

Politisk holdningsdannelse II: Motivated reasoning og heuristikker

Dansk og Komparativ Politik 2 - forelæsning #5
[soerendamsbo.github.io/dak2-slides/
dak2_sds_holdningsdannelse2_slides.html](https://soerendamsbo.github.io/dak2-slides/dak2_sds_holdningsdannelse2_slides.html)

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"[I]t is perfectly reasonable to give heavy weight to one's own carefully constructed attitudes [...] attitudes may be thought of metaphorically as possessions to be protected" (Taber & Lodge 2006: 767)



Dagens hovedpointe: Vi mennesker er tilbøjelige til (ofte ubevist) at behandle ny information på en måde, der beskytter vores eksisterende holdninger frem for at hjælpe os frem til den mest "korrekte" holdning

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- Er ekstrem kulde et argument eller bevis *imod* global opvarmning?
- For en klimaforandringsbenægter, måske!
- "Motivated reasoning"

Over- og tilbageblik

- Zaller's **Receive-Accept-Sample** (RAS)-model
 - Holdningsdannelse som **process**, der starter med **information**, som måske modtages og forstås (afhænger af politisk bevidsthed), måske accepteres og huskes (afhænger af prædispositioner), så det måske er tilgængeligt i den situation, hvor der skal udtrykkes en **holdning**
 - Begreber: *information og elitediskurs, politisk bevidsthed, prædispositioner, tilgængelighed og sampling, holdningsudsagn*
- Ofte **elitedominerede holdninger** og polarisering - bl.a. på klimaområdet i USA (Tesler 2018)
- I dag fortsætter vi ad **samme spor** → klare paralleller, men også markante forskelle
 - Mere hardcore mikroteori → forstå **menneskers psykologi** og informationsbehandling for at forstå **individuel holdningsdannelse**
 - (Men også bruge det til at forklare udviklinger i den offentlige mening, polarisering, etc.)

Ugens tekster

Hvad, hvorfor?

Ikke så mange sider denne uge, men mere tekniske:

1. Taber & Lodge (2006) - **klassiker** i politisk psykologi (motivated reasoning) og genialt **eksperiment**
2. Druckman & McGrath (2019) - nyere oversigt over **motivated reasoning** med fokus på klima, begrebsafklaringer og udfordringer
3. Damsbo-Svendsen (2021) - empirisk eksempel på en **heuristik**, personlige vejr erfaringer, der påvirker klimaholdningsdannelse

Plan for forelæsningen

1. Motivated reasoning: Introduktion og centrale begreber (afsæt i D&M)
2. Eksperimentet i Taber & Lodge (2006)
3. Motivated reasoning på klimaområdet og udfordringer for teorien (tilbage til D&M)
4. Heuristikker: Damsbo-Svendsen (2021) og generelt
5. Overblik og opsamling

Spørgsmål undervejs → bit.ly/dak2-spørgsmål (Google Docs)

Druckman & McGrath (2019)

nature
climate change

The evidence for motivated reasoning in climate change preference formation

Despite a scientific consensus, citizens are divided when it comes to climate change — often along political lines. Democrats or liberals tend to hold that human activity is a primary cause of climate change, whereas Republicans or conservatives are much less likely to hold this belief. A prevalent explanation for this divide is that it stems from directional reasoning: individuals reject new information that contradicts their standing beliefs. In this review, we suggest that the empirical evidence is not so clear, and it is equally consistent with a theory in which citizens strive to form accurate beliefs but vary in what they consider to be credible evidence. This suggests a new research agenda on climate change preference formation, and its implications for effective communication.

A widely discussed explanation for the public's beliefs about climate change is the "conservatism of environmental concern." According to this explanation, people who are more concerned about environmental issues become less certain that their healthiest belief—that climate change is real—will be confirmed. In effect, communications scholars and practitioners have focused on the "conservatism of environmental concern" as the primary reason that the public has become less certain that climate change is real. In this paper, we argue that this is an oversimplification. We present data that suggest that the public's uncertainty about climate change is not the result of the concern over global climate change. Instead, our results suggest that the public's uncertainty about climate change is the result of a distinct emotional reaction to climate change that occurs when people are exposed to information that challenges their preexisting beliefs. Specifically, we argue that climate change alarmists are more likely to react to climate change alarm than to climate change denial. This pattern of behavior is consistent with previous research on climate change denialism, which shows that climate change alarmists, rather than climate change deniers, react more strongly to climate change alarm than to climate change denial. The results of this study also support the argument that the perception of climate change is rational and that the perception of climate change is not the result of the concern over global climate change.

Introducing the Bayesian framework
 Bayesian updating is a theoretical model of the process for incorporating new information into prior beliefs to form posterior beliefs. In fact, we offer an overview of the following discussion that highlights the notation we will use in the following sections. Further, this section ends with a brief summary of the contents of the rest of the Review. Our approach and arguments are consistent throughout, although our terminology and language vary.

NATURE CLIMATE CHANGE | VOL 9 | FEBRUARY 2019 | 18–19 | www.nature.com/natureclimatechange

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| Table 1: Terminology | |
|------------------------------------|---|
| | Definition |
| (a) Theories | |
| Motivational-matching | An individual's goals or motivations affect cognitive processes of memory and judgment. |
| Identify potential cognition | Two possible goals are accuracy gained (a correct response) or directional goals (gained at a particular time). |
| Based on matching | A theory of directional motivation in which the goal is to maximize or minimize stability or status in one's environment. |
| Identify perception | The theory is interpreted in a manner that emphasizes one's prior belief. |
| (b) Dimensional matching/reasoning | The interpretation of a stimulus as consistent with previous values, beliefs, or aftereffects. |
| Confirmation bias | A tendency to seek out information that confirms one's pre-existing belief or theory. |
| Conformity bias | A tendency to seek out information that contradicts one's pre-existing belief or theory. |
| Desirability bias | Greater desire to obtain information that confirms one's pre-existing belief. |
| (c) Positive updating | Information that is consistent with one's pre-existing belief. |
| Belief effect | No change in belief when presented with new information. |
| Precue learning | The perceptual bias is the same as the prior belief. |
| Base rate learning/bias effect | Relative to the prior belief, the posterior belief moves in the direction of the information. |
| Belief updating/bias reduction | Relative to the prior belief, the posterior belief moves in the opposite direction of the information. |
| (d) Unconscious processing | Unconscious recall of beliefs held by an individual (or group) or acquired through suggestion. |

Desired motivation. Instead of trying for accuracy (individuals can do this), the desired outcome can vary, but, as often used in a desire (polite *paramotivational* to maintain and increase social bonds), the desired outcome can be to increase satisfaction, selective perception, and the preexisting script—reinforcing the self. This is the case when individuals are asked to evaluate the outcomes of directional motivated research identified by Lodge and Taylor.¹⁰ Consider two of these three studies. In one, participants were asked to evaluate the processing of the prior belief in question:

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The Bayesian framework starts with an individual's prior belief, $p(a)$. This consists of multiple beliefs based on (b) some condition of the world (a) and her confidence in that guess (M_1). Next, the individual encounters some new information, x . This information may change her prior belief, $p(a)$, if it provides evidence of the condition, a , but individuals will differ in their perception of how closely relevant the truth is to the particularity of the information, x . The Bayesian update happens when the prior belief is adjusted in light of the new information, taking

Figure 1 shows a portion of the population of μ_1 and μ_2 that are consistent with the observed data. The requirements at the top of the figure state the same level of confidence to have the information. In addition, it does not allow for any information that may be available at a higher level of confidence. For example, accuracy estimates may differ in the standing trust they place in scientists. If someone has low confidence in the credibility of the information, that

where $A_i = \{x_j | x_j \in A_i\}$ is the individual's updated belief space. Note that prior belief is adjusted as the distance between prior belief and new information is increased. The closer the prior belief is to new information and β_{ij} is the individual's confidence in the posterior belief.

one's confidence in the new information. If the individual perceived the study as highly credible, then his or her confidence would be inflated by the update. In contrast, if he or she perceived the study as less credible, then his or her confidence would be partially reduced and were highly confident in his or her prior belief, the new information would not carry much weight.

Similarly, van der Linden shows that after exposure to a climate conspiracy video individuals update their beliefs in line

where beliefs move in the direction opposite to the new information (less belief in human-induced climate change) (see the first three rows of Table 1d).

¹⁵ We discuss two possible motivations—informational and directional—across a large number of studies. Although the terms ‘informational’ and ‘directional’ were first introduced by Gigerenzer and Goldstone (1996), they have since been interpreted to mean ‘unbiased’ assessments of the model fit and ‘biased’ assessments of non-monotonicity of the fit. See, for example, Gigerenzer and Goldstone (1996) and Gigerenzer et al. (1999).

while "instrumental reasoning" is often taken to indicate "biased" processing, this is an oversimplification of the theory. At a basic level, instrumental reasoning is a general cognitive strategy that can be used for many different purposes. In Box 2, we discuss the use of various terms related to bias in more detail. Table 2 provides an overview of various terms related to and directional motivations, summarizing the discussion to which we now turn.

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Box 2 | Community-revised terms in the discussion of bias

The term bias is commonly used in the preference-formation literature, but it is often used in an unclear fashion. Here we clarify some terminology that frequently enters discussions of bias.

- In the context of information processing, Bayesian update is
- The observational equivalence problem
- Evidence for directional motivated reasoning requires documentation that an individual possesses a directional goal and that information processing is conducted to achieve that goal. These are difficult concepts to operationalize. Thus, one might argue that (but little evidence) directional motivated reasoning occurs despite the lack of directional goals.

At least three different meanings of the term bias are relevant to the preference literature, although the word is used very differently in each case:

- (a) Incorporating new information into a prior belief at an arrival time t to form a posterior belief about the state of the world either unbaised or biased.
- (b) Whether it is present or depends on the prior belief in a model with a decision rule; this may seek out new information that is likely to confirm her prior beliefs, incorporate new information that is likely to contradict her prior beliefs, or update an unbiased belief that is based relative to the normatively determined prior belief.
- (c) The preference literature, although the word is used very differently in each case.

Svær og kompakt tekst, men fantastisk reservoir af skarpe begrebsafklaringer

- Også interesserede i den polariserede klimadebat i USA
 - En meget udbredt forklaring er "motivated reasoning"
 - Motivated reasoning = motivated skepticism = (politisk) motiveret tænkning
 - Lidt (selv)kritiske over for motivated reasoning - vender vi tilbage til

Druckman & McGrath (2019)

nature
climate change

REVIEW ARTICLE
<https://doi.org/10.1038/s41551-019-0491-0>

The evidence for motivated reasoning in climate change preference formation

James N. Druckman¹ and Mary C. McGrath²

Despite a scientific consensus that humans are driving climate change – often along political lines, Democrats tend to believe that humans have a greater cause of climate change, whereas Republicans or conservatives often think it is likely that this belief is false. A prominent explanation for this divide is that it stems from directed motivated reasoning (DMR), where individuals update their beliefs about climate change based on how well the new information evidences what they expect, and is equally consistent with a theory in which climate science has become so polarized that it is no longer a neutral source of information. This suggests a new research agenda on climate change preference formation, and its implications for effective communication.

A widely discussed explanation for the public divide in belief about climate change is that people engage in "biased processing" of climate science information. This refers to the tendency to believe that humans are causing climate change because it confirms their existing beliefs, and to discount other causes of climate change. In this article, we argue that DMR is a more parsimonious explanation for this divide, and that it can account for other climate change preferences as well. We find that individuals update their beliefs about climate change based on how well the new information evidences what they expect, and is equally consistent with a theory in which climate science has become so polarized that it is no longer a neutral source of information. This suggests a new research agenda on climate change preference formation, and its implications for effective communication.

The opening section has three steps. The first specifies the motivation for DMR, and the second provides a formal model of the process. The third shows that the model fits the data well, and provides a discussion of the implications for climate change communication.

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Introducing the Bayesian framework

Bayesian updating is a formal way of thinking about the process for incorporating new information into prior beliefs to arrive at an updated belief. It is a general way of thinking about how people update their beliefs in the following discussion. Further, it is the approach used by Druckman and McGrath (2019) in this Review. Our terminology is partly consistent with previous work, although our approach and arguments are distinct.

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| Table 1 Terminology | |
|--|---|
| Terminology | Definition |
| (a) Theory | An individual's goals or motivations affect cognitive processes of reasoning and judgment ¹ . |
| Motivated reasoning | Two possible goals are accuracy goals (aimed at a correct conclusion) or directional goals (aimed at a particular belief). |
| Identify motivation | A type of directional motivated reasoning in which the goal is maintenance of membership or status in one's social group. |
| Based assimilation | The tendency to interpret new evidence in a manner that affirms one's prior beliefs. |
| Stereotype confirmation | The tendency to interpret new evidence in a manner that affirms one's prior beliefs. |
| Perceptual assimilation | A theoretical filter that distorts political participants' perceptions of the world, leading to different beliefs about the same objective reality. |
| (b) Directional motivated reasoning mechanisms | A tendency to seek out information that confirms the prior belief, or the same as the prior belief. |
| Confirmation bias | Updating strength of a new information as a function of its similarity to one's prior belief ² . |
| Prior effect | Updating strength of a new information as a function of its similarity to one's prior belief ³ . |
| Disconfirmation bias | New evidence that contradicts the prior belief. |
| (c) Possible updating outcomes | No updating of beliefs in light of the new information. |
| Neutral | No updating of beliefs in light of the new information. The posterior belief is the same as the prior belief. |
| Persuasion/heuristic | Belief updating that is driven by a new piece of information. |
| Backfire effect | Belief updating that is driven by a new piece of information that contradicts the prior belief. |
| Better polarization (between multiple actors) | Movement of updated beliefs of an individual (or group) in opposite and divergent directions ⁴ . |

Directed assimilation: formal theory for accuracy Individuals are most prone to update their beliefs in response to a new piece of information if the new information is consistent with their prior belief. This effect is often termed as a *desire* (perhaps unconscious) to maintain one's prior belief. For example, Druckman and McGrath (2019) find that individuals are more likely to accept a new scientific finding if it is consistent with their prior belief. This is consistent with the three mechanisms of directed motivated reasoning identified in Table 1, which can be understood as follows. Persuasion is a function of the prior belief, and the prior belief is a function of the prior belief. Therefore, the prior belief is the same as the posterior belief if the person seeks out information that confirms the prior belief. In this case, the distribution from

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Box 1 | The Bayesian framework

The Bayesian framework starts with an individual's prior belief (π_0). This consists of an individual's best guess ($\hat{\mu}_0$) about how confident the world is ($\hat{\sigma}_0$) in the information that gave rise to her prior belief. The individual's prior belief is the probability that the world is in state i . For example, an accuracy-motivated individual might have a high prior belief that the world is in state i , but her confidence will differ in her prior belief about the world, but individuals will differ in their prior beliefs about the world.

With an accuracy-motivated individual, the evolution of π_0 is independent of the new information. The new information is added to the prior belief, and the individual's prior belief about the world remains the same. With a partisan-motivated individual, the evolution of π_0 depends on the new information. Bayesian updating happens when the prior belief is updated to reflect the new information. This is done by adding the new information into the individual's confidence in the new information relative to the prior belief. This is represented as

$$\pi_0 = \pi_0(\hat{\mu}_0, \hat{\sigma}_0) + \frac{1}{\hat{\sigma}_0^2} \left(\frac{\hat{\mu}_0 - \hat{\mu}_1}{\hat{\sigma}_0^2} \right)^2 \hat{\sigma}_0^2$$

where $\hat{\mu}_1$ is the new information, $\hat{\sigma}_1$ is the individual's updated belief, the prior belief has been adjusted by the distance between the prior and new information. π_0 is a normal distribution.

With a partisan-motivated individual, the evolution of π_0 depends on the new information. The new information is added to the prior belief, and the individual's prior belief about the world changes. This is represented as

$$\pi_0 = \pi_0(\hat{\mu}_0, \hat{\sigma}_0) + \frac{1}{\hat{\sigma}_0^2} \left(\frac{\hat{\mu}_0 - \hat{\mu}_1}{\hat{\sigma}_0^2} \right)^2 \hat{\sigma}_0^2$$

where $\hat{\mu}_1$ is the new information, $\hat{\sigma}_1$ is the individual's updated belief, and the prior belief has been adjusted by the distance between the prior and new information. This is represented as

$$\pi_0 = \pi_0(\hat{\mu}_0, \hat{\sigma}_0) + \frac{1}{\hat{\sigma}_0^2} \left(\frac{\hat{\mu}_0 - \hat{\mu}_1}{\hat{\sigma}_0^2} \right)^2 \hat{\sigma}_0^2$$

where $\hat{\mu}_1$ is the new information. If the individual previously had a low prior belief, the new information increases the prior belief. If the individual previously had a high prior belief, the new information decreases the prior belief. In both cases, the new information is added to the prior belief to form a new posterior belief. If the individual had a medium prior belief, the new information has little effect on the prior belief.

There are three possible types of updating in light of new information. The first is called *accuracy*, in which the new information is used to update the direction of the prior belief, but not the strength of the prior belief. This is the case when the individual's prior belief is accurate, and the new information is accurate. For example, if the individual has a high prior belief that the world is in state i , and the new information is also high, the individual's posterior belief is also high. This is called *based assimilation*.

Second, as individual's motivation shifts from accuracy to direction, the individual's prior belief is updated to reflect the new information, but the new information does not change the strength of the prior belief.

Finally, the third possibility is that the individual's prior belief is inaccurate, and the new information is inaccurate. In this case, the individual's prior belief is updated to reflect the new information, and the new information changes the strength of the prior belief.

Overall, people arrive at normatively desirable conclusions when they update their beliefs in a way that reflects the new information, and they update their beliefs in a way that reflects the new information, and they update their beliefs in a way that reflects the new information.

Source: as people arrive at normatively desirable conclusions when they update their beliefs in a way that reflects the new information, and they update their beliefs in a way that reflects the new information, and they update their beliefs in a way that reflects the new information.

1. Druckman, J. N. & McGrath, M. C. *Nature Climate Change* 29, 114–116 (2019).

2. Druckman, J. N. & McGrath, M. C. *Psychol. Rev.* 125, 260–282 (2018).

3. Druckman, J. N. & McGrath, M. C. *J. Polit. Psychol.* 37, 1–20 (2018).

4. Druckman, J. N. & McGrath, M. C. *Am. J. Pol. Sci.* 63, 103–125 (2019).

Hvad betyder *motiver* i "motivated reasoning"?

- En slags *formål* med at sætte hjernen i arbejde
- (1) **Mål om nøjagtighed** - *accuracy/non-directional* - at nå frem til den "bedste" konklusion, "sandheden"
- (2) **Politiske mål** - *partisan/directional* - at beskytte eller bestyrke eksisterende holdninger, identitet, mv.

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Box 2 | Commonly observed forms in the discussion of bias

NATURE CLIMATE CHANGE

Box 2 | Commonly observed forms in the discussion of bias

The term bias is commonly used in the preference formation literature, but it is used as an unclear term. We clarify some of the ways in which the term is used.

Identify motivation

Individuals are more likely to update their beliefs in a direction that reflects their prior beliefs. This is called *based assimilation*.

The tendency to interpret new evidence in a manner that affirms one's prior beliefs.

Source: as individuals are more likely to update their beliefs in a direction that reflects their prior beliefs.

Based assimilation

Accuracy goals – accuracy and directional goals

Bayesiansk opdatering

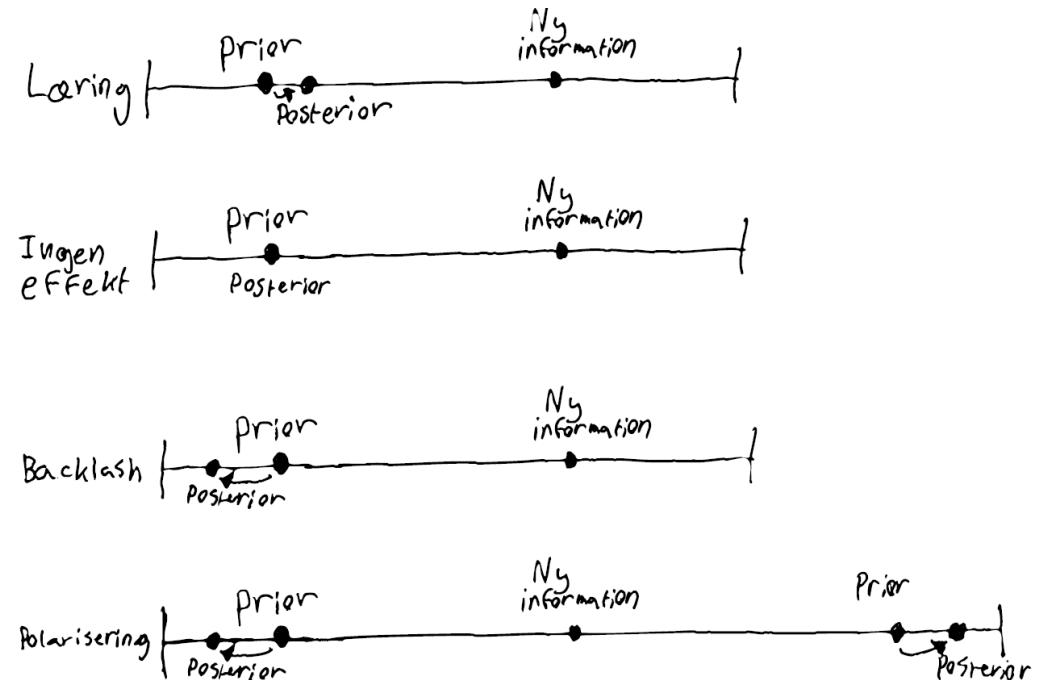
- Oversat til holdningsdannelse er den grundlæggende indsigt i Bayes' teorem simpel:
 - | Sandsynligheden for, at man ændrer holdning i lyset af ny information (og måden man ændrer holdning) afhænger af ens eksisterende holdning
- Mao. er opdateringen af holdningen betinget af den eksisterende holdning ("prior")
- Den eksisterende holdning ("prior") kan være stærk eller svag og være baseret på hvad som helst
- Den opdaterede holdning kaldes "posterior"

Bayesiansk opdatering

Proces

1. Prior (eksisterende opfattelse)
2. Indsamling af ny information
3. Ny information inkorporeres muligvis i opdateret opfattelse (*posterior*) afhængigt af:
 - *styrke/sikkerhed* af prior
 - *styrke/sikkerhed* af ny information (= opfattet troværdighed)

Udfald



Bayesiansk opdatering - eksempel

Er cykelstien ensrettet?



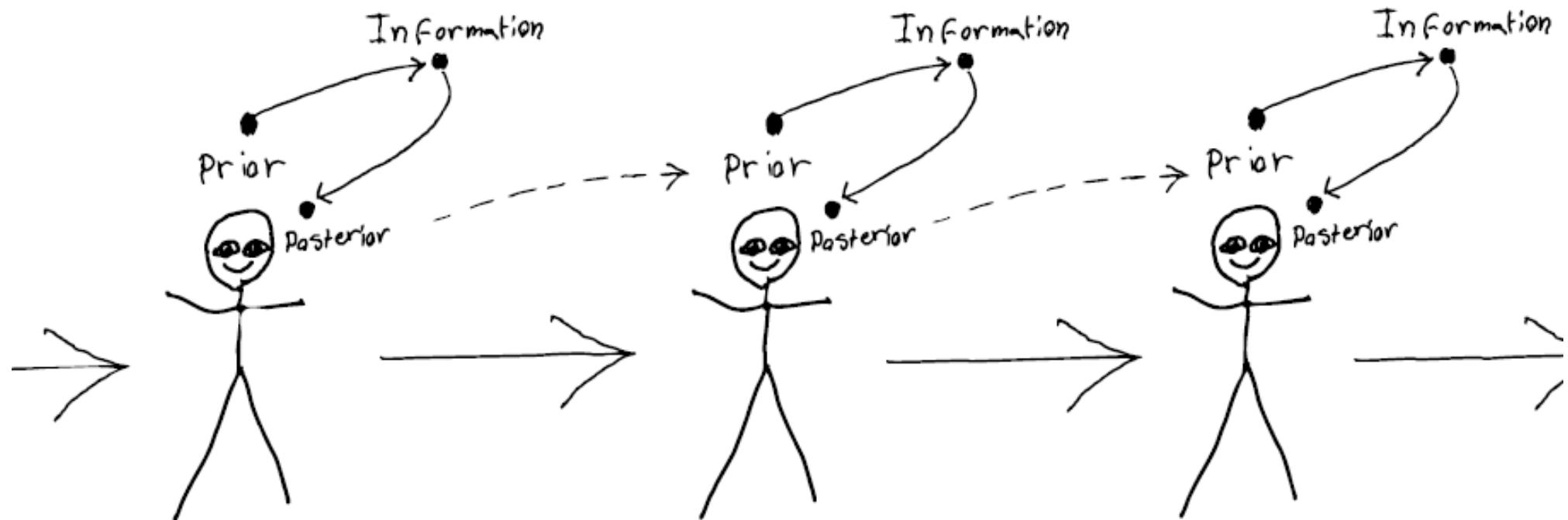
Bayesiansk opdatering

Det vigtigste at tage med er billedet af holdningsdannelse som løbende opdatering af eksisterende holdninger (*priors*) i lyset af nye informationer



Bayesiansk opdatering

Det vigtigste at tage med er billedet af holdningsdannelse som løbende opdatering af eksisterende holdninger (*priors*) i lyset af nye informationer



Tilbage til motivated reasoning

- Okay - vores eksisterende opfattelser (*priors*) påvirker altså vores holdningsdannelse
- Det er også budskabet i motivated reasoning
- Al tænkning er motiveret af bestemte mål:
 - (a) Nøjagtighed
 - (b) Politisk mål
- Ikke nødvendigvis klart for individet

Motivated reasoning - mål om nøjagtighed

- Mål: at nå frem til den "korrekte" konklusion om verdens tilstand
- Ens **prior** påvirker hverken indsamlingen af ny information eller behandlingen af ny information
- Det er det rene, rationelle ideal
- Ikke altid forkert, men ofte
- Kan føre til læring af "sandheden", men gør det ikke nødvendigvis (motiv er ikke nok og meget kan gå galt)

Motivated reasoning - politisk mål

- Mål: at nå frem til en forudbestemt konklusion om verdens tilstand
 - Mao. at beskytte sin *prior*
- Ens *prior* påvirker indsamlingen og/eller behandlingen af ny information
- Kan altså påvirke *selve informationen*, man eksponeres for, den opfattede *troværdighed* og mobilisering af *modargumenter*
- Det kan forklare forskelle i holdningsdannelse (endda ved eksponering for samme information)

De tre mekanismer

1. Confirmation bias
2. Prior attitude effect
3. Disconfirmation bias

De tre mekanismer

1. Confirmation bias
2. Prior attitude effect
3. Disconfirmation bias

1. Confirmation bias

"A tendency to seek out information that confirms one's prior beliefs" (D&M)

- Når man indsamler information, vælger man kilder, som vil være tilbøjelige til at bekræfte ens holdning
- (og man kan jo kun blive påvirket af information, man faktisk eksponeres for)



De tre mekanismer

1. Confirmation bias
2. Prior attitude effect
3. Disconfirmation bias

2. Prior attitude effect

"Perceived strength of new information is a function of its relationship to one's prior belief" (D&M)

- Man stoler mere på information, som "giver mening" i forhold til ens eksisterende opfattelser - og påvirkes derfor også mere

De tre mekanismer

1. Confirmation bias
2. Prior attitude effect
3. Disconfirmation bias

3. Disconfirmation bias

"Greater scrutiny and counter-argumentation of information contrary to one's prior beliefs (relative to information consistent with one's prior beliefs)"
(D&M)

- Man bruger flere kræfter på at efterprøve og modargumentere information, der udfordrer ens holdning - og påvirkes derfor også mindre

Lad se på en empirisk undersøgelse af motivated reasoning!

1. Motivated reasoning: Introduktion og centrale begreber (afsæt i D&M)
2. Eksperimentet i Taber & Lodge (2006)
3. Motivated reasoning på klimaområdet og udfordringer for teorien (tilbage til D&M)
4. Heuristikker: Damsbo-Svendsen (2021) og generelt
5. Overblik og opsamling

Spørgsmål undervejs → bit.ly/dak2-spørgsmål (Google Docs)

Taber & Lodge (2006)

- Klassiker i politisk psykologi og statskundskab (citeret 3733 gange)
- Tester motivated reasoning empirisk med laboratorieeksperiment

Motivated Skepticism in the Evaluation of Political Beliefs

Charles S. Taber Stony Brook University
Milton Lodge Stony Brook University

We propose a model of motivated skepticism that helps explain when and why citizens are biased-information processors. Two experimental studies explore how citizens evaluate arguments about affirmative action and gun control, finding strong evidence of a prior attitude effect such that attitudinally congruent arguments are evaluated as stronger than attitudinally incongruent arguments. When reading pro and con arguments, participants (Ps) counterargue the contrary arguments and uncritically accept supporting arguments, evidence of a disconfirmation bias. We also find a confirmation bias—the seeking out of confirmatory evidence—when Ps are free to self-select the source of the arguments they read. Both the confirmation and disconfirmation biases lead to attitude polarization—the strengthening of t_2 over t_1 attitudes—especially among those with the strongest priors and highest levels of political sophistication. We conclude with a discussion of the normative implications of these findings for rational behavior in a democracy.

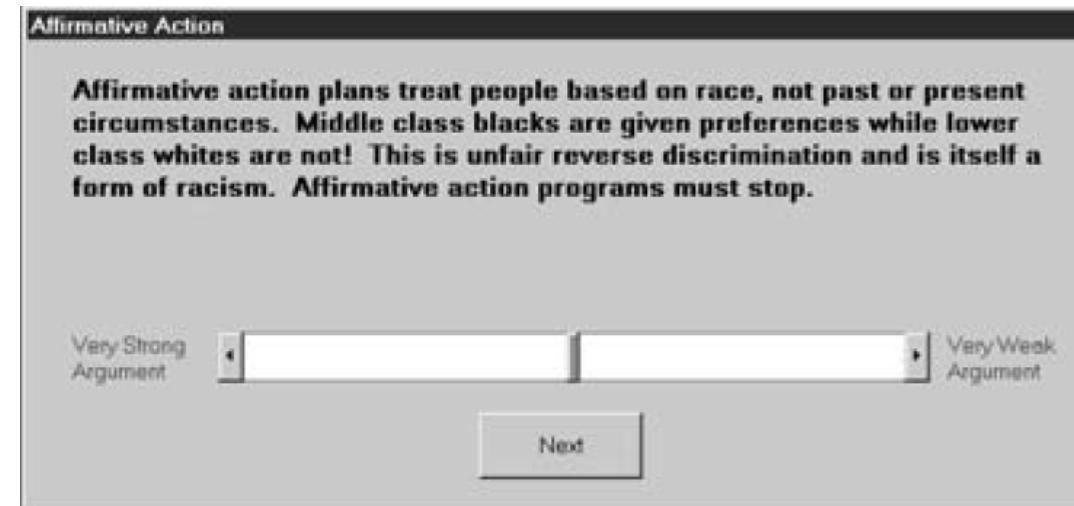
Forskningsdesign

- (Op til) 136 deltagere rekrutteret blandt statskundskabsstuderende (W.E.I.R.D?)
- To politiske emner: *affirmative action* og *gun control*
- Deltagerne svarer på spørgsmål og løser opgaver på computere:
 - Først holdninger til emnet
 - Så øvelser ("infoboard", vurdering af argumenters styrke, tanker om argumenter)
 - Til sidst holdninger til emnet igen
- **Analyse** af hvordan forskellige typer løser opgaver og besvarer holdningsspørgsmål
 - enige/uenige
 - mere eller mindre **sofistikerede** (low/high knowledge, politisk bevidsthed) = *mulighed* for motiveret tænkning
 - har stærke eller svage **priors** = *grad* af motivation
- Seks hypoteser

Prior attitude effect

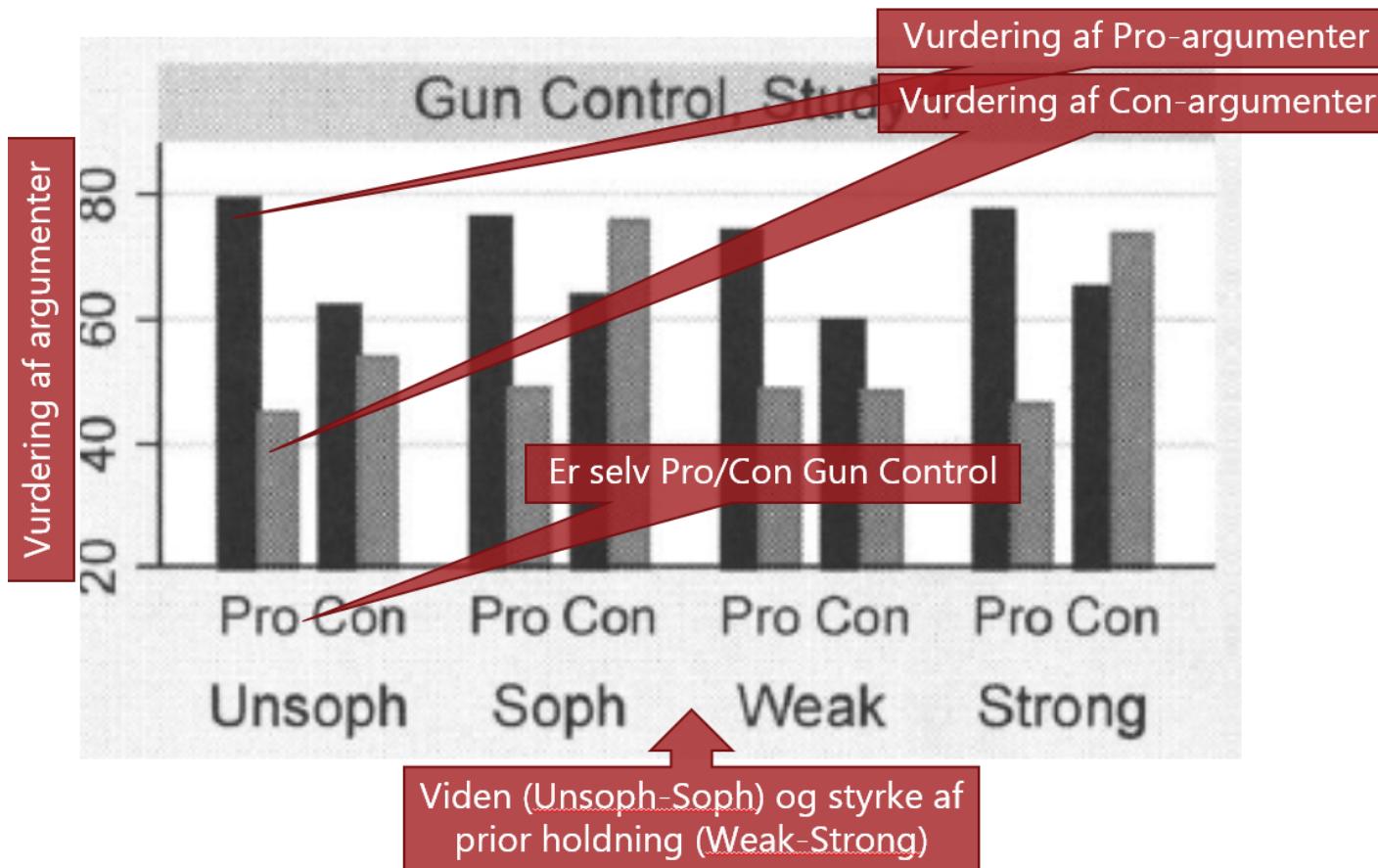
H1 (prior attitude effect): Man vurderer argumenter, der understøtter ens eksisterende holdning, som stærkere/mere overbevisende (prior attitude effect)

- Deltagerne præsenteres for argumenter for og imod og vurderer "så objektivt som muligt", hvor gode argumenterne er fra 0-100

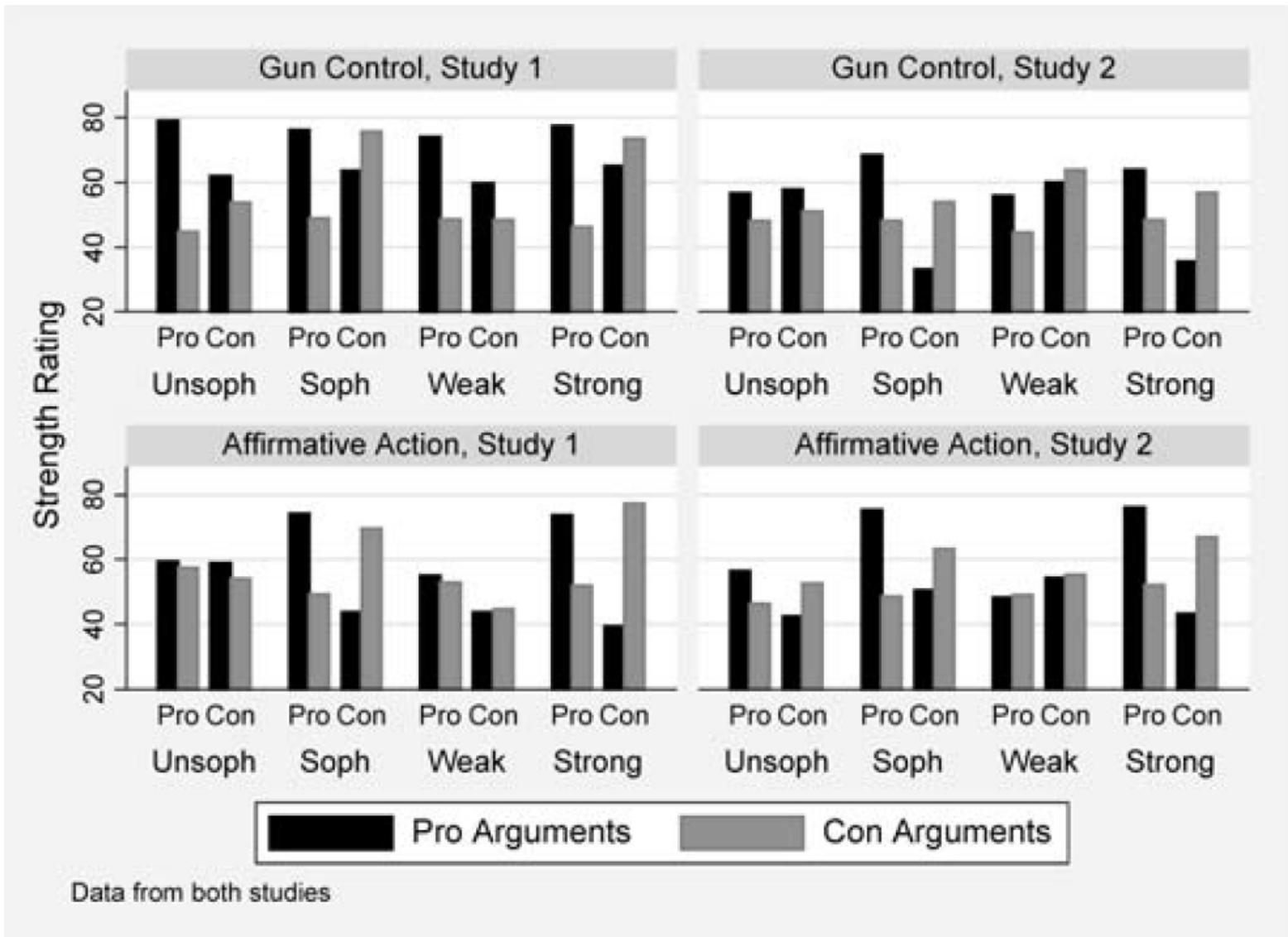


- Tanken er, at deltagerne vil vurdere argumenter som stærkere, hvis de er enige (svagere, hvis de er uenige)

Prior attitude effect



- Primært: Forskelle i vurderinger af Pro/Con (nabosøjler) for personer, der selv er Pro hhv. Con
- Sekundært: Forskelle afhængigt af sofistikation og styrke af prior

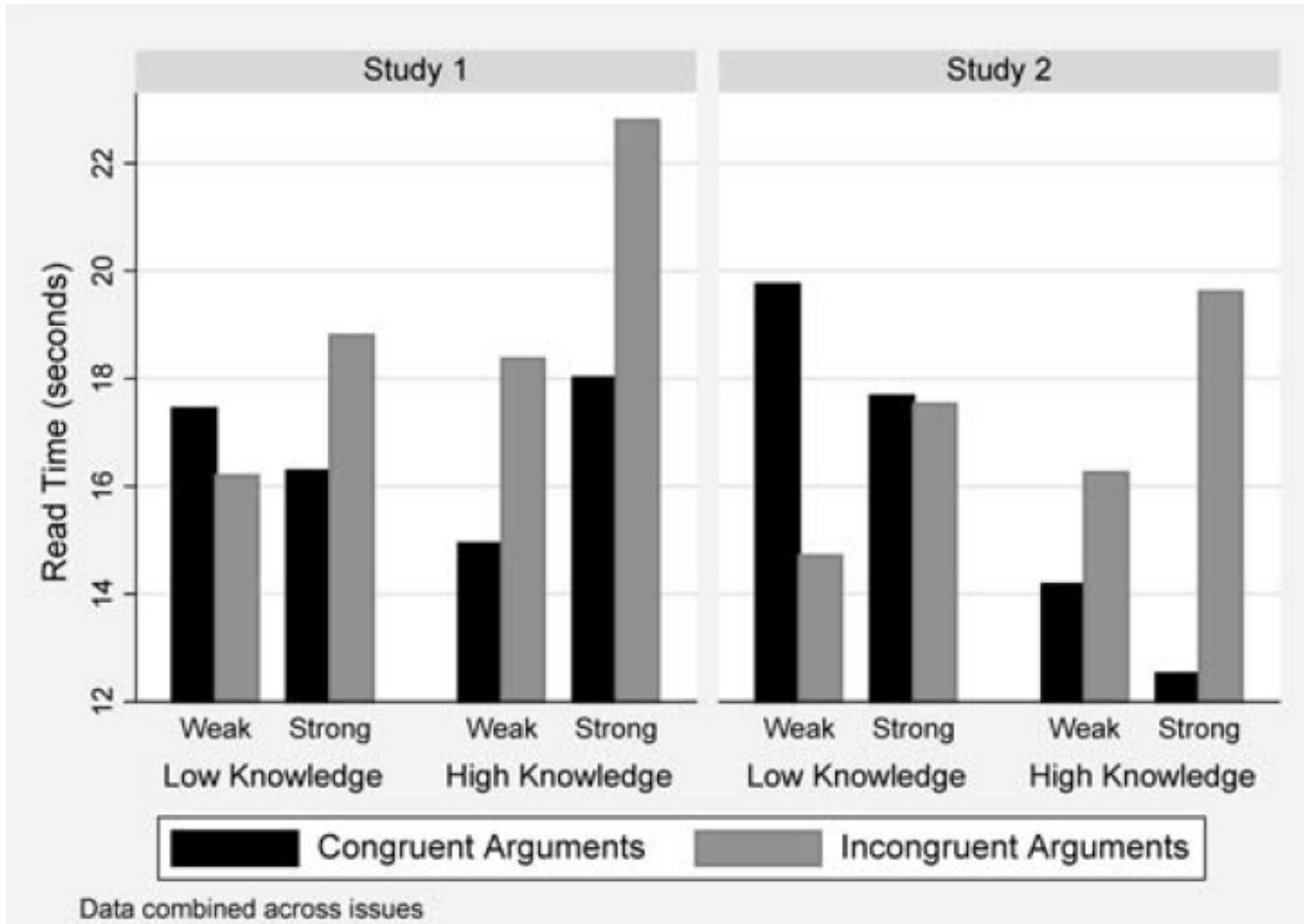


→ Understøtter H1 (prior attitude effect), H5 (attitude strength effect) og H6 (sophistication effect)

Disconfirmation bias

H2 (disconfirmation bias): Man vil bruge mere tid og omtanke på at argumentere *imod* påstande, der er i modstrid med ens egen eksisterende holdning (prior)

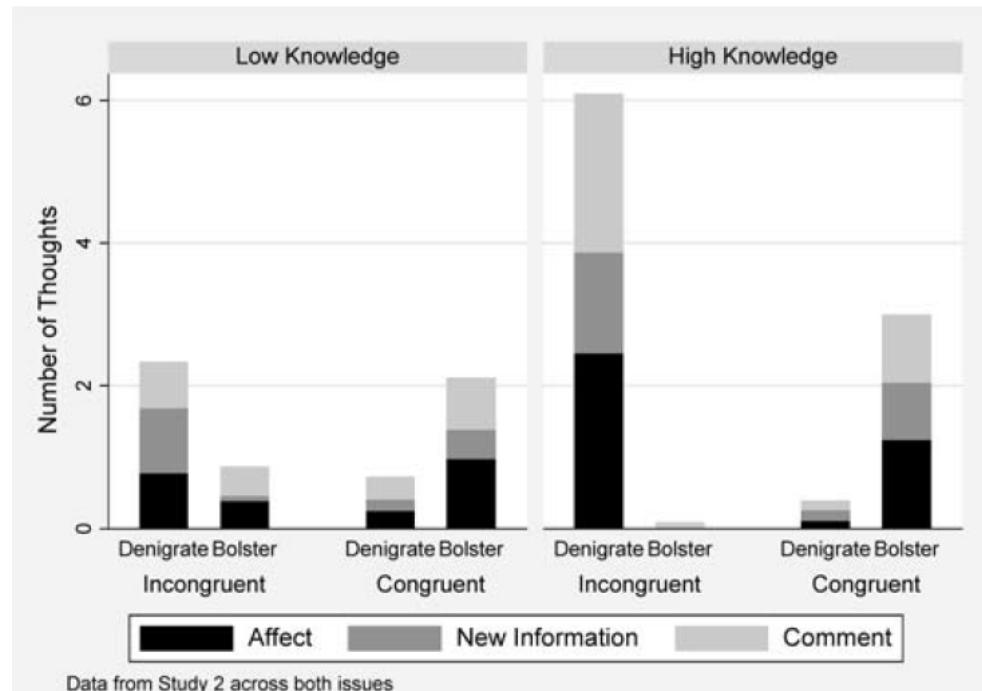
- Folk vil med det samme acceptere argumenter, der bekræfter dem, men *aktivt modargumentere* inkongruent information
- De vil **bruge mere tid** på at læse og tænke over argumenter, de er uenige med



- Primært: Grå søjler sammenlignet med sorte (læsetid for modstridende argumenter)
 - Sekundært: Fokus på dem med stærke priors (**strong**) og **high knowledge** (sofistikation)
- Resultat: Lille forskel på tværs af alle grupper (1-2 sek.), stor forskel for de sofistikerede og dem med stærke priors (4-7 sek.)

Hvad bruger de tiden på?

T&L spurte ind til **deltagernes tanker** omkring argumenterne . Bruges tiden på at argumentere *imod* inkongruent information?



- Inkongruente argumenter medførte langt flere tanker
- Næsten udelukkende tanker, der udfordrede argumentet
- Sofistikerede deltagere er mest *biased*

- *Indikation på beskyttelse af prior → motivated reasoning*

Confirmation bias

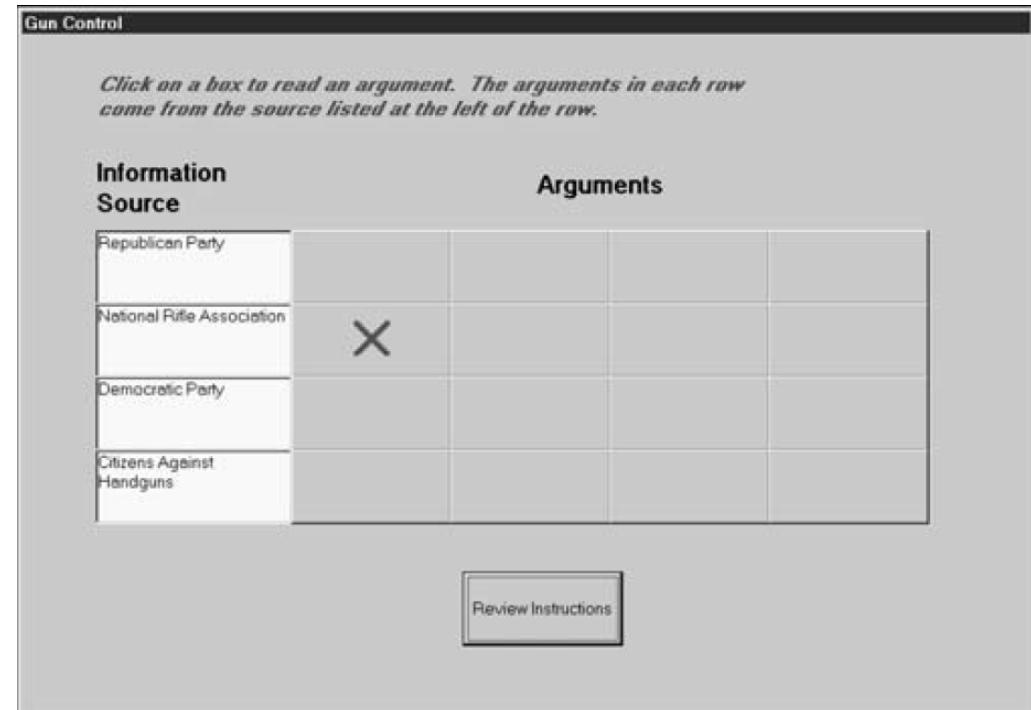
- H3 (confirmation bias): Man søger i højere grad information fra afsendere, man forventer vil understøtte ens egen holdning (prior)
- Operationaliseres som andelen af valgte argumenter (8 ud af 16) fra kilder, man normalt er enig med (%)

Gun Control

Click on a box to read an argument. The arguments in each row come from the source listed at the left of the row.

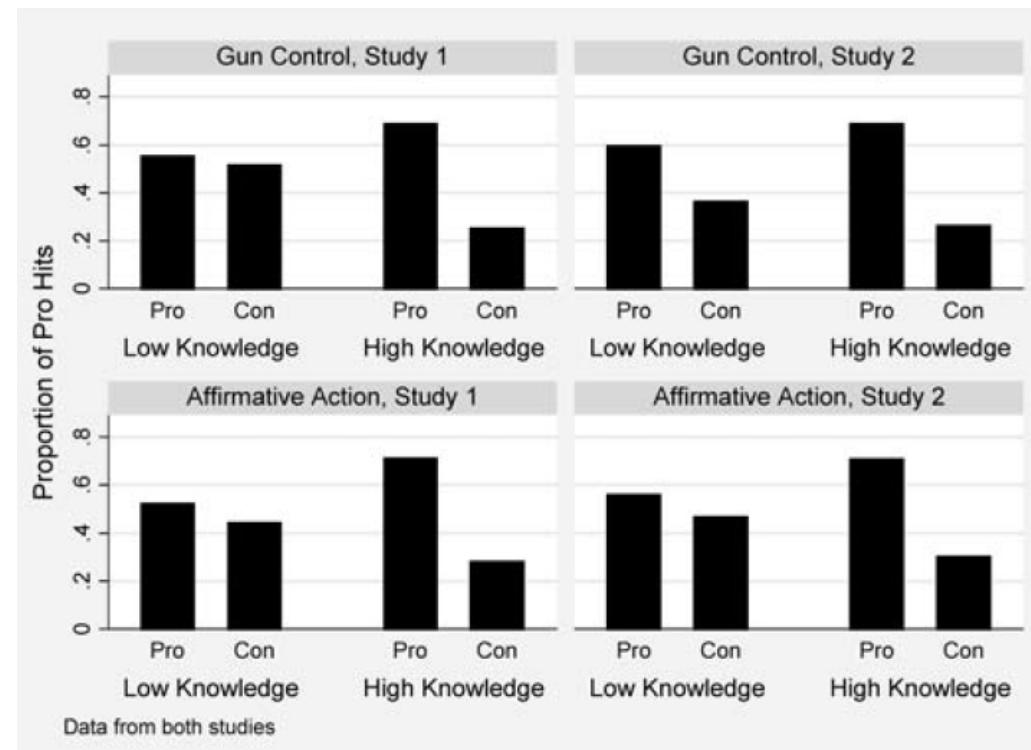
| Information Source | Arguments | | | |
|----------------------------|-----------|--|--|--|
| Republican Party | | | | |
| National Rifle Association | X | | | |
| Democratic Party | | | | |
| Citizens Against Handguns | | | | |

[Review Instructions](#)



Confirmation bias

- Primært: Forskelle på Pro/Con
- Sekundært: Særligt fokus på "High Knowledge" (sofistikation)

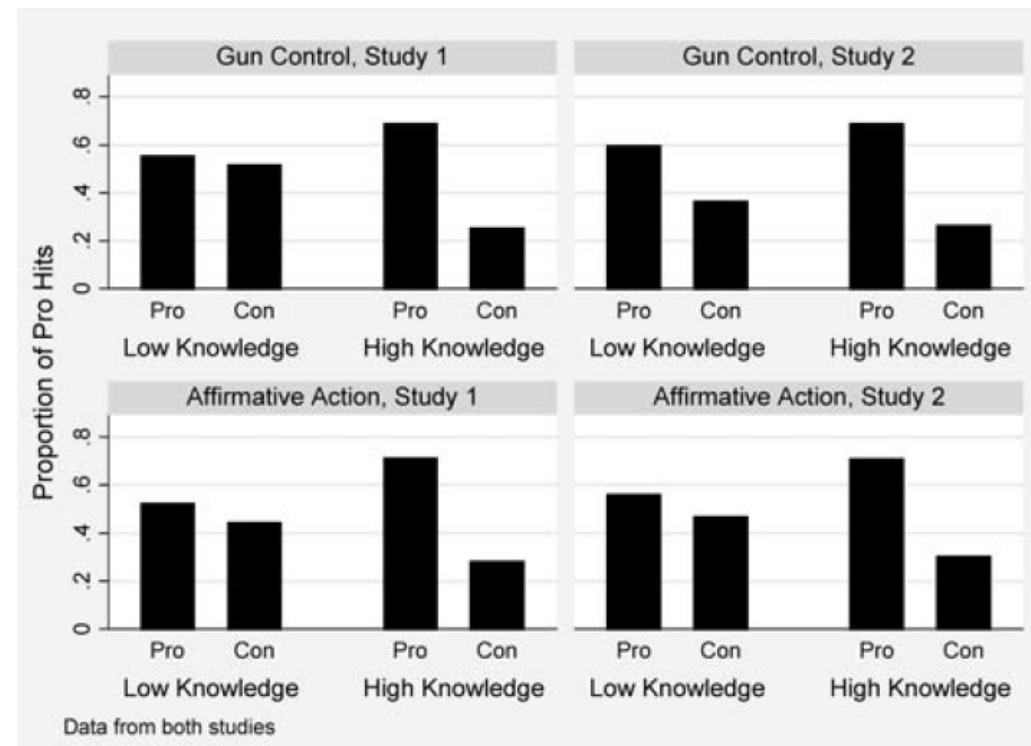


Confirmation bias

- Primært: Forskelle på Pro/Con
- Sekundært: Særligt fokus på "High Knowledge" (sofistikation)

Resultat

- I gennemsnit udvælger man flere understøttende (Pro) argumenter
- De sofistikerede deltagere er mest biased ("selected arguments from like-minded groups 70-75% of the time")



Polarisering

- Sidste lille krølle!
 - | H4 (attitude polarization): Selvom man udsættes for balanceret information om et emne (gode argumenter for og imod), vil ens holdning (posterior) blive mere ekstrem af informationen
- Stærk evidens for polarisering for *sofistikerede*, dem med *stærke priors* og dem der *udviste bias* i de andre øvelser (men ikke de andre)
- Mao. kan motivated reasoning forklare *polarisering* blandt sofistikerede (dem med høj politisk bevidsthed)

RAS-modellen og MR - ligheder

- Samme grundlæggende spørgsmål - hvor kommer holdninger fra?
- Antagelse om at holdninger formes og forandres som funktion af information
- **Modstandsantagelsen** (RAS) ligner en forsimplet version af MR - man står imod ny information, der er *for* inkongruent (prior attitude effect/disconfirmation bias)

RAS-modellen og MR - forskelle

- MR er mere **psykologisk** - mere fokuseret på, hvordan informationsbehandling faktisk fungerer, mere mikroniveau
- MR beskæftiger sig *ikke* med, **hvor informationen kommer fra** (informationslandskabet, kommunikation, elitediskurs)
- Det er kun i MR, at der er mulighed for "**backlash**", ikke hos Zaller, hvor det er en skala fra ikke-accept til fuld accept
- I RAS er det kun dybereliggende prædispositioner (ideologi, værdier, osv.), der regulerer informationsbehandlingen. I MR er det også eksisterende holdning til emnet
- For Zaller er der intet "**mål**" (motiv) med informationsbehandlingen - processen giver det outcome, den nu engang gør. I MR mobiliseres informationsbehandlingen for at opnå et mål
- Zaller er nærmest udelukkende baseret på **kognition**. MR lægger hovedvægt på **affekt** ("*affect-driven motivated reasoning*")
 - Bias drives af lynchurtige, automatiske affektive processer (*like/dislike, mavefornemmelse*), og hvis ikke emnet vækker affekt, vækker det ikke motivation/bias

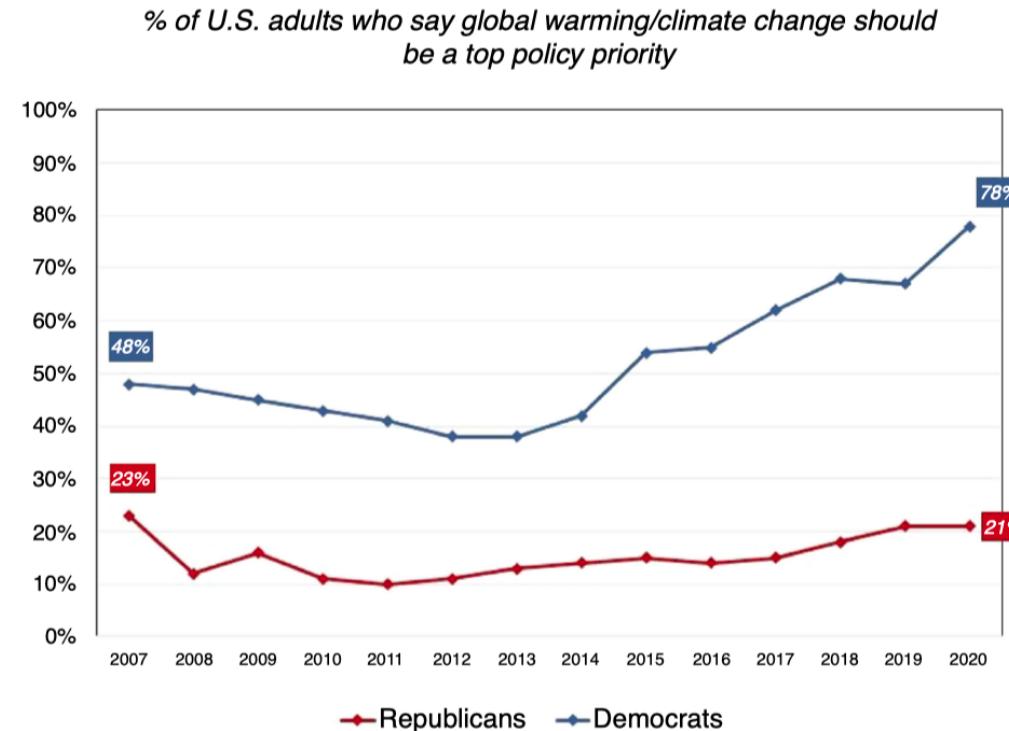
Okay, lad os lige kortvarigt vende tilbage til Druckman & McGrath (2019) ...

1. Motivated reasoning: Introduktion og centrale begreber (afsæt i D&M)
2. Eksperimentet i Taber & Lodge (2006)
3. Motivated reasoning på klimaområdet og udfordringer for teorien (tilbage til D&M)
4. Heuristikker: Damsbo-Svendsen (2021) og generelt
5. Overblik og opsamling

Spørgsmål undervejs → bit.ly/dak2-spørgsmål (Google Docs)

Hvad var egentlig D&Ms hovedbudskab?

- Evidensen for motivated reasoning på klimaområdet i USA er faktisk *ikke* så klar
 - Trods studier, der viser, at fx demokrater/republikanere behandler information forskelligt og når forskellige konklusioner
 - Trods at MR ville kunne **forklare polarisering** i klimaholdninger ↓



Hvad var egentlig D&Ms hovedbudskab?

- ... Så kan man normalt ikke udlede, hvilke mål folk faktisk er motiverede af
 - Vi kan ikke direkte observere motiverne!

Alternativ forklaring:

- Motiveret af **nøjagtighed** men med forskellige opfattelser af, hvad der er (u)troværdige kilder til information
 - bl.a. forskelle i tillid til videnskabsfolk
- De kilder, folk vi finder troværdige, er dem, vi deler holdninger og værdier med
- Derfor kan folk, der er motiveret af at finde frem til "sandheden", nå frem til noget langt fra den videnskabelige konsensus pga. "*inability to detect 'bad information'*"
- Vi kan som regel ikke se forskel på de to motiver i praksis

Meeen! Det betyder ikke, at teorien tager fejl. Det er bare svært at finde en "smoking gun"

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Damsbo-Svendsen (2021) - The Local Warming Effect



"Oh god ... weird ... how did that ...?"

WEST EUROPEAN POLITICS

<https://doi.org/10.1080/01402382.2020.1792731>



RESEARCH NOTE



How weather experiences strengthen climate opinions in Europe

Søren Damsbo-Svendsen 

Department of Political Science, University of Copenhagen, Copenhagen, Denmark

ABSTRACT

Previous research has shown that we believe more in the reality of climate change when we experience warmer-than-usual temperatures. This reflects a psychological process in which easily accessible information from personal weather experiences is used as a heuristic to form climate opinions. This paper replicates and extends upon a research design and results of Egan and Mullin to provide the first systematic European study of the Local Warming Effect. Based on data from 12 European countries, the analysis shows that when objective temperatures increase by two standard deviations (5 °C) relative to normal temperatures, climate opinions are strengthened by around 0.5–1.0 percentage points – comparable to the effect of a full step to the left on a 0–10 political ideology scale.

KEYWORDS Local warming effect; global warming; temperature; personal experience; public opinion

Damsbo-Svendsen (2021) - The Local Warming Effect

RQ: Hvordan påvirker usædvanlige temperaturer europæernes holdninger til klimaforandringer?

- Direkte oplevelser og erfaringer med vejret
- Uafhængigt af medier og eliter (?)
- Vejrerfaringer som heuristik!
- Local warming effect er, når "deviations in the day's temperature affect individuals' global warming beliefs"
- Inspireret af Egan & Mullin (2012) fra USA

WEST EUROPEAN POLITICS
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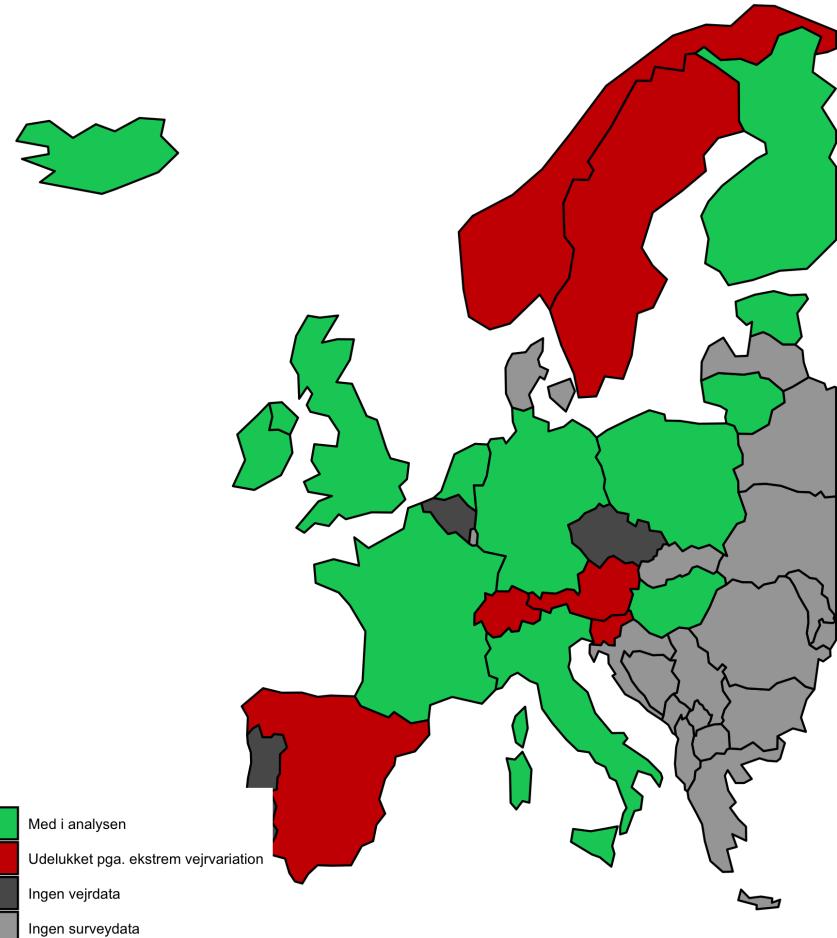
ABSTRACT

Previous research has shown that we believe more in the reality of climate change when we experience warmer-than-usual temperatures. This reflects a psychological process in which easily accessible information from personal weather experiences is used as a heuristic to form climate opinions. This paper replicates and extends upon a research design and results of Egan and Mullin to provide the first systematic European study of the Local Warming Effect. Based on data from 12 European countries, the analysis shows that when objective temperatures increase by two standard deviations (5 °C) relative to normal temperatures, climate opinions are strengthened by around 0.5–1.0 percentage points – comparable to the effect of a full step to the left on a 0–10 political ideology scale.

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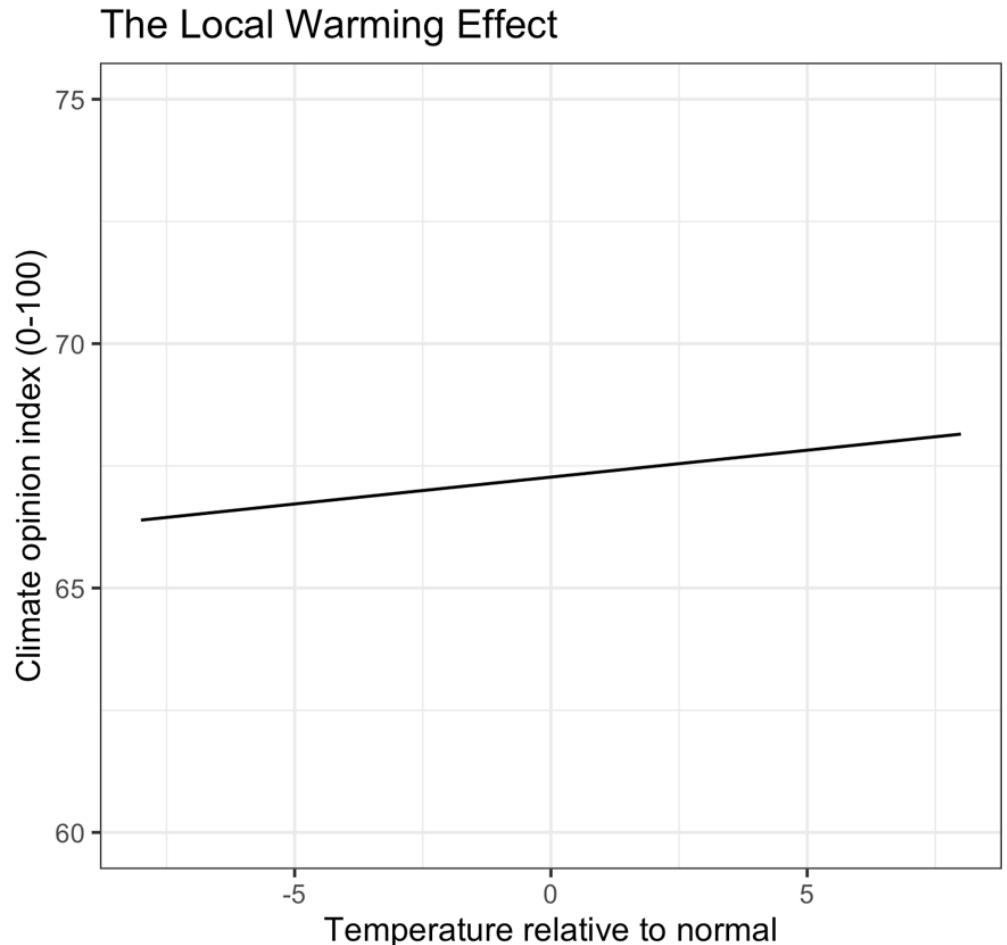
Data

- European Social Survey runde 8 (2016) med masser af klimaspørgsmål
- Afhængig variabel: **Klimabevisthed** (0-100, baseret på 6 spørgsmål)
- Uafhængig variabel: **Temperatur** over 7 dage ift. "normal" over 30 år
- Temperaturer observeres på landenniveau og matches med respondenter i hvert land
- I nogle lande ikke plausibelt at tale om en "national temperatur" pga. enorm variation
- Derfor udelukkes ekstremt store eller bjerggrige lande → 12 lande tilbage (ikke DK)



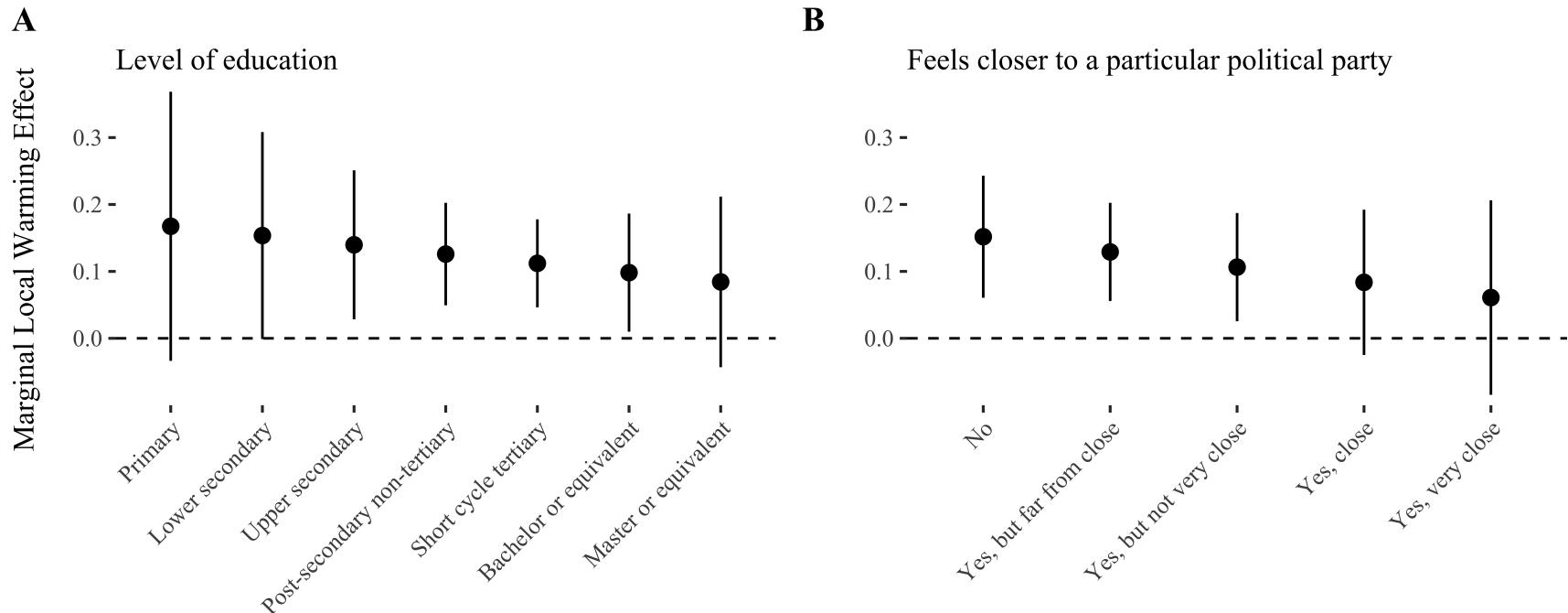
Resultater (1)

- Statistisk regressionsanalyse af sammenhængen mellem temperaturer og holdninger
- Positiv sammenhæng!
- Oplevelser med varmt vejr *forårsager/øger klimabevidsthed*
- Svag effekt ... men alle påvirkes af vejret hele tiden



Resultater (2)

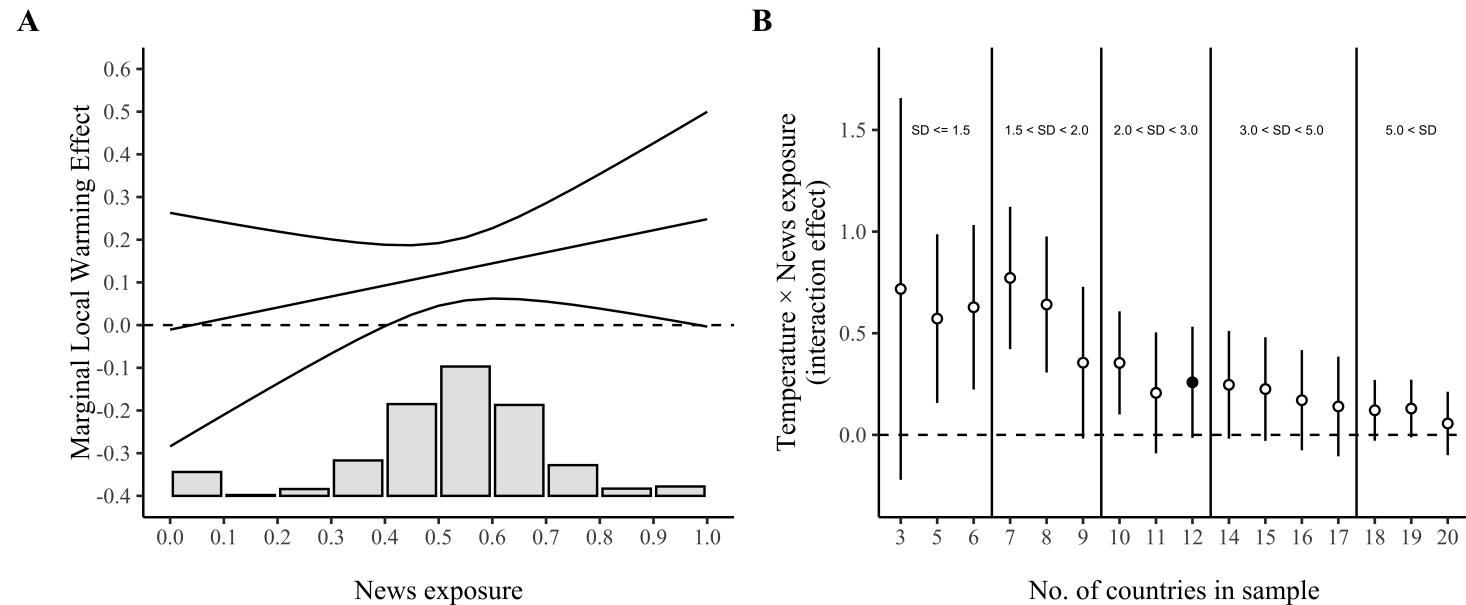
- Er der forskelle i, *hvem* der påvirkes af vejret?
- **Uddannelsesniveau** (politisk bevidsthed, sofistikation) og **partitilhørsforhold** (motiv)



- Svag tendens, men **nej**. Alle påvirkes!

Resultater (3)

- Er det udelukkende en **direkte effekt af egne erfaringer?** Spiller medierne ingen rolle?
- **Medier/eliter** kunne spille en rolle ved at frame/italesætte vejrerfaringer som relevante
 - → så ville effekten være større ved højere nyhedsforbrug



- Svag tendens, men: Det *er* en **direkte effekt af erfaring** (nyhedsforbrug gør ingen forskel)

Fortolkning

- Er vejrerfaringer en type af information i sig selv? (Ja)
- Er det en kognitiv **heuristik**? (Også ja)
- Er det en tilfældighed? (Nej)
- Er det smart eller dumt/uforklarligt?
 - D&M: Opdatering af klimaholdninger i retning af videnskabelig konsensus (*godt*), men på baggrund af flygtige erfaringer, som videnskabsfolk ikke ville betragte som troværdig evidens (*dårligt*)
 - Kan være rationelt at reagere på sine omgivelser og direkte erfaringer og bruge tilgængelig "information"
 - Godt *for klimaet*, hvis the local warming effect "automatisk" skaber mere klimabevidsthed

Kort om heuristikker

- Personlige **vejrerfaringer** er en blandt mange kognitive heuristikker
- Det er en genvej til at regne ud, huske eller være i stand til at "gætte" på, hvordan det er med global opvarmning, osv.
 - En "billig" omend upefekt informationskilde

Baggrund

- Menneskers informationsbehandling er stærkt begrænset af kognitive ressourcer, tid, etc.
- Derfor er vi blevet gode til at tage "smutveje", som gør os i stand til at træffe *nogenlunde* beslutninger med minimale kognitive strabader
- Måske kan det ligefrem ikke betale sig at sætte sig grundigt ind i tingene? (politisk bevidsthed)
- Jo - heuristikker anvendes af alle, men "virker" ikke lige godt for alle (Lau & Redlawsk 2001)

Eksempler på heuristikker

1. **Partitilhørsforhold** (budskabet kommer fra Venstre, så jeg er sikkert enig...)
2. **Ideologi** (budskabet kommer fra en socialist, så jeg er sikkert enig...)
3. **Endorsements** (Greenpeace bakker op om budskabet, så jeg er sikkert enig...)
4. **Popularitet/viability** (afsenderen er populær, så jeg er sikkert enig...)
5. **Udseende** (budskabet kommer fra en smuk person, der ser klog og autoritativ ud, så jeg er sikker enig...)
6. **Likeability a.k.a. affekt-heuristikken** (uden at jeg helt ved hvorfor, kan jeg godt lide afsenderen, så jeg er sikkert enig...)
7. **Argumentet er langt eller komplekst**, så det er sikkert godt (T&L)

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Spørgsmål undervejs → bit.ly/dak2-spørgsmål (Google Docs)

Overblik - holdningsdannelsesteori

- Vi har nu været omkring Zallers RAS-model, motivated reasoning, framing og heuristikker
- Generelt orienteret mod information og -behandling
- Fokus på holdningsændringer frem for "dannelse" i dybere forstand (bl.a. fordi vi gerne vil kunne *forandre* holdninger)
- Antagelse om at mennesker grundlæggende er ret ens udover at vi behandler information lidt forskelligt
- Fokus på individuelle processer

→ På de sidste slides er der nogle referencer til teori, der angriber holdningsdannelse anderledes - til senere inspiration

Opsumming

- Vi er tilbøjelige til at behandle ny information på en måde, der beskytter vores eksisterende holdninger frem for at hjælpe os frem til den mest "korrekte" holdning
- Det kaldes for **motivated reasoning** → vores tænkning er (sommertider) motiveret af et mål om at nå frem til en bestemt konklusion - ofte at beskytte vores holdninger
- De tre vigtigste mekanismer er **confirmation bias**, **prior attitude effect** og **disconfirmation bias**
- Super stærk og udbredt teori, men den kan være vanskelig at skelne *empirisk* fra andre forklaringer, fordi motiver ikke kan observeres (gælder også den polariserede klimadebat i USA)
- **Heuristikker** (fx vejrerfaringer) er en **kognitiv genvej** til at træffe beslutninger

Forbindelse til resten af DAK2

- Der kommer mere "politisk adfærd", mere individniveau (mikro)
- Flere teorier og analyser med relevans for holdningsdannelse
 - Populisme og *landlig bevidsthed*, vælgeradfærd m.m.
- (Evt. specialisering i politisk adfærd på kandidaten)

Spørgsmål?

bit.ly/dak2-spørgsmål

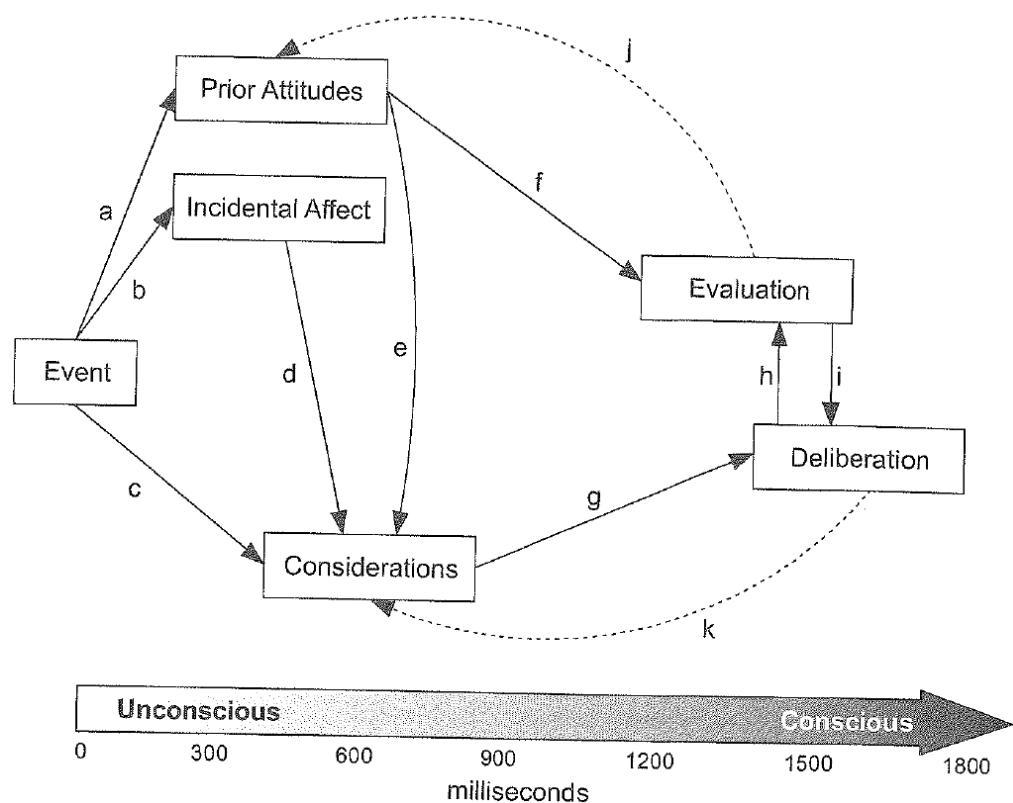


Tak for denne gang!

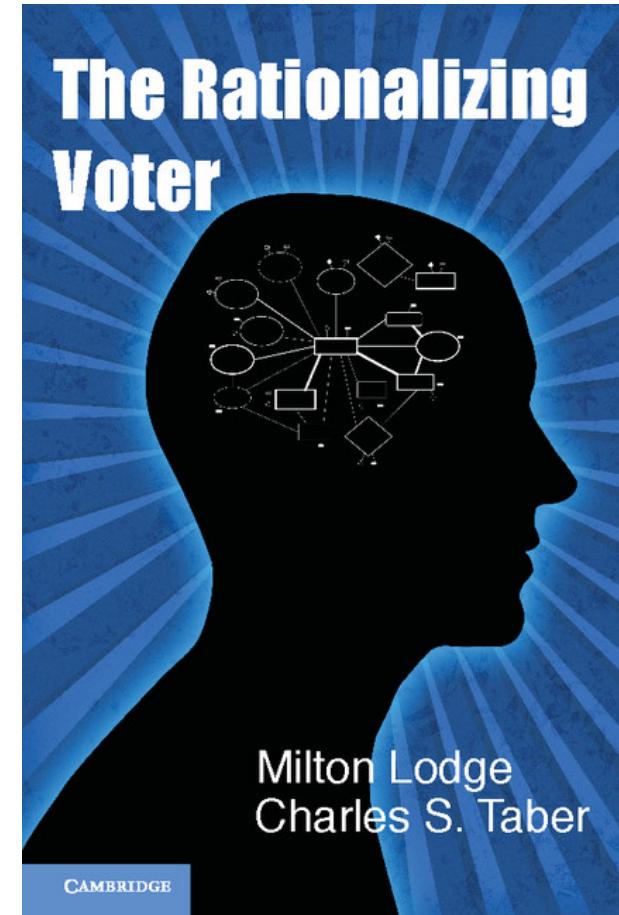
Mere holdningsdannelsesteori

- Teori om **heuristikker** → *Lau & Redlawsk (2001), Tversky & Kahneman (1974)*
- Teori der lægger vægt på dybe, **fundamentale forskelligheder** i holdninger og holdningsdannelse pba. **biologi, moral, personlighed** mv. → *Haidt (2012), Hibbing, Smith & Alford (2013), Smith et al. (2011), Mondak et al. (2010)*
- Teori der lægger mere vægt på **følelser, affekt mv.** frem for kognitive overvejelser → *Brader (2005), Lodge & Taber (2013)*
- Teori der er mindre psykologisk og eksempelvis lægger vægt på **materiel egeninteresse** → *Margalit (2013), Sears et al. (1980)*
- Teori der lægger mere vægt på **socialisering, opvækst** og oprindelig "dannelse" af holdninger → *Jennings, Stoker & Bowers (2009)*
- Teori der fokuser mere på **netværkseffekter, interpersonel inflydelse osv.** → *Goldberg et al. (2019), Mutz (2002)*

Mere holdningsdannelsessteori



Taber & Lodge's samlede holdningsdannelsesmodel



Taber & Lodge (2013)