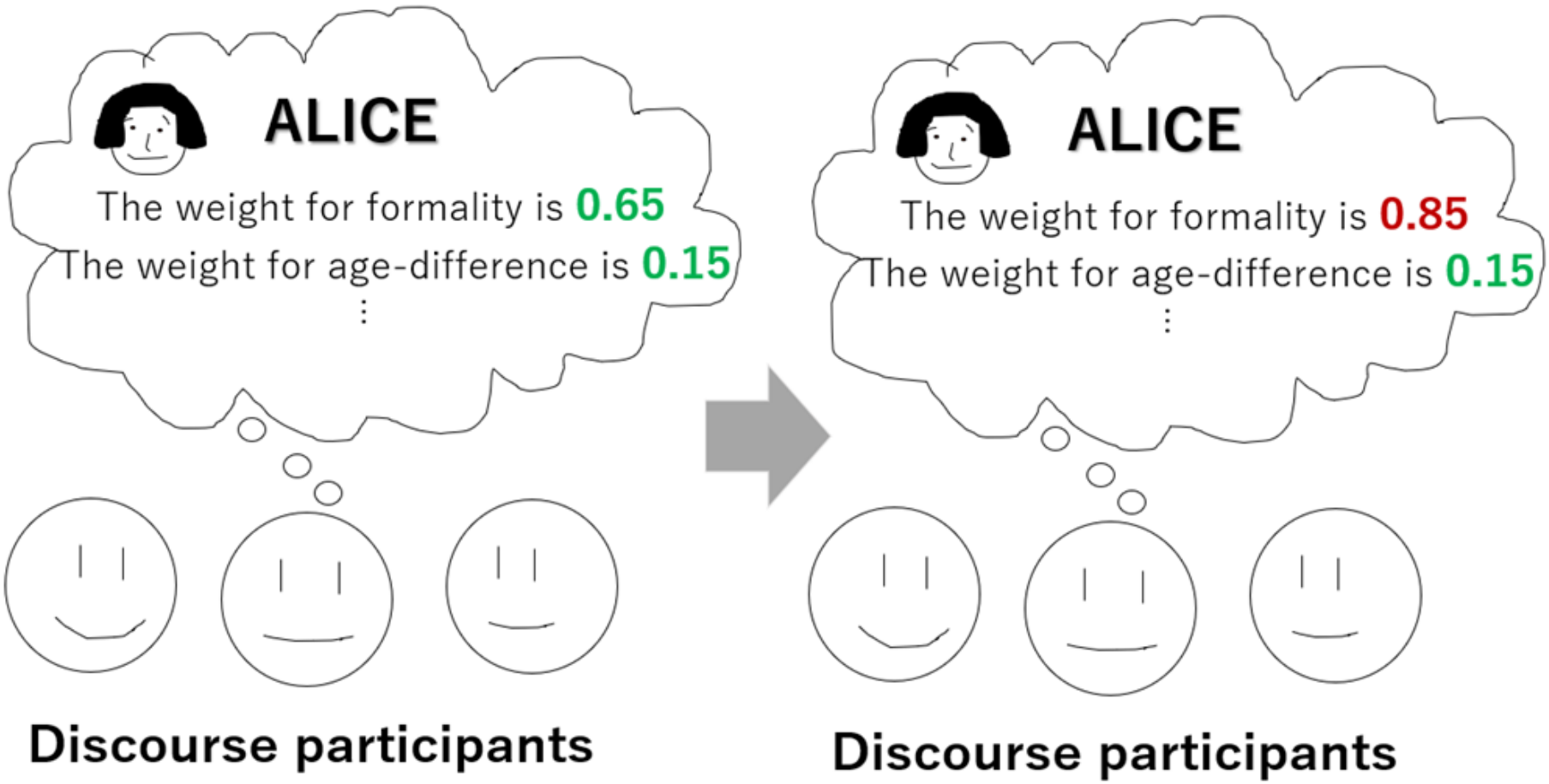
Problem: **Too confident!**



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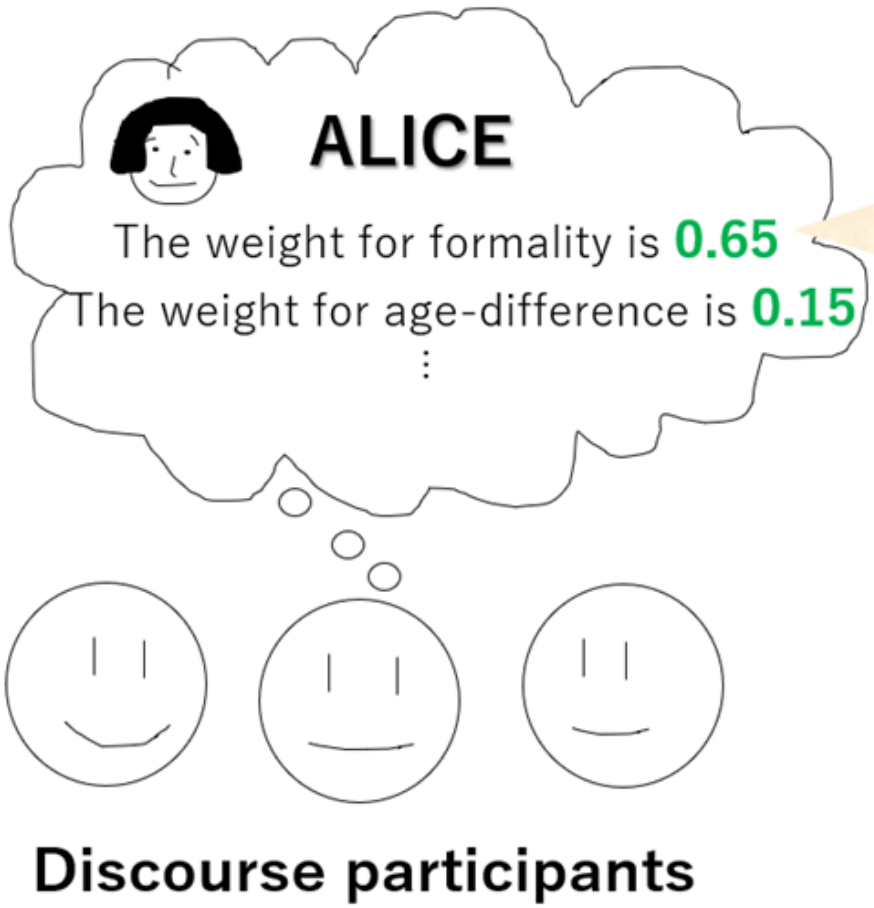

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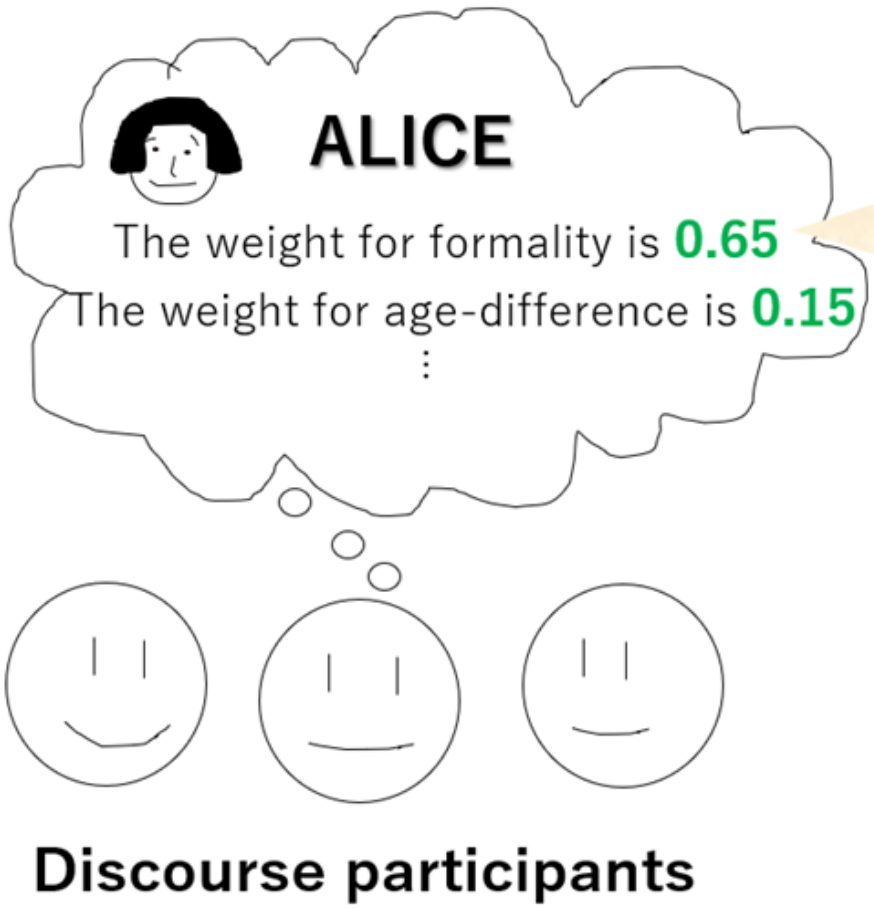

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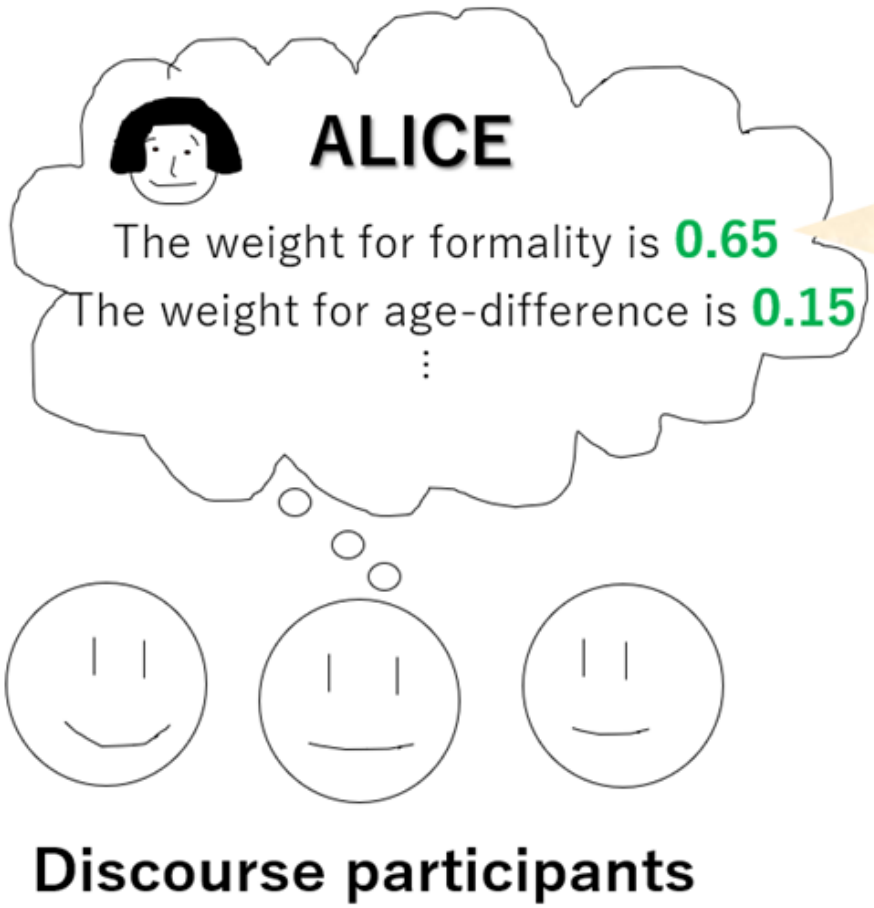

How can we be so sure about one particular value? We wish to incorporate a certain kind of uncertainty (= probability).

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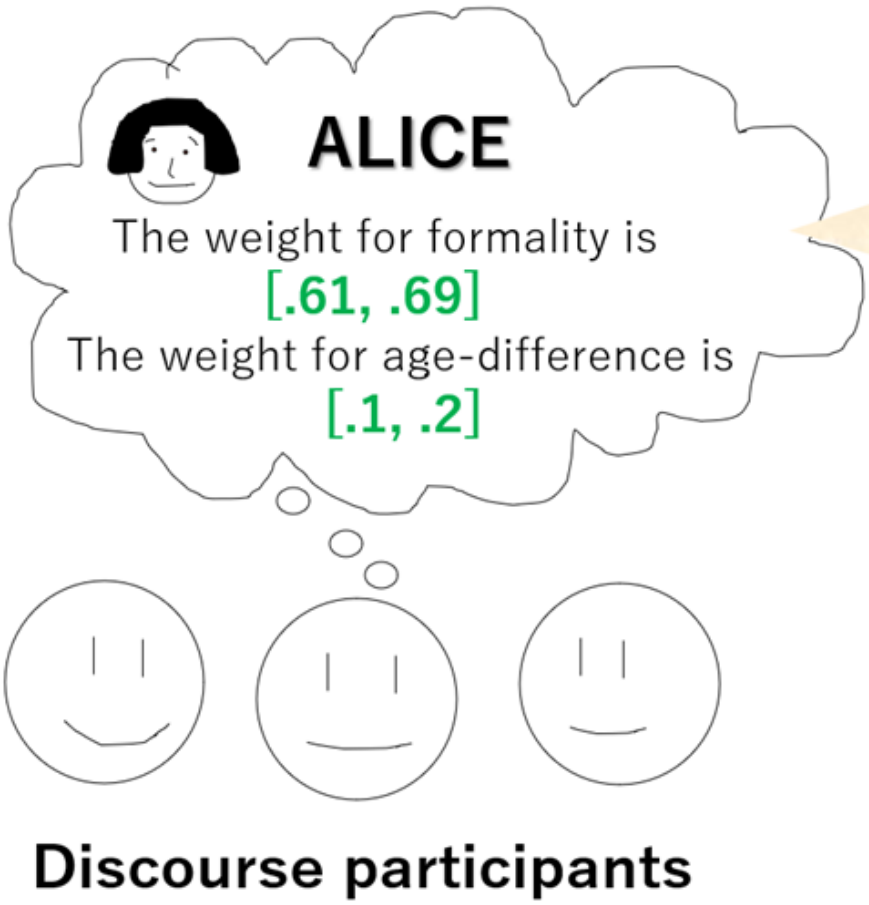
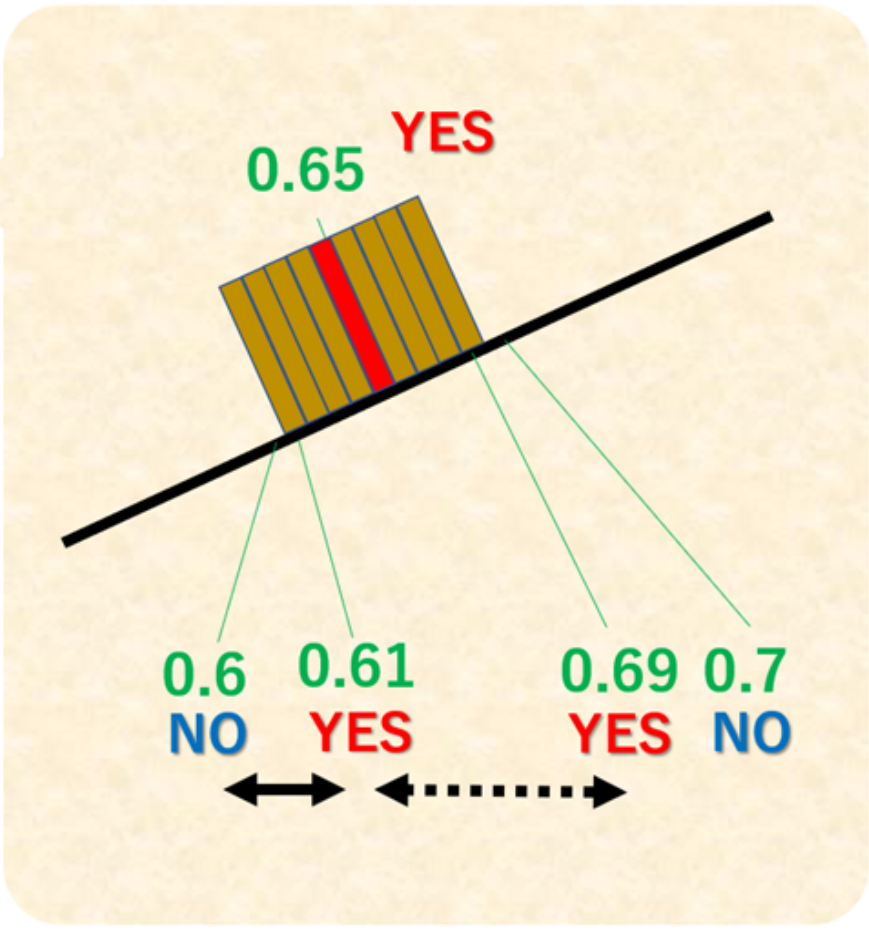
Model 2: Interval approach (cf., Potts 2007; McCready 2014, 2019)



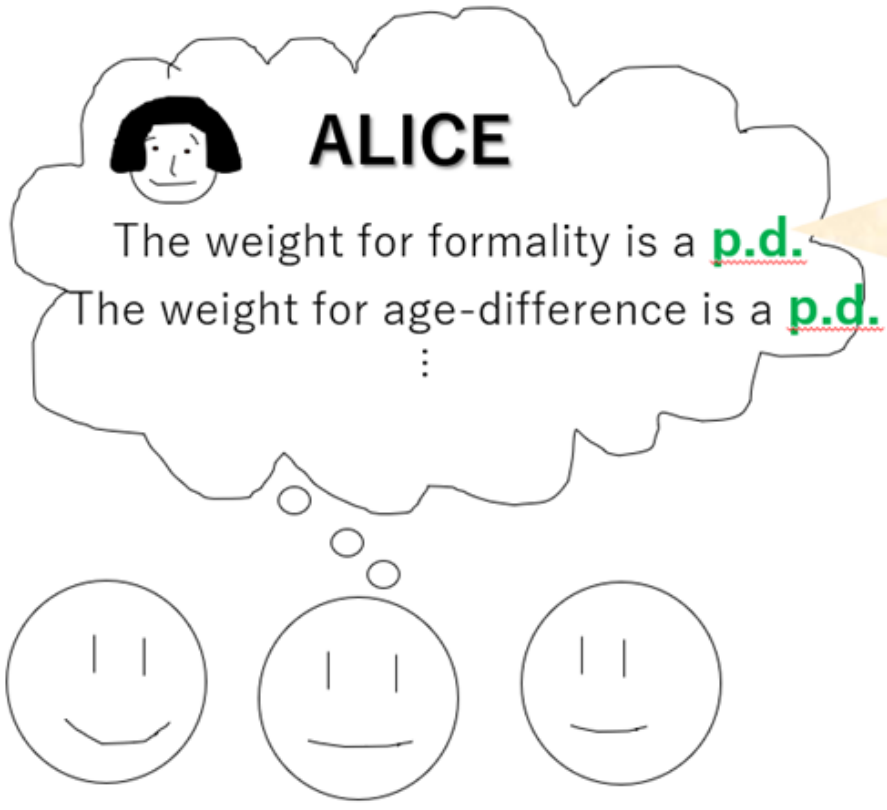


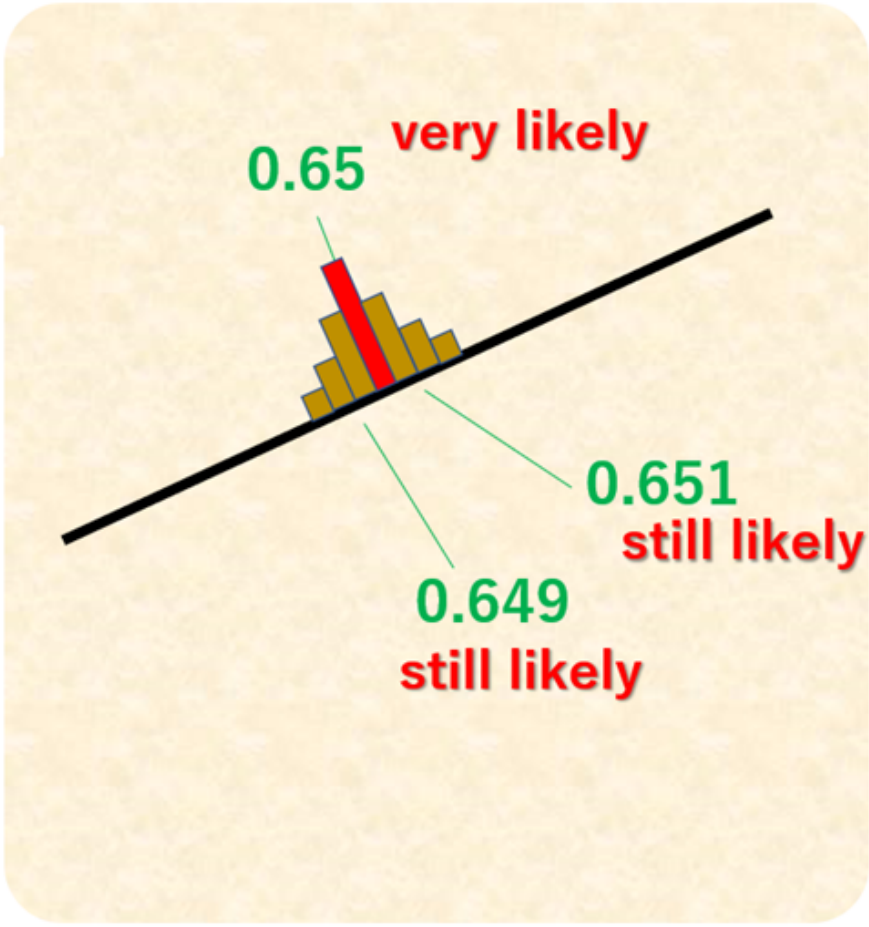
3.1 Dynamic pragmatics

Our model: A Bayesian Dynamic Pragmatics (Yamada 2019)

Sufficiently uncertain:

Uncertainty states are represented as probability distributions.





3.1 Dynamic pragmatics

A discrete model

(11) Structured Discourse Context (Version 2 out of 3)

a. $c = < cg, qs, tdl, p >$

b. $p = \left\{ \begin{array}{c} < alice, \begin{pmatrix} 0.65 \\ 0.15 \\ \vdots \end{pmatrix}, \mathbf{w}^s{}_{\text{alice}} >, \\ \\ \vdots \end{array} \right\}$

3.1 Dynamic pragmatics

A discrete model

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Bayesian Stats: Uncertainty as a Probability Distribution

(12) Structured Discourse Context (Version 3 out of 3)

a. $c =< cg, qs, tdl, p >$

3.1 Dynamic pragmatics

A discrete model

(11) Structured Discourse Context (Version 2 out of 3)

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Bayesian Stats: Uncertainty as a Probability Distribution

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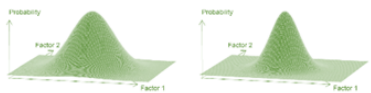
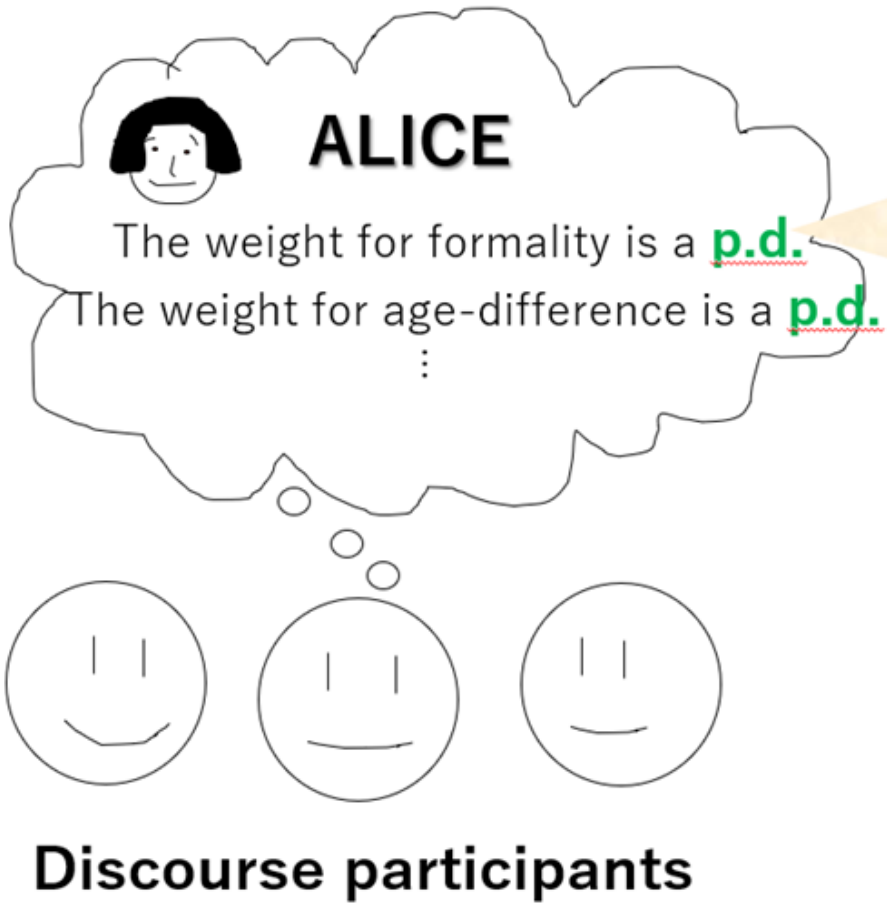
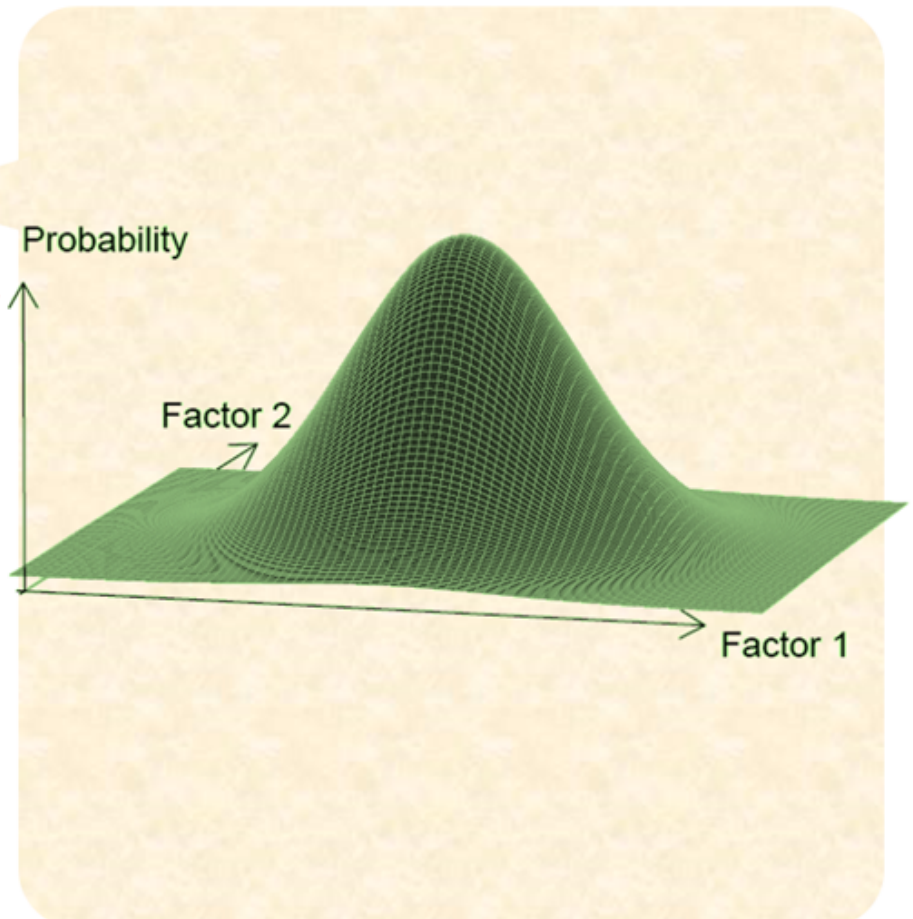
a. $c =< cg, qs, tdl, p >$

b. $p = \left\{ \begin{array}{c} < alice, \text{  }, \\ \\ \vdots \end{array} \right\}$

3.1 Dynamic pragmatics

Proposal: **Context change = a change in distribution**





3.1 Dynamic pragmatics

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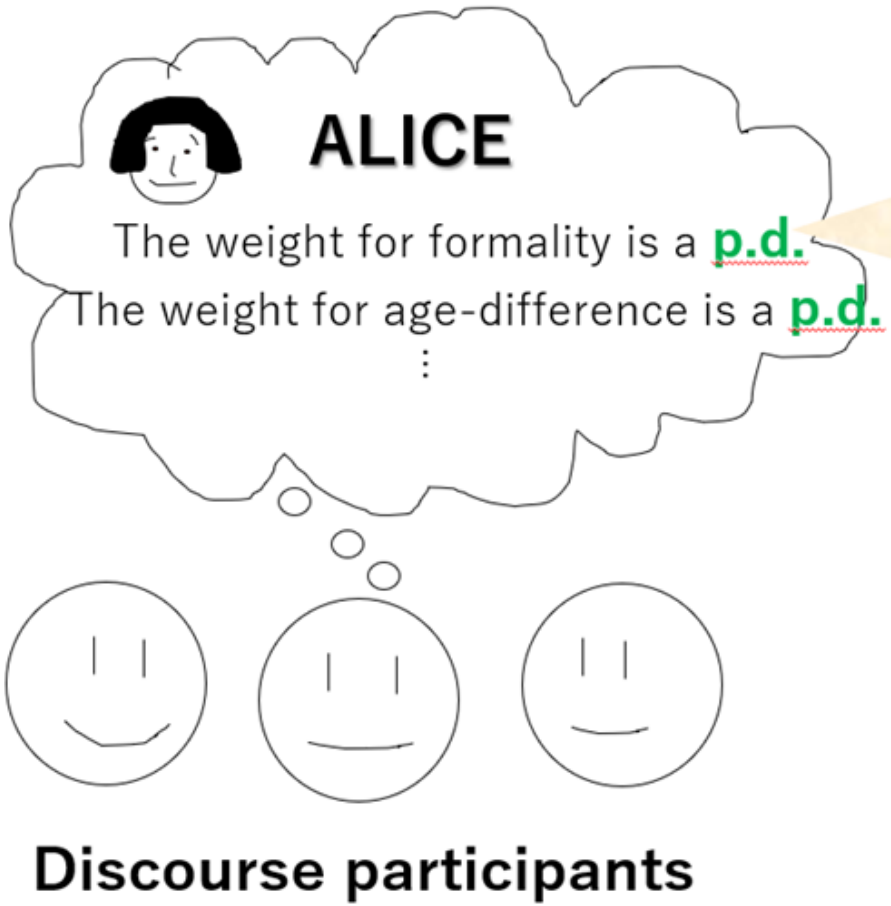

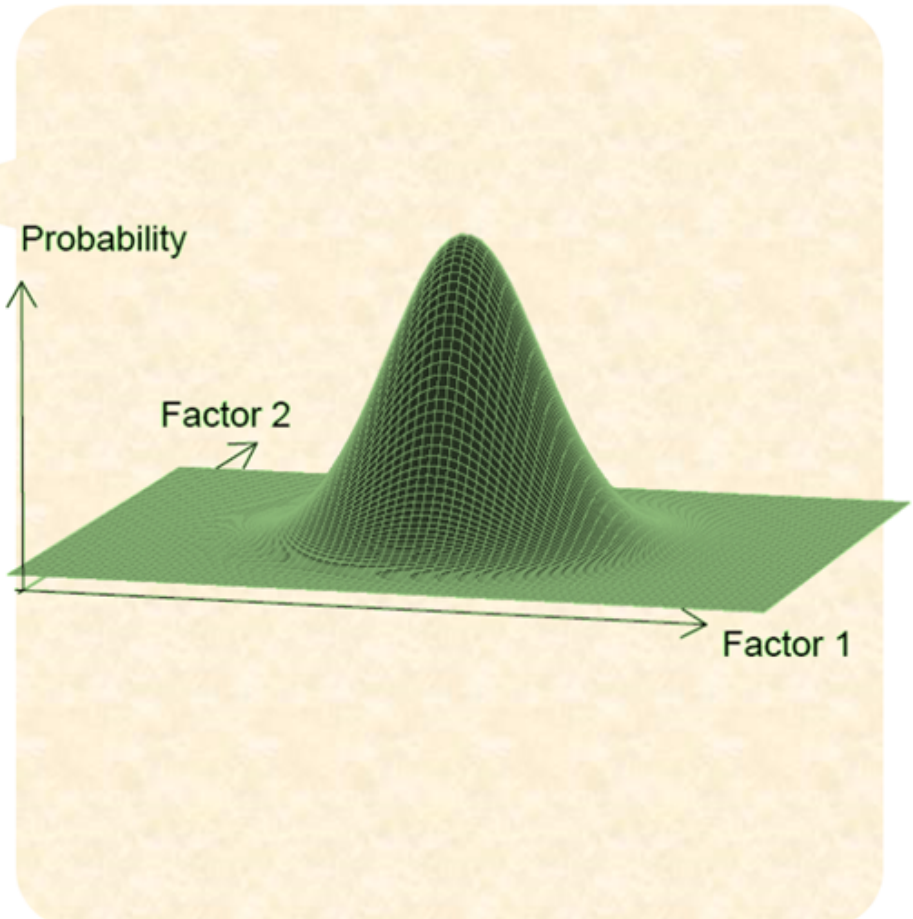

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
?		

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
?		

(13) $$\mathbf{w}^T\mathbf{f} = w_1 f_1 + w_2 f_2 + \ldots + w_p f_p$$

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
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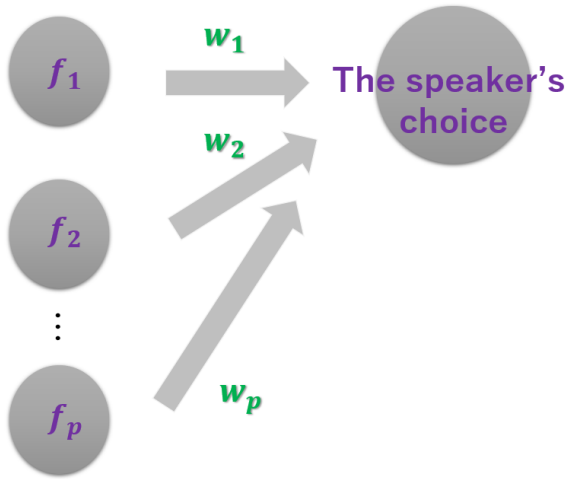

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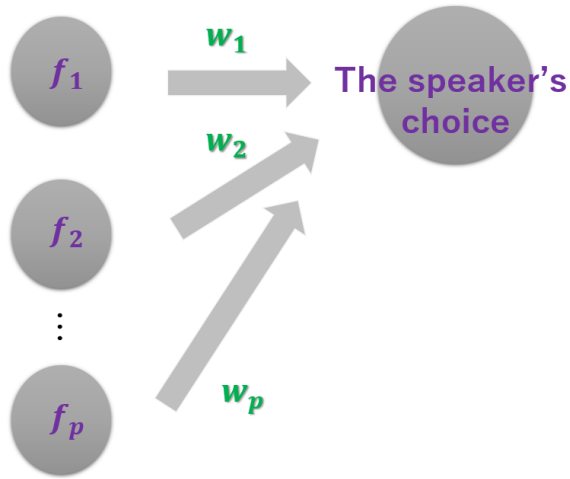

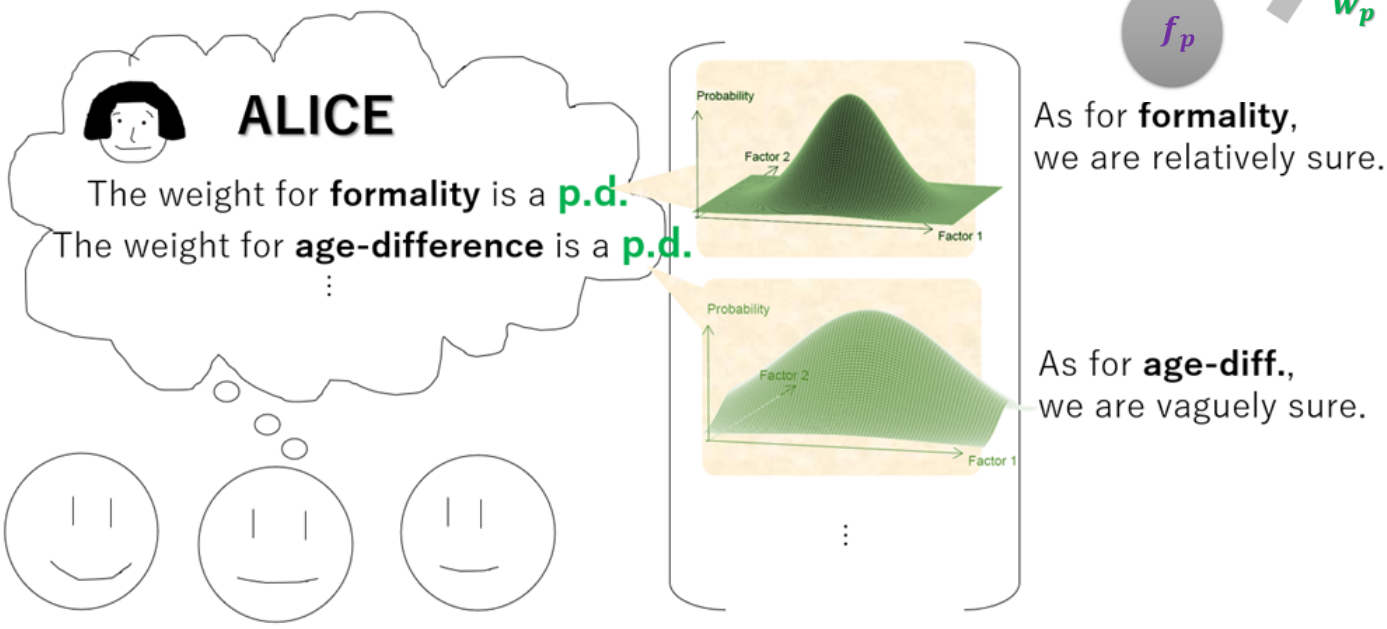

3.2 Discussion

Desiderata

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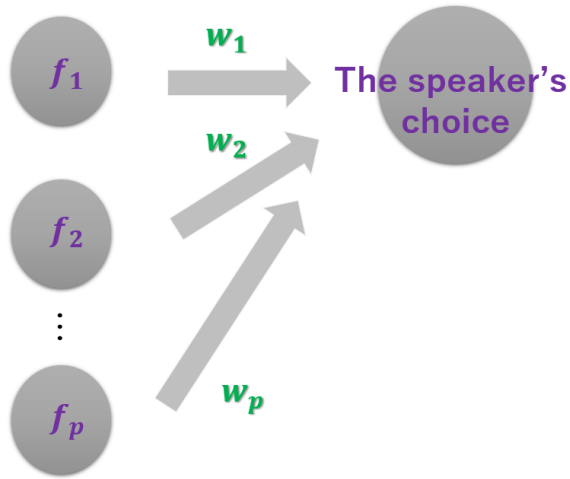

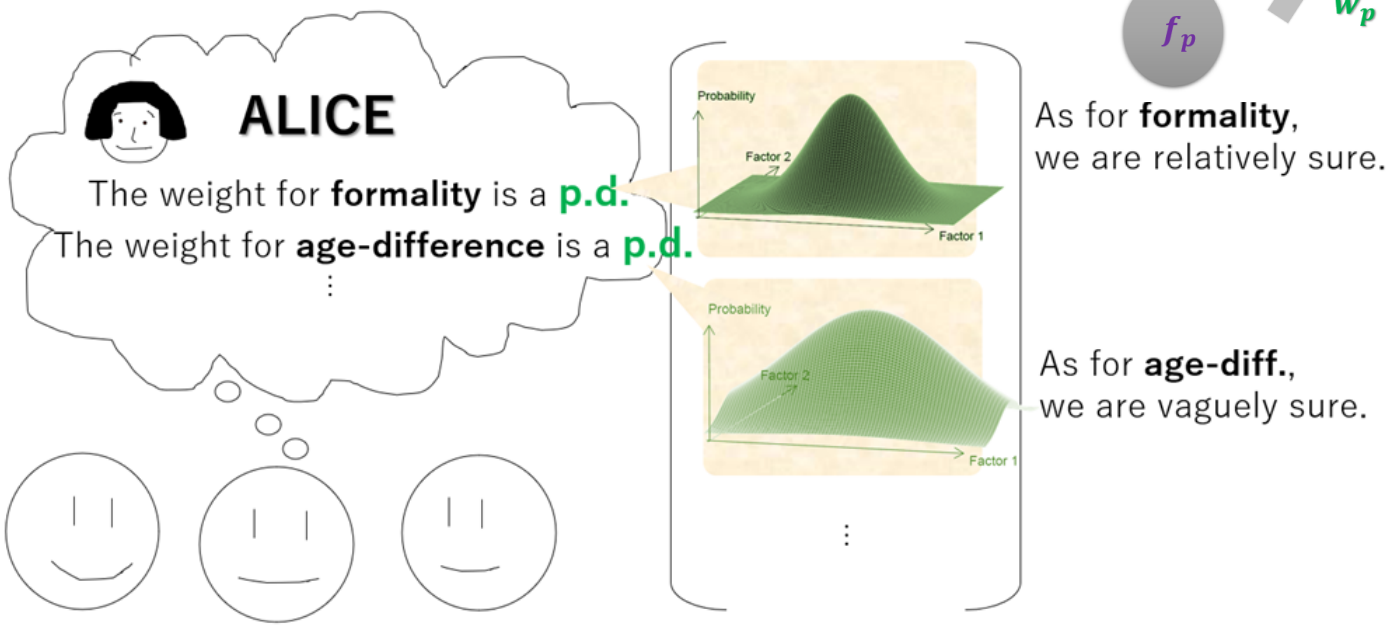

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
$\surd$	?	

(14) $$\mathbf{w}^T\mathbf{f} = w_1 f_1 + w_2 f_2 + \ldots + w_p f_p$$

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
√	?	

(14) $\mathbf{w}^T\mathbf{f} = w_1 f_1 + w_2 f_2 + \ldots + w_p f_p$

Fact: The audience can estimate how Alice behaves even before she has started talking to a new addressee (prior to the their utterance).

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
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Our model: As long as we have already estimated the weights of the relevant factors, we can make a prediction!

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
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(15) $\mathbf{w}^T\mathbf{f} = 0.65 \times 1 + 0.15 \times 0 + \ldots + 0.22 \times 2$

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
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3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
√	√	?

Fact: Speakers use politeness-oriented expressions strategically.

Our model:

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
√	√	?

Fact: Speakers use politeness-oriented expressions strategically.
Our model: The speaker makes their audience estimate the weight parameters as intended.

3.2 Discussion

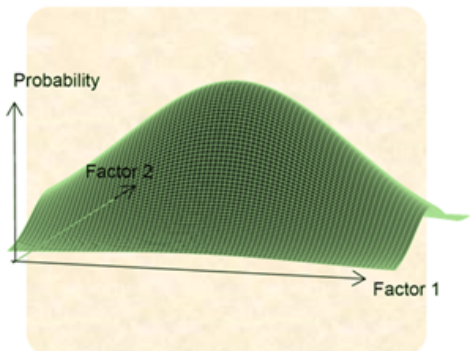
Desiderata

Multiple factors	Prior context	Posterior context
$\surd$	$\surd$	?

3.2 Discussion

Desiderata

Multiple factors	Prior context	Posterior context
√	√	?



3.2 Discussion

Desiderata

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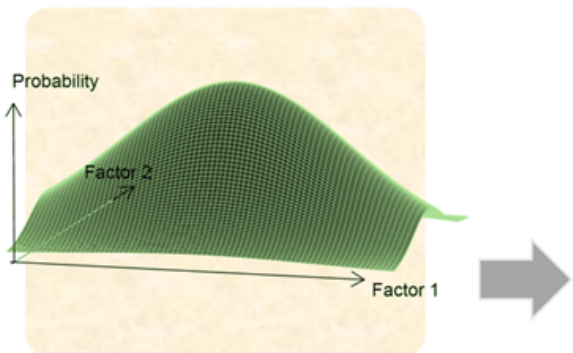

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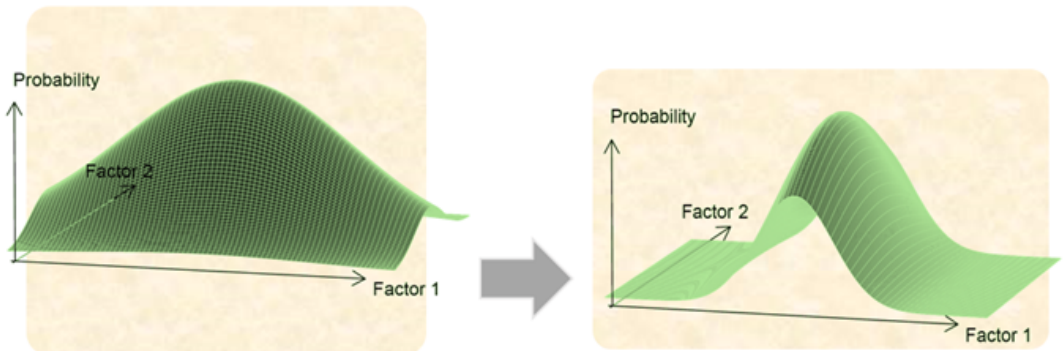

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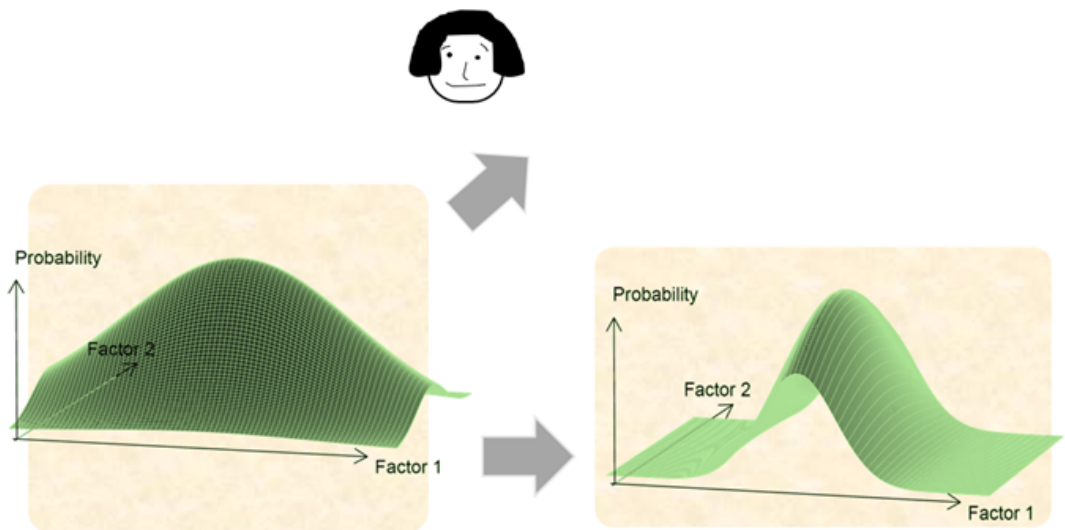

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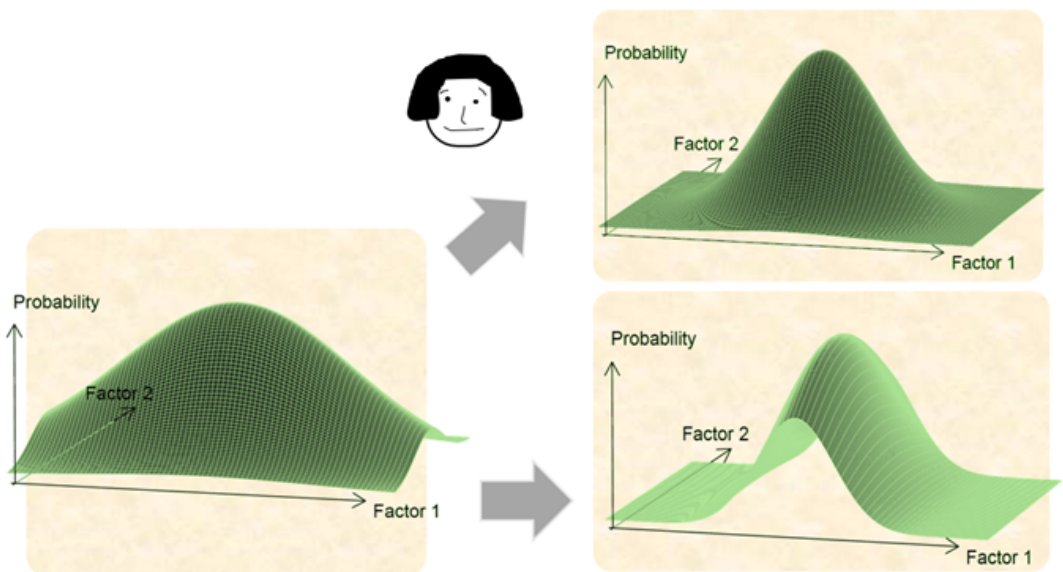

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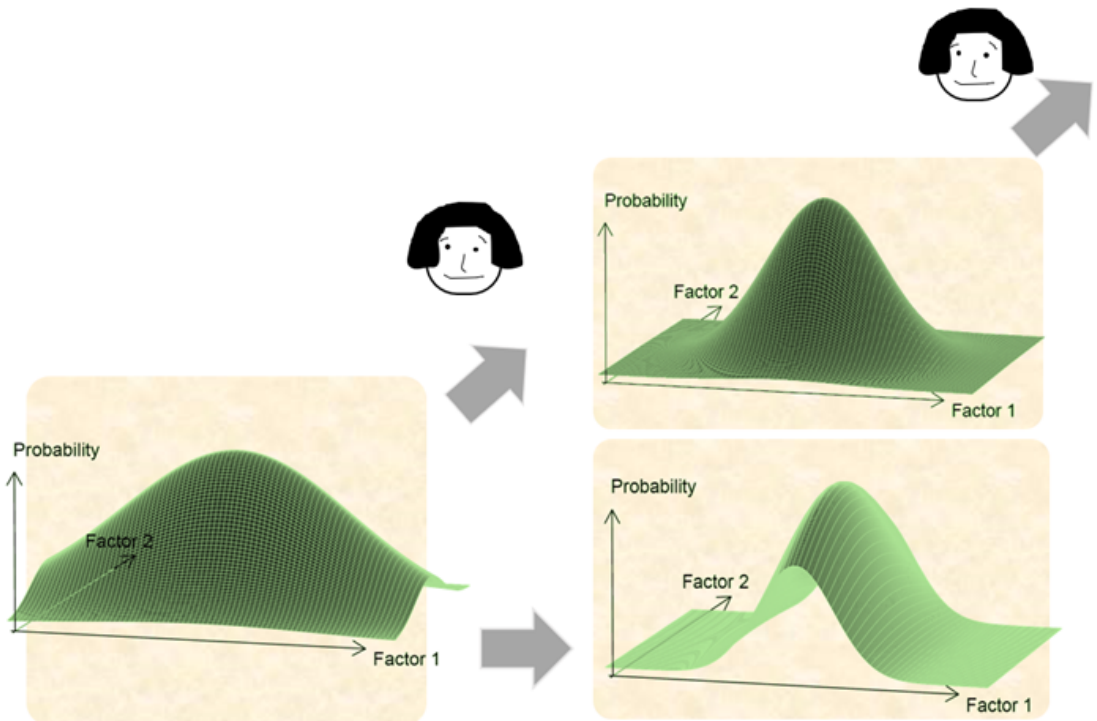

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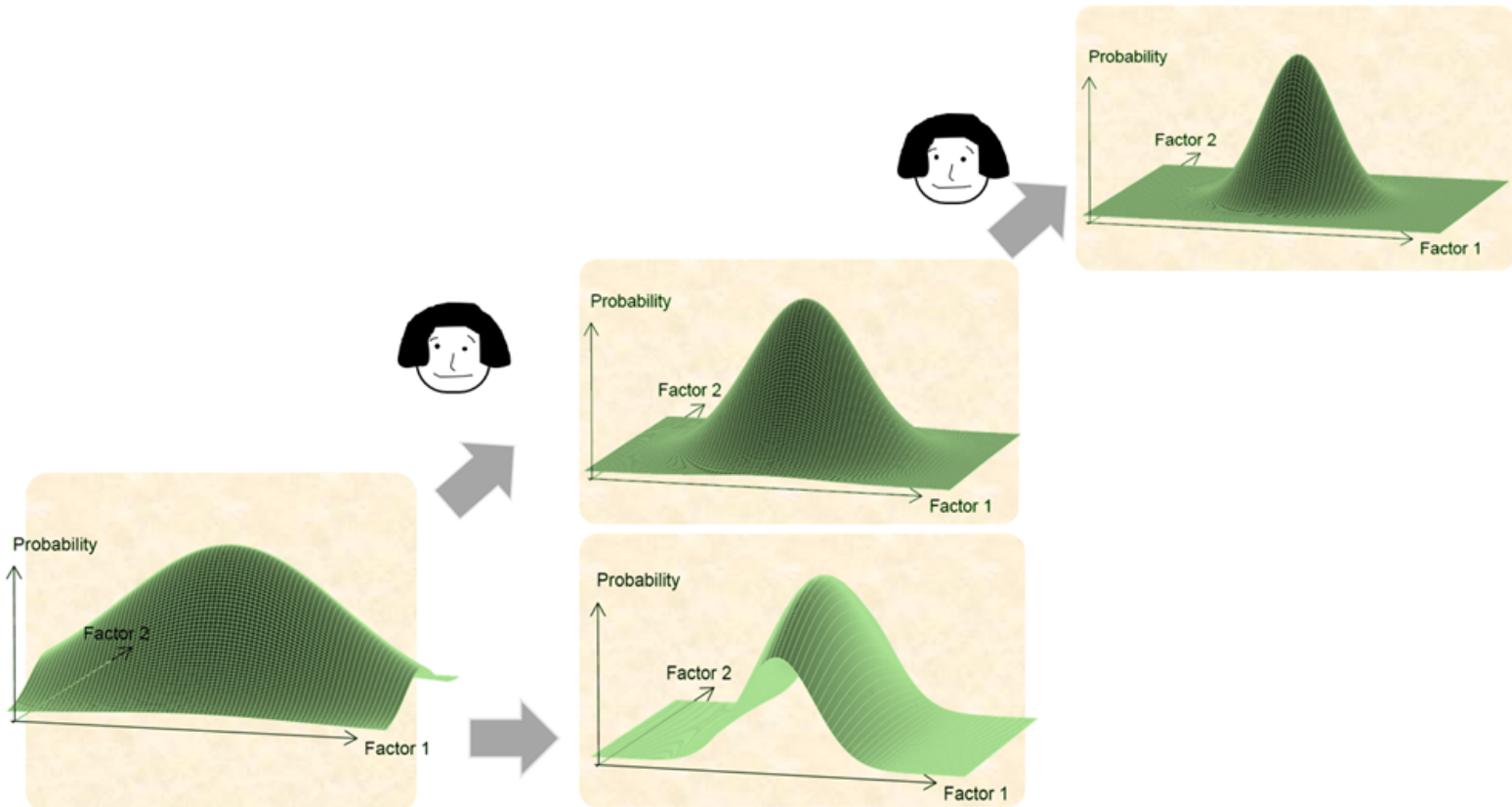

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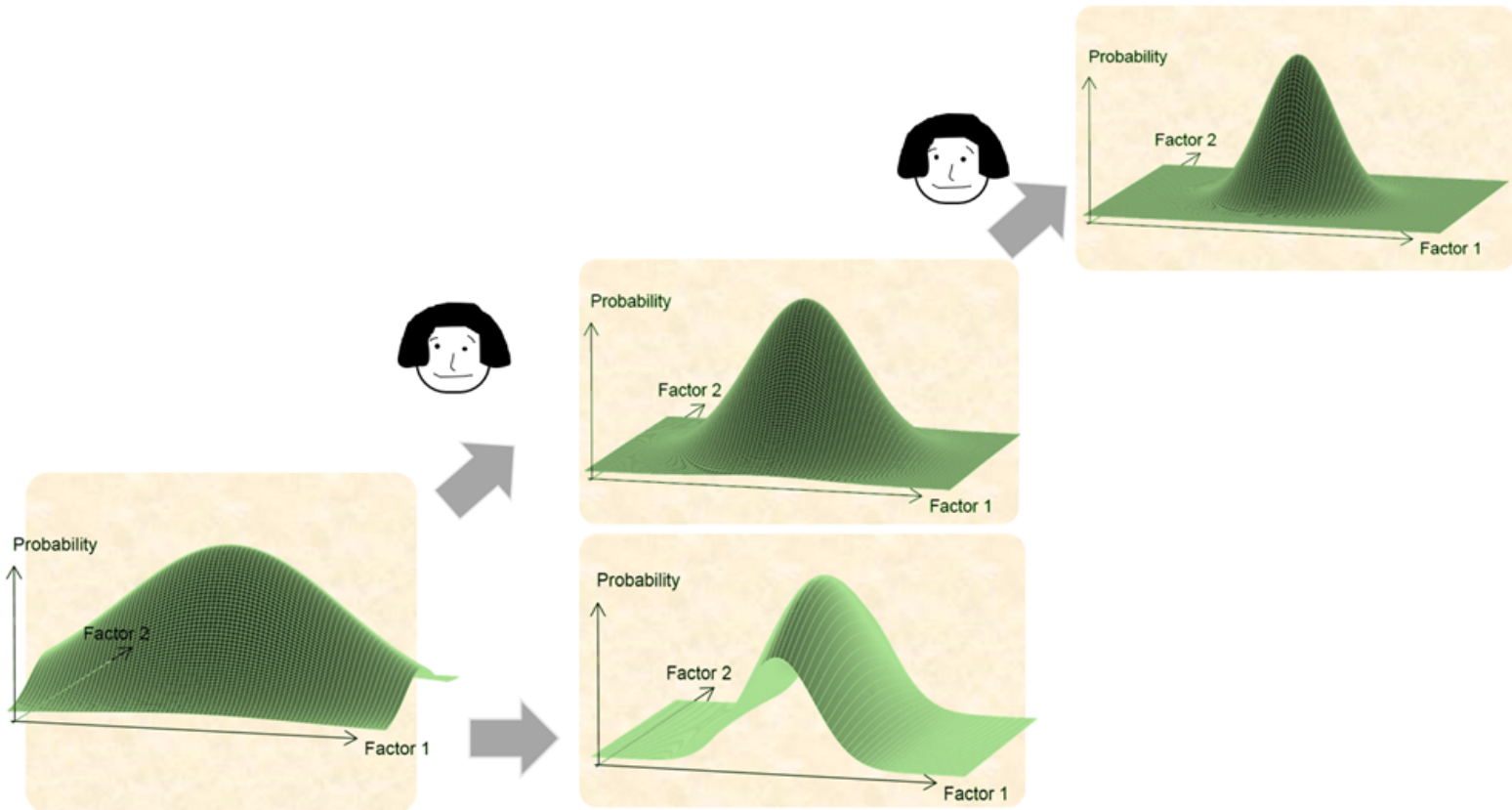

Dynamic update as persona-learning

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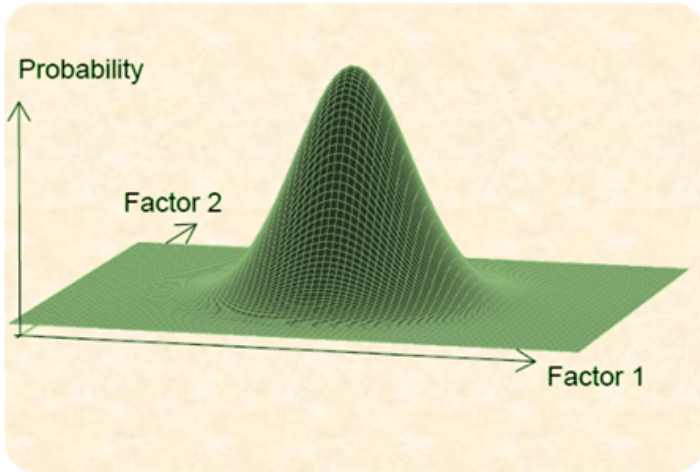

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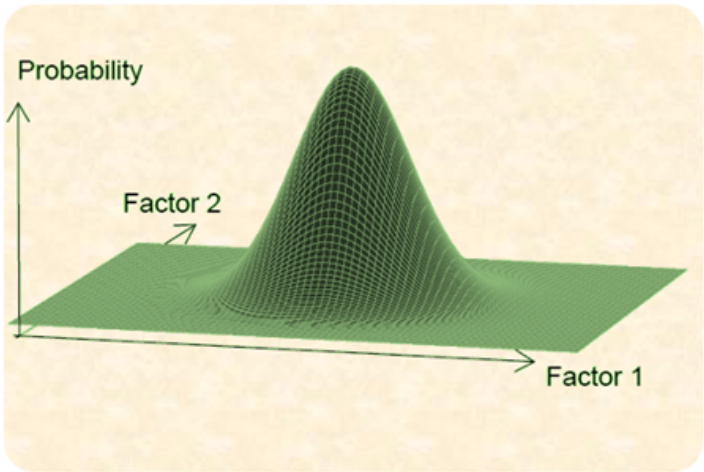

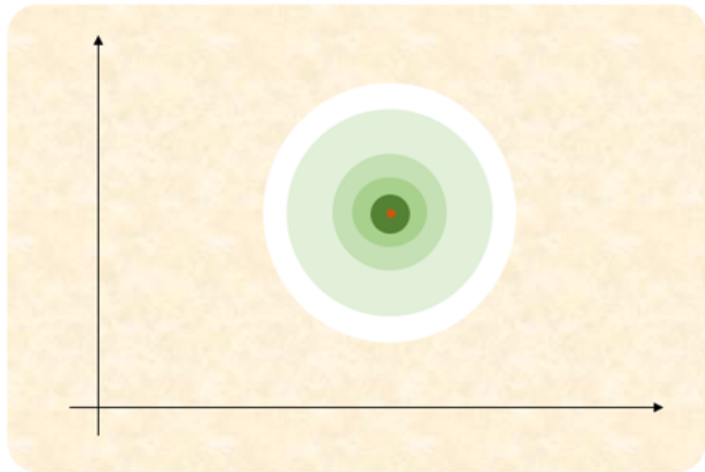

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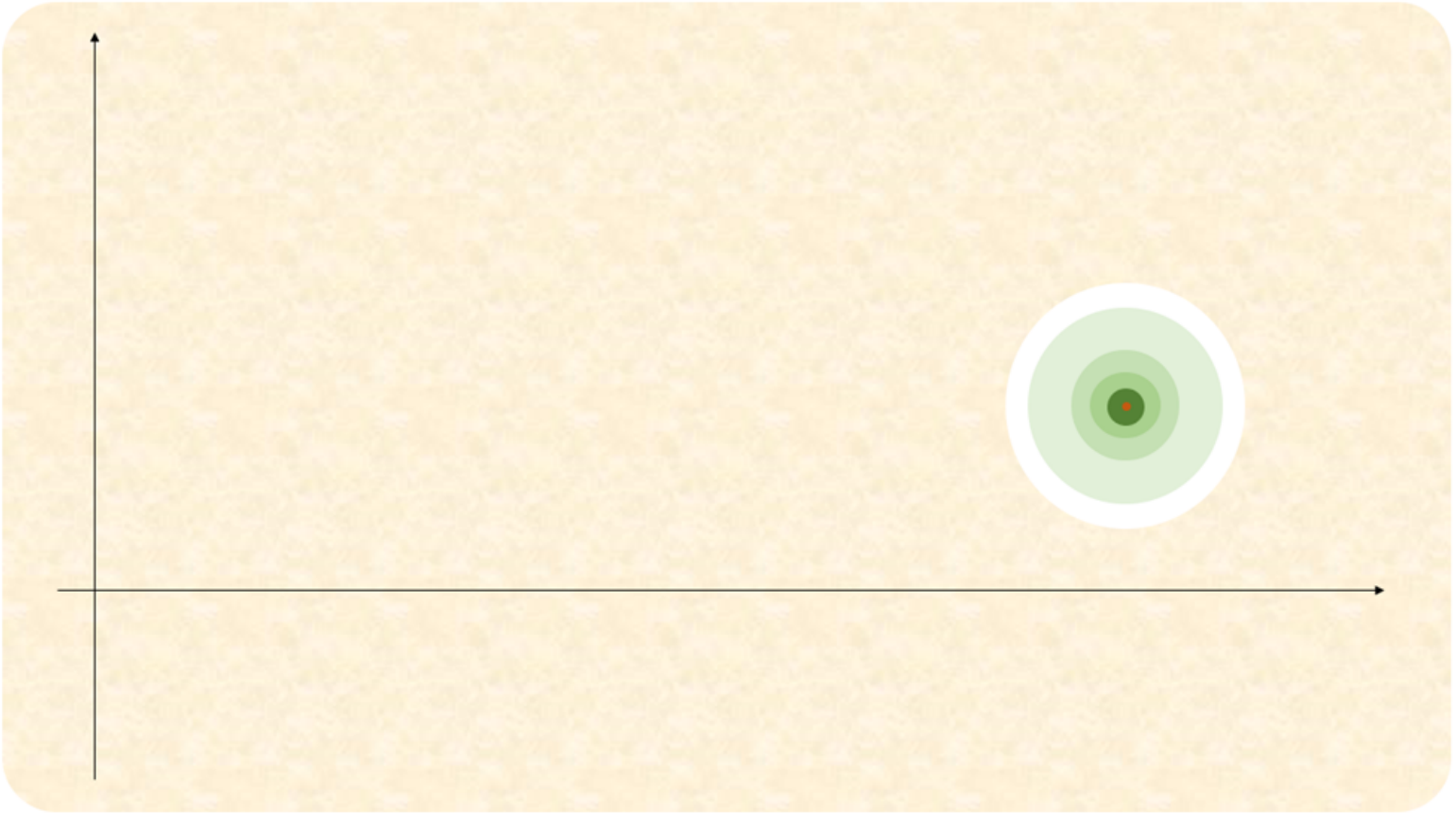

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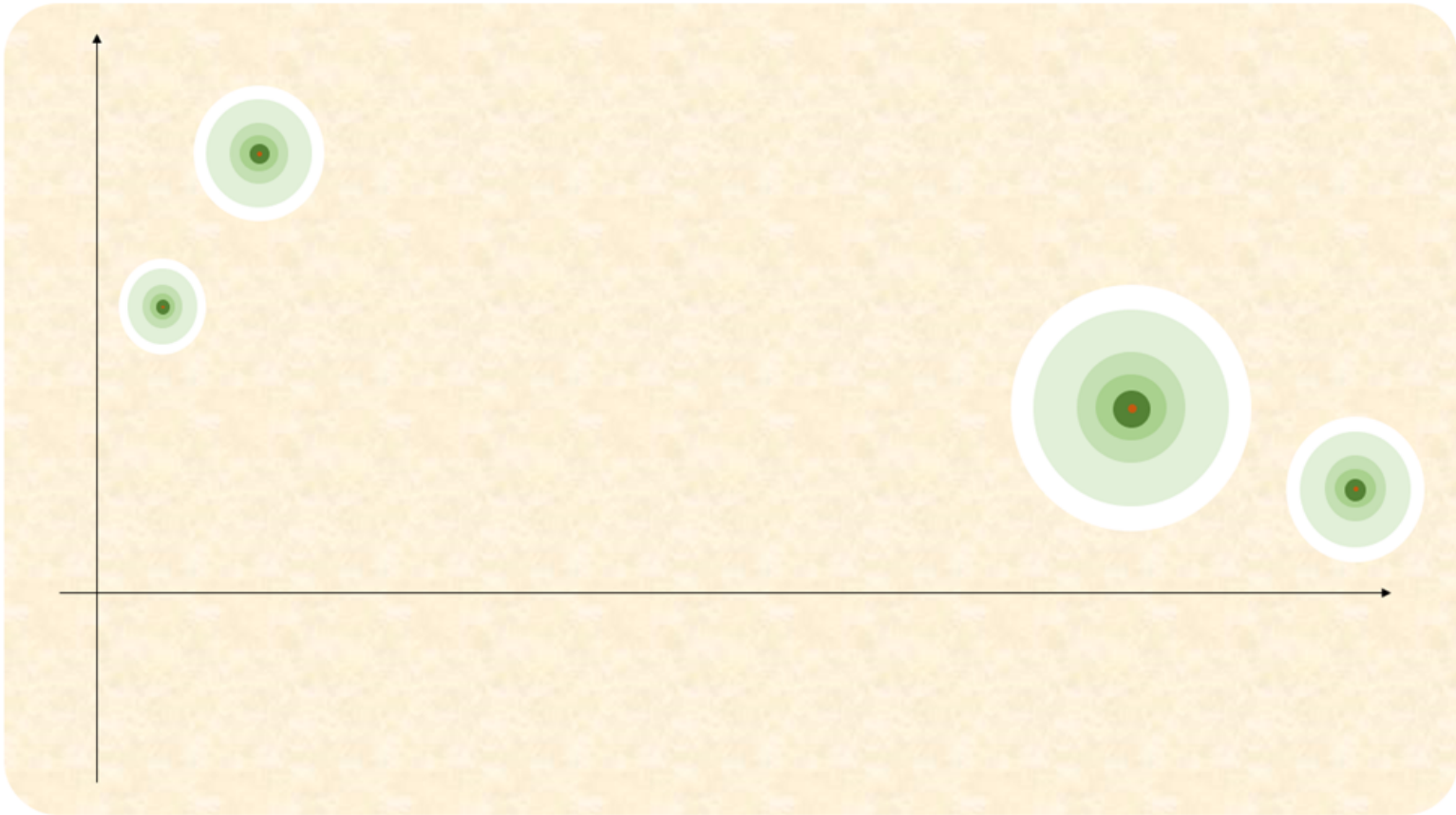

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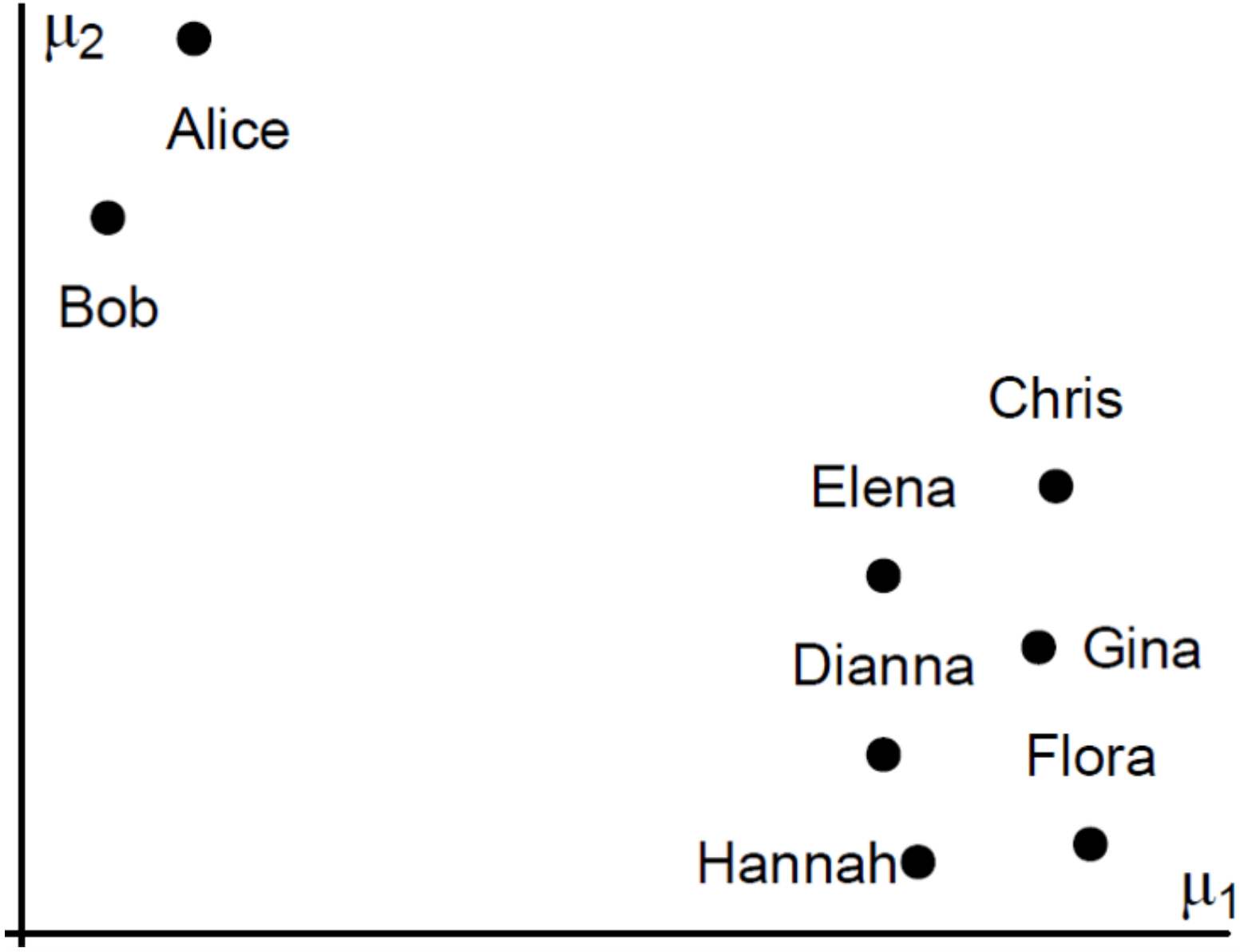

Theoretical Implications and Future Work

Extending our Model

German (*du/Sie*)

- A man in his mid-thirties went to the barbershop to have his hair cut.
- His barber was male and appeared to be the same age.
- The two men spent the duration of the haircut speaking in the third-person (equivalent to English ‘one’) because neither of them was confident to commit to a formal (*Sie* ‘you’) or familiar (*du* ‘you’) address form and corresponding relationship.
- The speaker relayed this story still with ambivalence about how he should have acted.

Conclusions

- We present a model of politeness-oriented features in Japanese and Spanish based on statistical learning.
- At observational level, politeness expressions are strategically used by speakers to create context-specific personas.
- Our model articulates the link between existing analyses of persona and dynamic pragmatic theories for politeness.
- Future work will formalize this how different languages encode politeness features in the syntax and semantics.

¡Gracias!

Arigatou!

Thank you!

Questions?

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donatelli@coli.uni-saarland.de

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