# Results of test 3:

For this pilot study, we aim to check two elements of the conception of the final study.

1. Print the values of a restaurant behind the utterance will fix the problem that we had in study 2 (Participants don’t read the definition of the restaurant, which make the submissive agent as being inflexible and the dominant agent flexible
2. Test the basic formulation of questions especially the notion of being flexible.

We defined three dialogues, with three different settings for initial preferences. In all the dialogues interpersonal dominance was fixed (speaker A is dominant, speaker b is submissive). Here the generated dialogues and the obtained results.

## Very different preferences:

**A: "Let's go to a Chinese restaurant."  
  
    B: "I like Italian more than Chinese restaurants."  
  
A: "Let's go to a quiet restaurant."  
  
    B: "I don't like quiet restaurants."  
  
A: "Let's go to a cheap restaurant."  
  
    B: "Do you like quiet or lively restaurants? "  
  
A: "I like quiet restaurants."  
  
    B: "I like lively restaurants."  
  
A: "Let's go to the Samura restaurant. It's a lively, cheap Japanese restaurant."  
  
    B: "What kind of cuisine do you like?"  
  
A: "I like Chinese restaurants."  
  
    B: "I like Italian restaurants."  
  
A: "Let's go to the Dragon restaurant. It's a lively, cheap Chinese restaurant."  
  
    B: "Okay. Let's go to the Dragon restaurant."  
  
A: "Okay. I'll call to book a table."**

### Results interpretation:

We observe that the dominant speaker is perceived as the one who is leading the dialogue. This confirm our H3 (i.e. dominant agents lead the dialogue while submissive agent follows other). However, dominant speaker is perceived as flexible and take into account the preference of other in his decision making.

In the position where I cannot get an explanation of why participants perceived in the majority, speaker A as the flexible one. I decided to ask my colleagues at Limsi (5 in total) to answer the questionnaire. I asked them next, the reasons that lead them to choose their responses. I present in the following their answers and their arguments.

**Why did you perceived speaker A as flexible?**

Speaker A proposes what speaker b likes: (lively restaurants), even if he stated that he prefers quiet restaurants. Plus, speaker A only proposes and speaker B gives his assent about the proposal.

**Why did you perceived speaker B as flexible?**

Speaker B accepts to go to a Chinese restaurant, even if he prefers an Italian restaurant, because speaker A proposed twice to choose a Chinese restaurant.

## Different preferences

**A: "Let's go to a quiet restaurant."  
  
    B: "Okay."  
  
A: "Let's go to the Parisien restaurant. It's a quiet, expensive French restaurant."  
  
    B: "I don't like expensive restaurants."  
  
A: "Let's go to an expensive restaurant."  
  
    B: "What kind of cuisine do you like?"  
  
A: "I like French restaurants."  
  
    B: "Let's go to a French restaurant."  
  
A: "Let's go to the Tokyo restaurant. It's a quiet, expensive Japanese restaurant."  
  
    B: "Okay. Let's go to the Tokyo restaurant."  
  
A: "Okay. I'll call to book a table."**

### Results interpretation:

The third principal is also confirmed here. Speaker A is leading the negotiation. Moreover, all the participants perceived speaker B as flexible in his decisions which also confirm the first principal. Most of participants perceived speaker A as not flexible.

In the same perspective of understanding participant’s answers, especially the difference between the results obtained for the very different preferences and this case. I asked the same colleagues to answer the questionnaire for this dialogue. Bellow the obtained results:

Only one participant (colleague) perceived speaker A as flexible. He said for the same reasons than the first dialogue. This explains why the error bar is so big.. In the following, I present a summary of participant’s justification about their answers.

**Why did you perceived speaker B as flexible?**

Participants explained that speaker A ignores completely what speaker B told him about his preferences. It was confirmed when Speaker B proposes a French restaurant, after than speaker A states; he likes French restaurant. However speaker A ignores this proposal and made a counter proposal with an expensive restaurant that he wants from the beginning.

**Why did you perceived speaker B as flexible?**

Speaker B is flexible in this dialogue, he tries to know the preferences of speaker A, even if this later appears as not considering what speaker B says. In addition, he accepted to go to an expensive restaurant even if he doesn’t like it.

## Similar preferences:

**A: "Let's go to a Chinese restaurant."  
  
    B: "Okay."  
  
A: "Let's go to the Dragon restaurant. It's a lively, cheap Chinese restaurant."  
  
    B: "I don't like lively restaurants."  
  
A: "Let's go to a quiet restaurant."  
  
    B: "Okay."  
  
A: "Let's go to the Yong restaurant. It's a quiet, expensive Chinese restaurant."  
  
    B: "Okay. Let's go to the Yong restaurant."  
  
A: "Okay. I'll call to book a table."**

### Results interpretation:

This results confirms the third principal, Speaker A is perceived as leading the dialogue. However, in this dialogue also, speaker A is perceived as being flexible. Reading back the dialogue, I noticed that speaker A only proposes values, while speaker B rejects a proposal (in the second turn).

## Questions about dominant behaviors:

1. What is the real impact of initial preferences in the perception of dominance behavior at each speaker turn?
2. Should we consider the preferences in our analysis?
3. Review the principal of flexibility in the algorithm? Or in more general the behavior of flexibility in psychology