Process Tracing and RT for Measuring Decision Conflict to Better Predict People's Behavior: Experimental Research on the 2022 French Presidential Elections

Oliviero Marchese

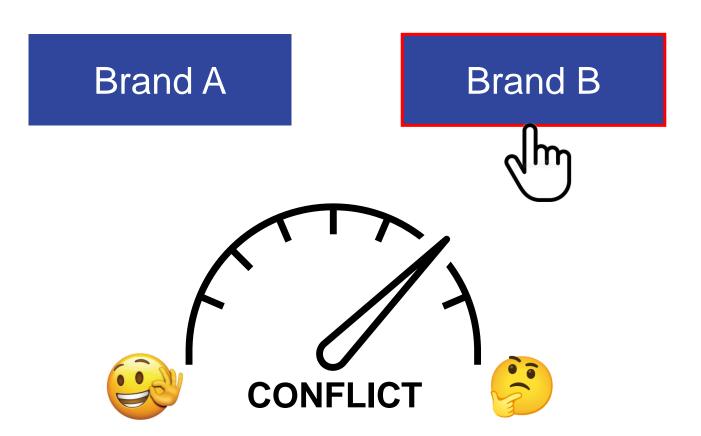
Global Director – Election Research Public Affairs

Davide Baldo

Global R&D Lead – Experimental Research Global Science Organization



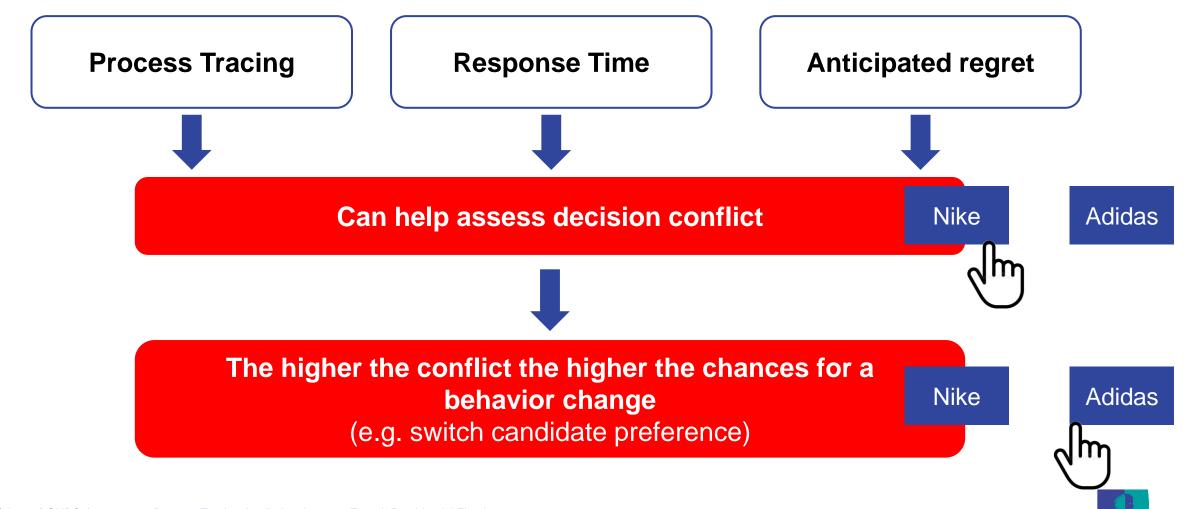
DECISIONS ARE NOT ALL THE SAME – CONFLICT MATTERS



- How can we measure decision conflict (in a scalable way)?
- > How measuring decision conflict allows us to better understand behavior change.



PROCESS TRACING, RT, AND ANTICIPATED REGRET FOR MEASURING DECISION CONFLICT



EXPERIMENTAL RESEARCH: APPLYING PROCESS TRACING TO THE 2022 FRENCH PRESIDENTIAL ELECTIONS

In collaboration with the GSO, we conducted internal, experimental survey including process tracing to:

Run a preliminary assessment of the potential added value of response time and process tracing in the context of election research, and specifically to detect uncertainty in the voting intent.

Key objectives:

- Can decision conflict measured with response time contribute to evaluate the likelihood of declared voter's intent to change over the last days / hours before the election day?
- > Can decision conflict measured with process tracing contribute to evaluate the likelihood of declared voter's intent to change over the last days / hours before the election day?



RECAP OF PAST WORK

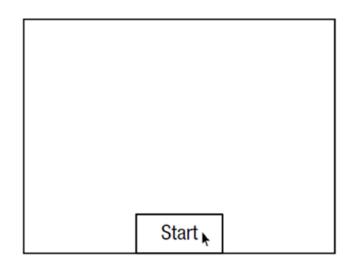


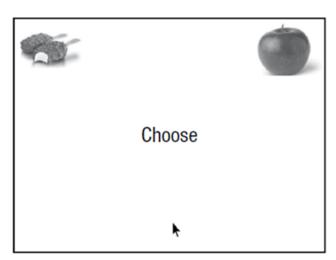
PROCESS TRACING FOR INVESTIGATING DECISION-MAKING

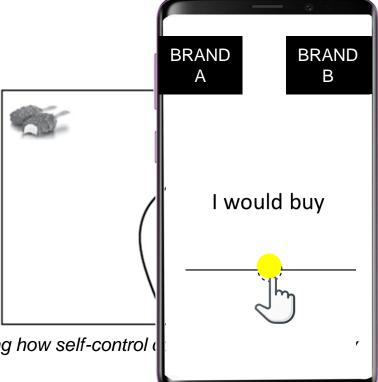
> Study the cognitive processes in real-time during decision-making.

Conducted in a central location, typically a lab. Requires time for data collection.

Allows capturing decision-conflict / conflict resolution.







Stillman, P. E., Medvedev, D., & Ferguson, M. J. (2017). Resisting temptation: Tracking how self-control (resolved in real time. Psychological science, 28(9), 1240-1258.



PROCESS TRACING - EXAMPLE

BRAND A

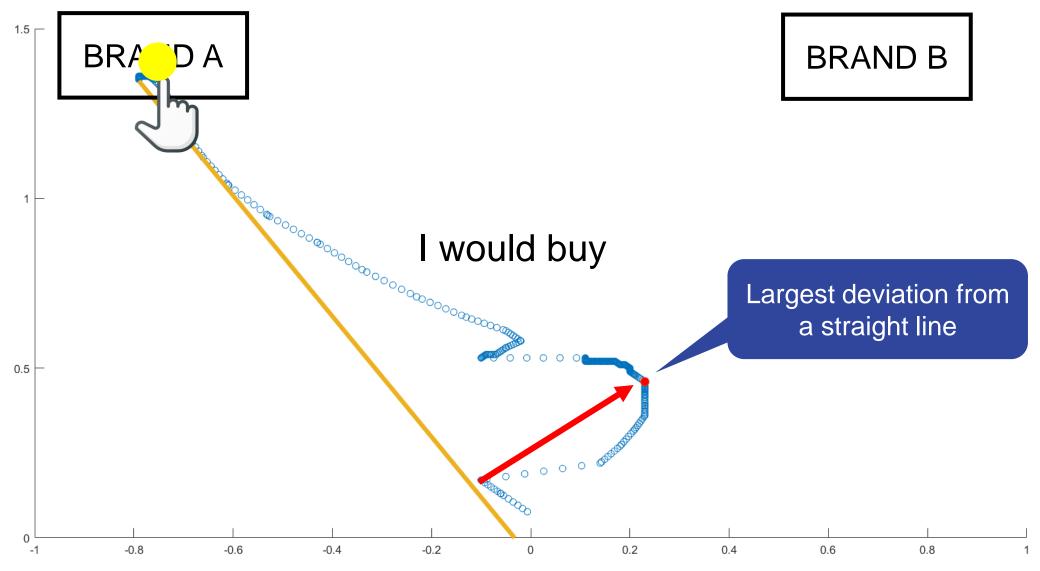
BRAND B

I would buy





PROCESS TRACING - EXAMPLE





PROCESS TRACING AND CHOICE BEHAVIOR

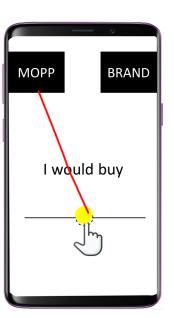
Paired choices PRE

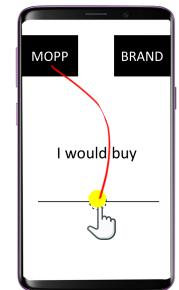


Reflect on MOPP (Intervention)

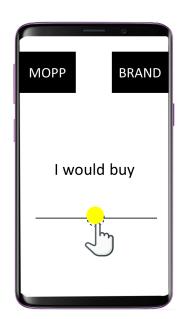


Paired choices POST



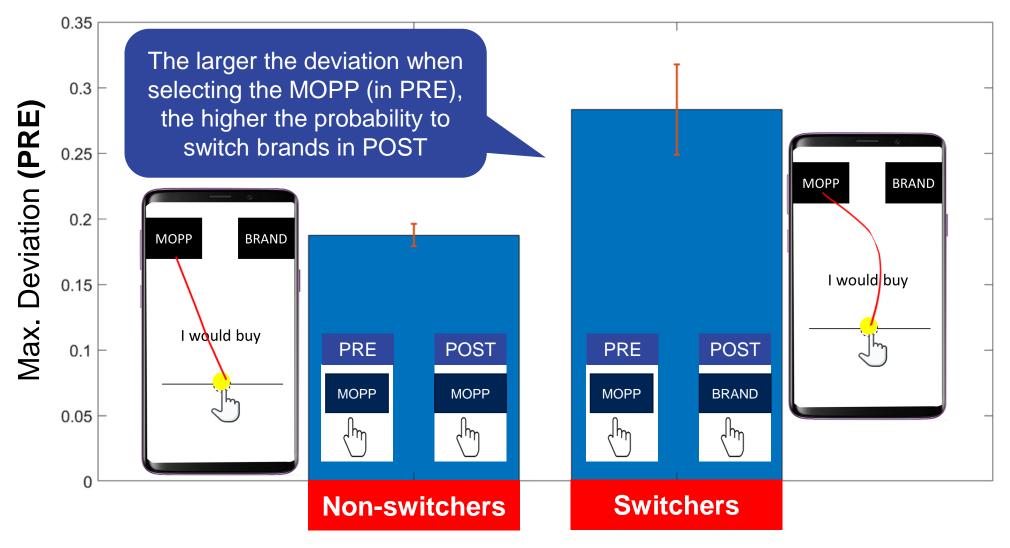


Does process tracing predict behavior change?





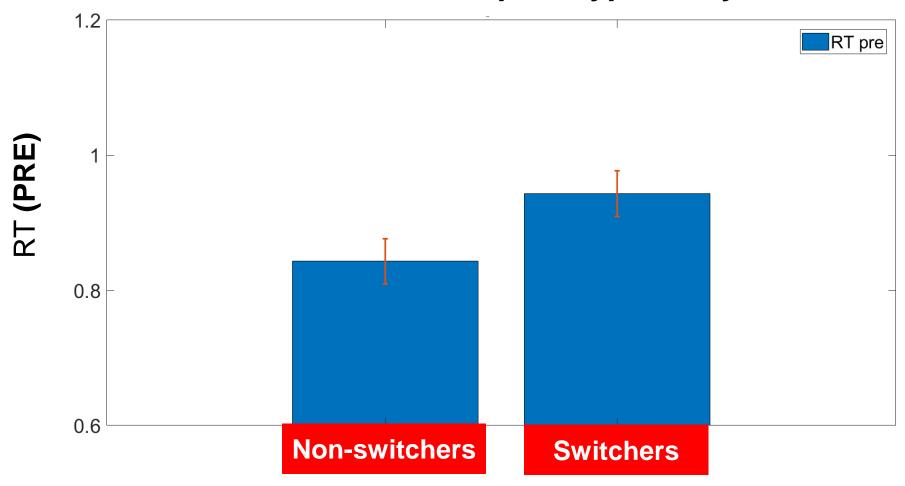
PROCESS TRACING PREDICTS CHOICE BEHAVIOR





RT PREDICTS CHOICE BEHAVIOR

RT from DDMM prototype study



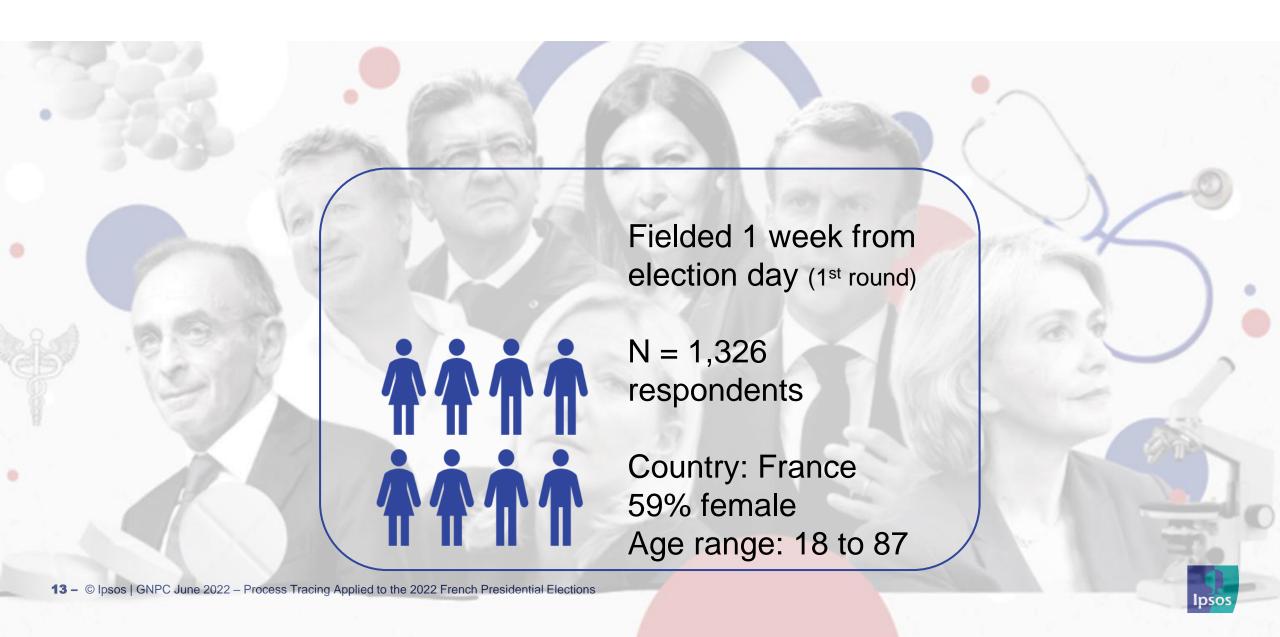


PROCESS TRACING AND THE 2022 FRENCH ELECTIONS



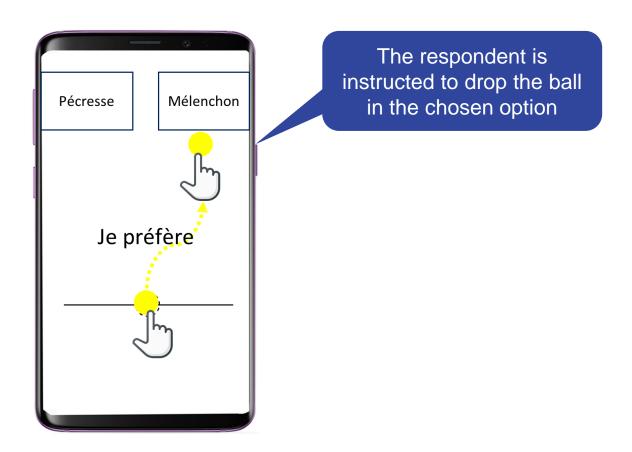


PROCESS TRACING FOR THE 2022 FRENCH ELECTIONS



DESIGN SUMMARY

Respondents were asked to select the candidate they preferred between the two presented on screen. 6 candidates in total (highest polls), 15 trials per respondent (all possible combinations) in random order



Pair ID	Response LEFT	Response RIGHT
1	Macron	Le Pen
2	Mélenchon	Macron
3	Macron	Zemmour
4	Pécresse	Macron
5	Macron	Jadot
6	Le Pen	Mélenchon
7	Le Pen	Zemmour
8	Le Pen	Pécresse
9	Jadot	Le Pen
10	Mélenchon	Zemmour
11	Mélenchon	Pécresse
12	Jadot	Mélenchon
13	Zemmour	Pécresse
14	Zemmour	Jadot
15	Pécresse	Jadot

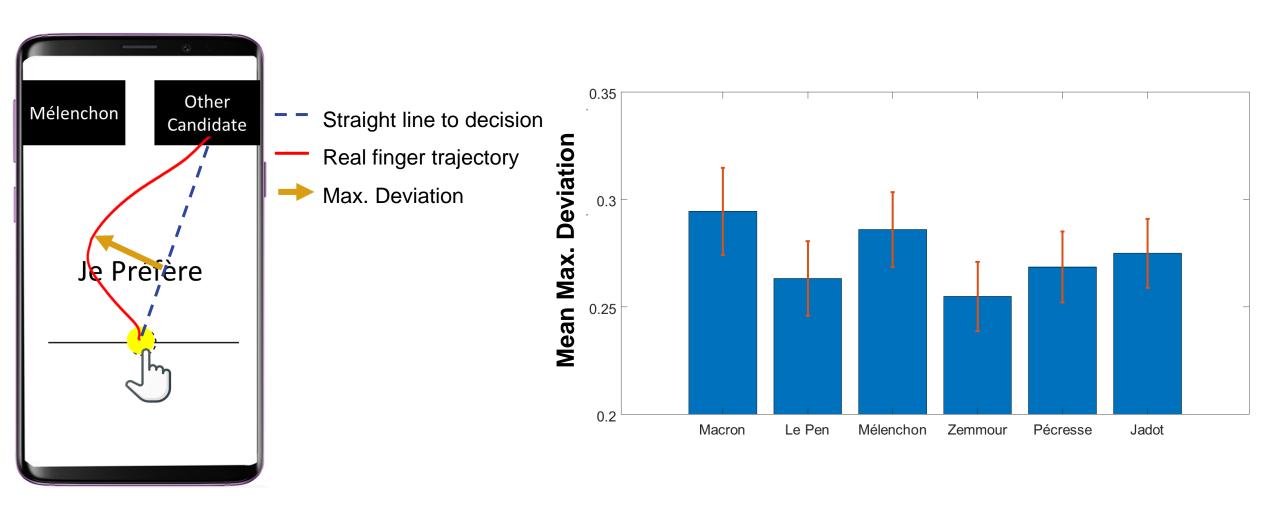


CAN PROCESS TRACING MEASURE THE PROPENSITY OF BEHAVIOR CHANGE?

Can decision conflict (measured with process tracing) assess the chances of people's preferences changing during the last week prior to election day?

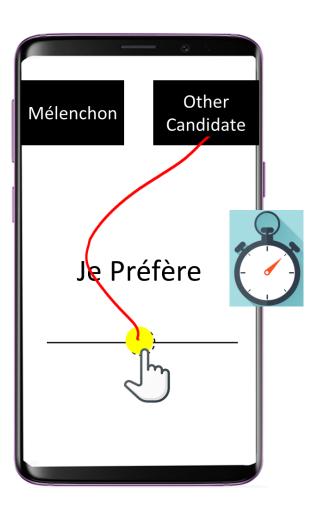


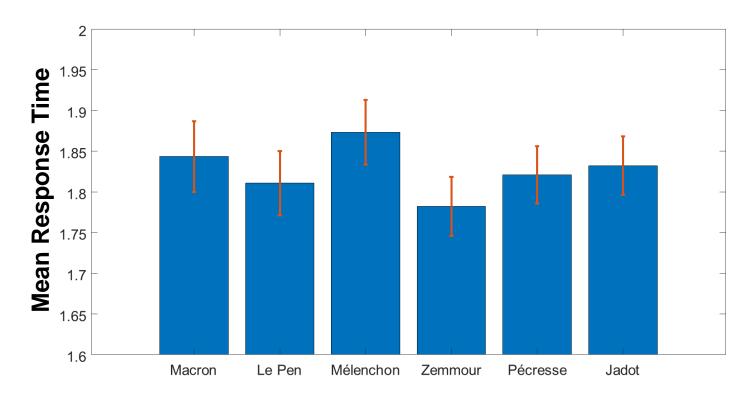
HESITATION WHEN NOT SELECTING A SPECIFIC CANDIDATE





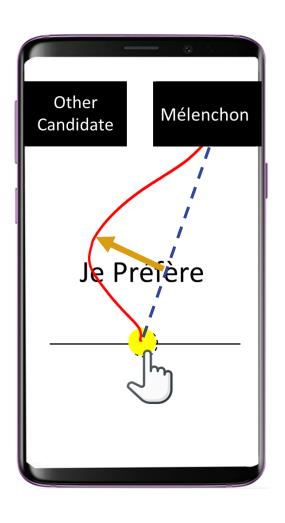
HESITATION WHEN NON-SELECTING A CANDIDATE

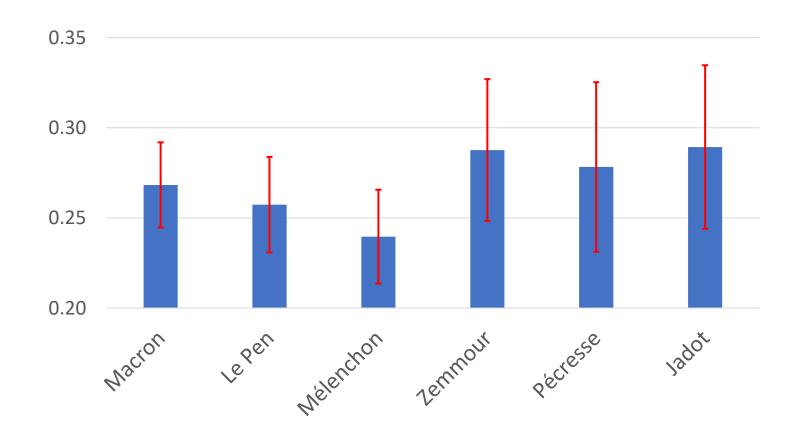






CONVICTION IN CANDIDATE PREFERENCE

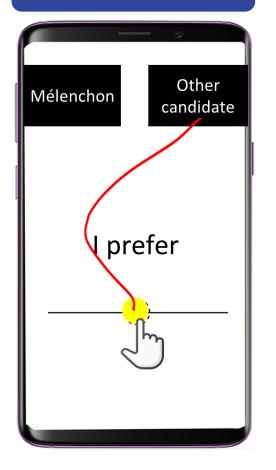




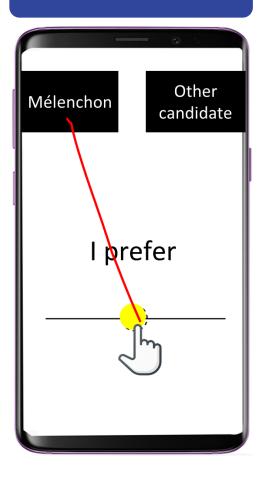


RESULTS VS. POLLS ONE WEEK FROM ELECTION DAY

Hesitation



Conviction



Candidates	lpsos poll (Apr. 5)	% vote
M. Emmanuel MACRON	26.5	27.9
Mme Marine LE PEN	21.0	23.2
M. Jean-Luc MÉLENCHON	16.0	22.0

