

Odense Congress Center, den 31. august 2017

# Sprogdesign – Derfor (mis)forstår vi hinanden

Kristian Sørensen, /KL.7 Adfærdsdesign

## 1. Adfærdsdesign

- /KL.7?
- Adfærdsøkonomi
- Evolution
- Danskernes Dårige Beslutninger

## 2. Sprogdesign

- Metaforer
- Erfaringsrammer

## 3. Samarbejde og Misforståelser

- Social Konformitet
- Groupthink
- Når Samarbejde Lykkes

## 4. Afrunding

## 5. Kontaktoplysninger





Et bat og en bold koster 110kr  
i alt.

Battet koster 100kr mere end  
bolden.

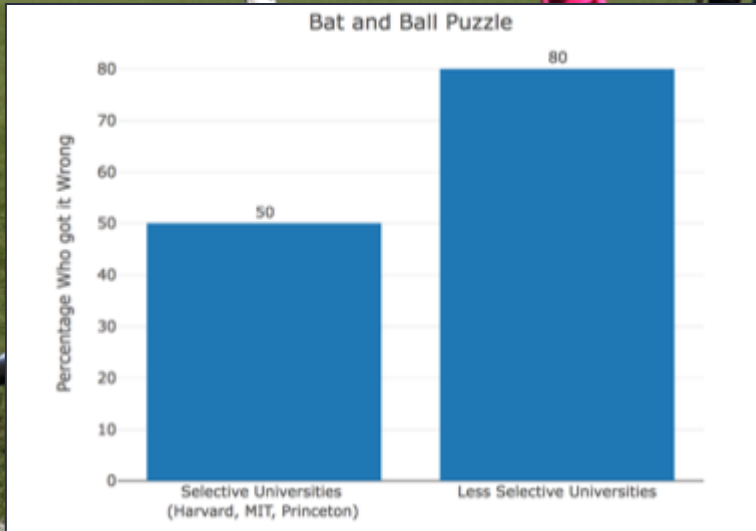
Hvad koster bolden?

Battet: 105kr

Bolden: 5kr

Sum: 110kr



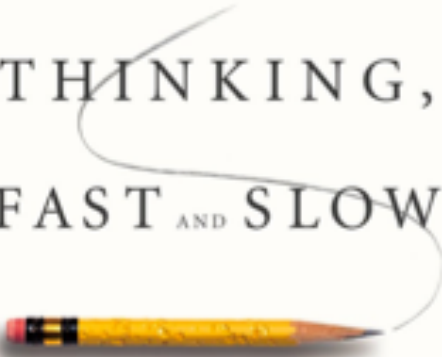


*"People are not accustomed to thinking hard, and are often content to trust a plausible judgement that quickly comes to mind."*

- Daniel Kahneman

THE NEW YORK TIMES BESTSELLER

THINKING,  
FAST AND SLOW



DANIEL  
KAHNEMAN

WINNER OF THE NOBEL PRIZE IN ECONOMICS

*"[A] masterpiece... This is one of the greatest and most engaging collections of insights into the human mind I have read." —WILLIAM EASTERLY, Financial Times*



## System 1

Intuitivt

Hurtigt

Automatisk

Billigt i drift

Opfatter mønstre

Online

Varmt



## System 2

Analytisk

Langsomt

Bevidst

Grundigt

Tænker logisk

Offline

Køligt

## Virkelighed

System 1

Intuitivt

Hurtigt

Automatisk

Opfatter mønstre

$2 + 2 = ?$

## Forestilling

System 2

Langsomt

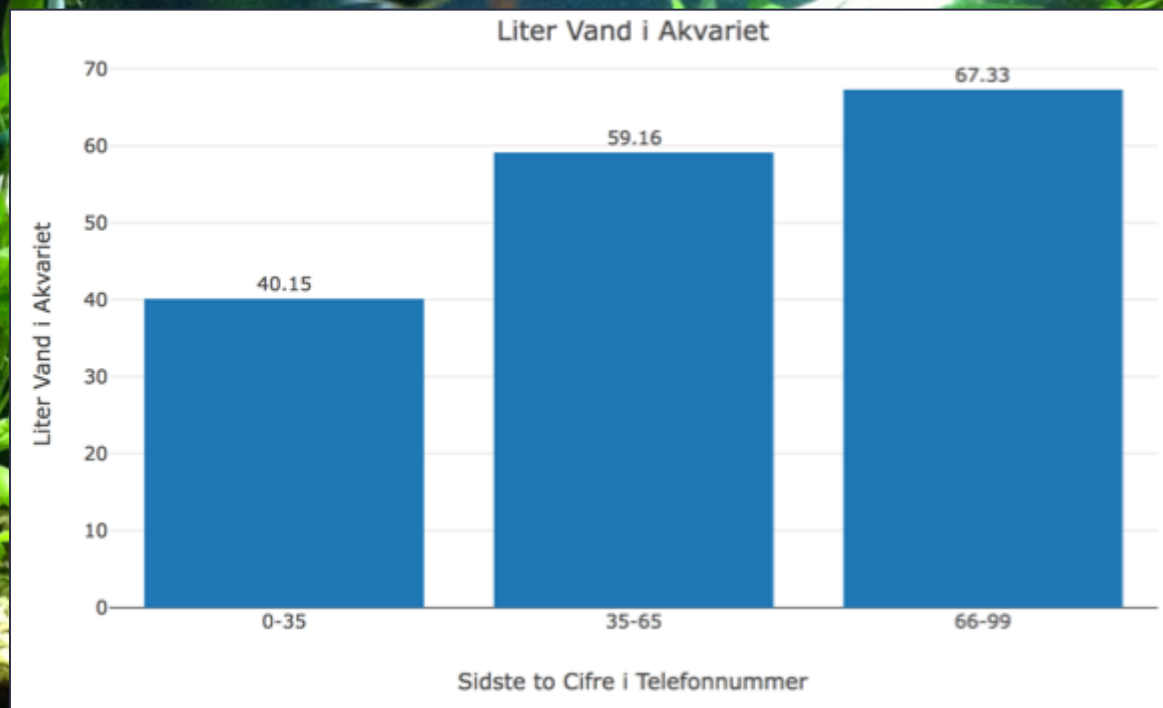
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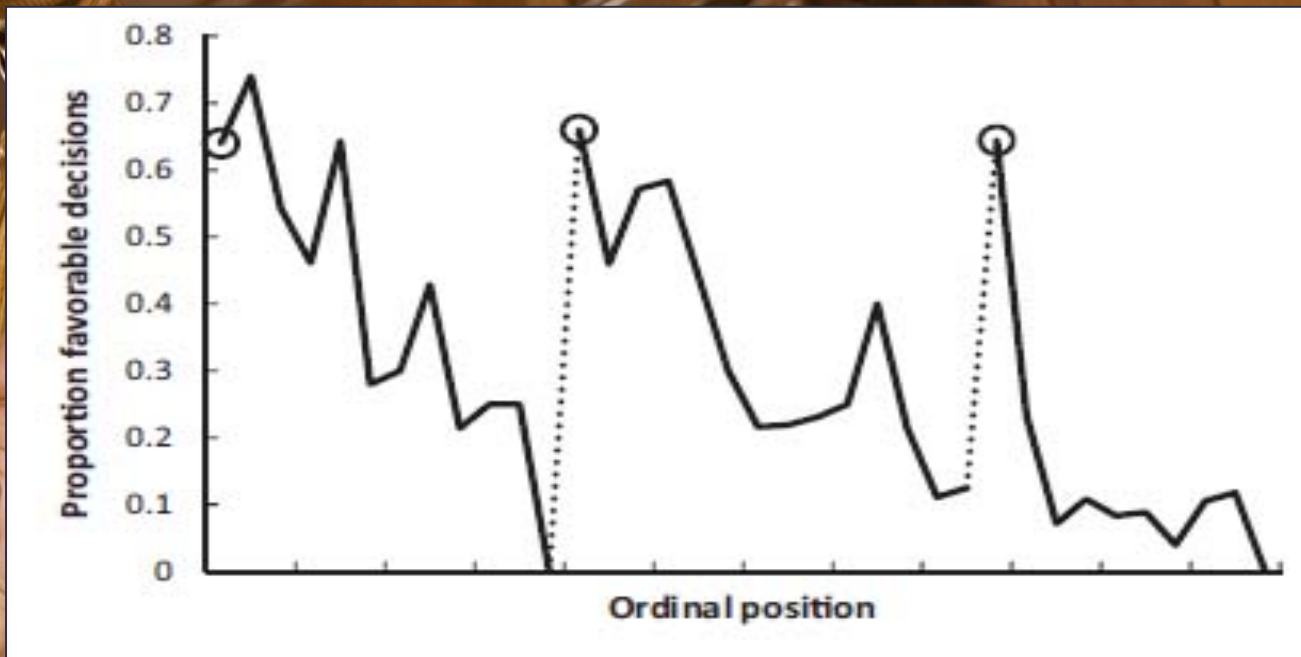
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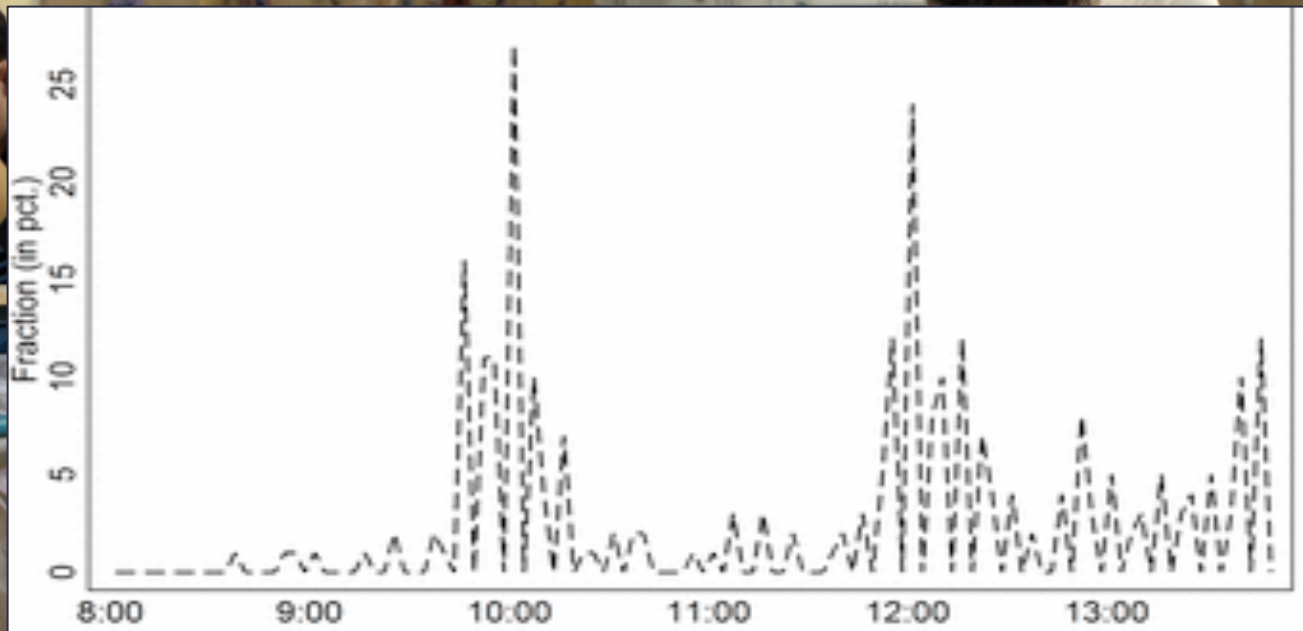
$17 \times 24 = ?$



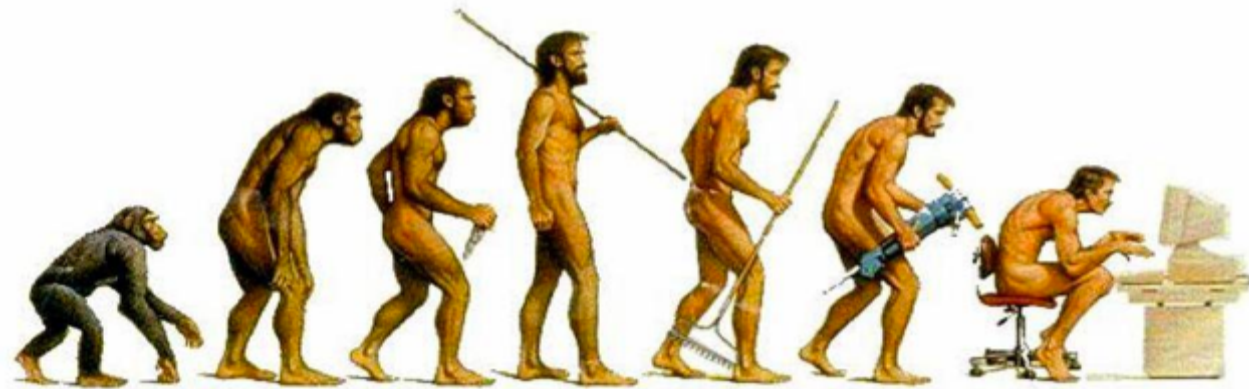
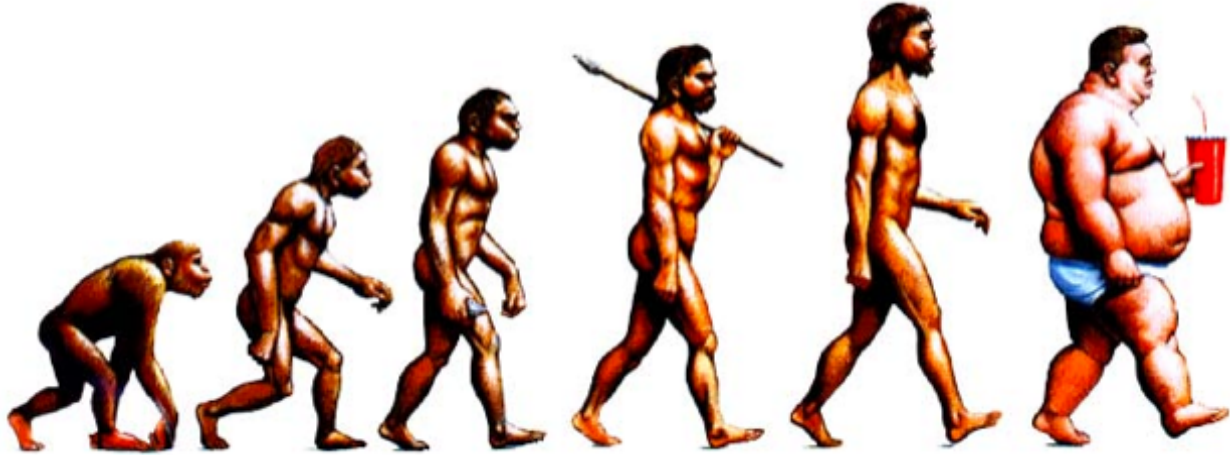


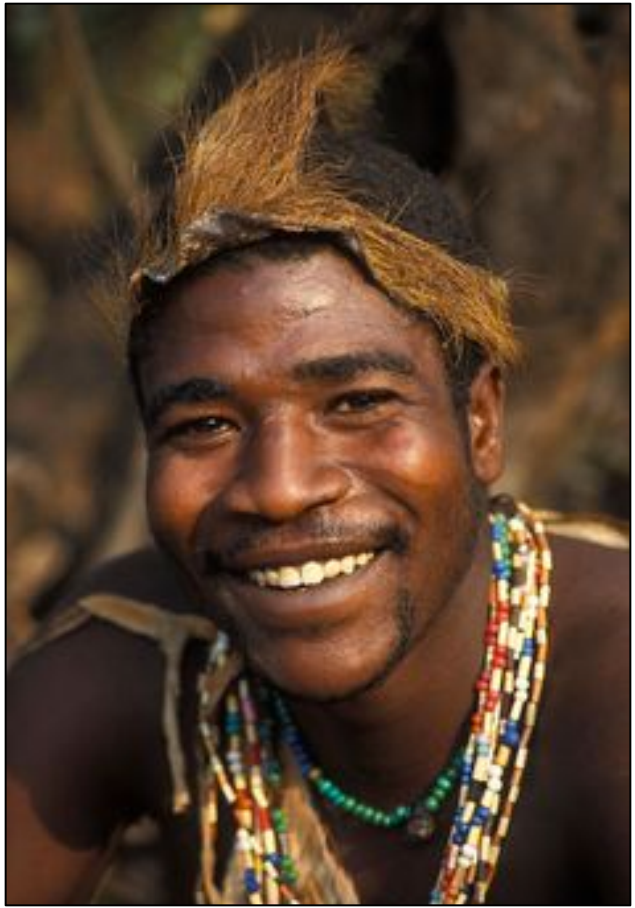


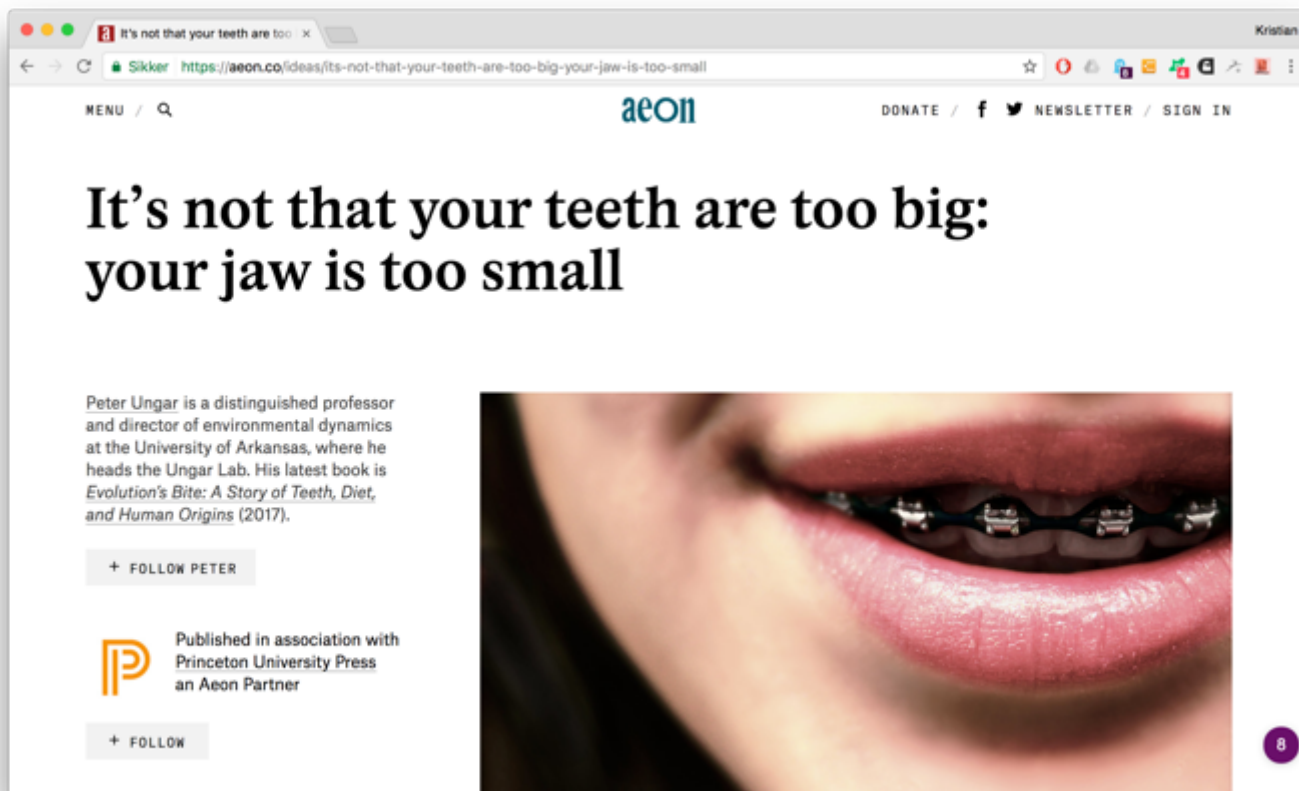












The image shows a browser window displaying an article on the Aeon website. The browser's address bar shows the URL: <https://aeon.co/ideas/its-not-that-your-teeth-are-too-big-your-jaw-is-too-small>. The article title is "It's not that your teeth are too big: your jaw is too small". The author is Peter Ungar, a distinguished professor at the University of Arkansas. The article is published in association with Princeton University Press, an Aeon Partner. A close-up photograph of a person's mouth with braces is featured on the right side of the article. The page includes navigation links for MENU, DONATE, NEWSLETTER, and SIGN IN. A small purple circle with the number 8 is visible in the bottom right corner of the article content area.

It's not that your teeth are too big:  
your jaw is too small

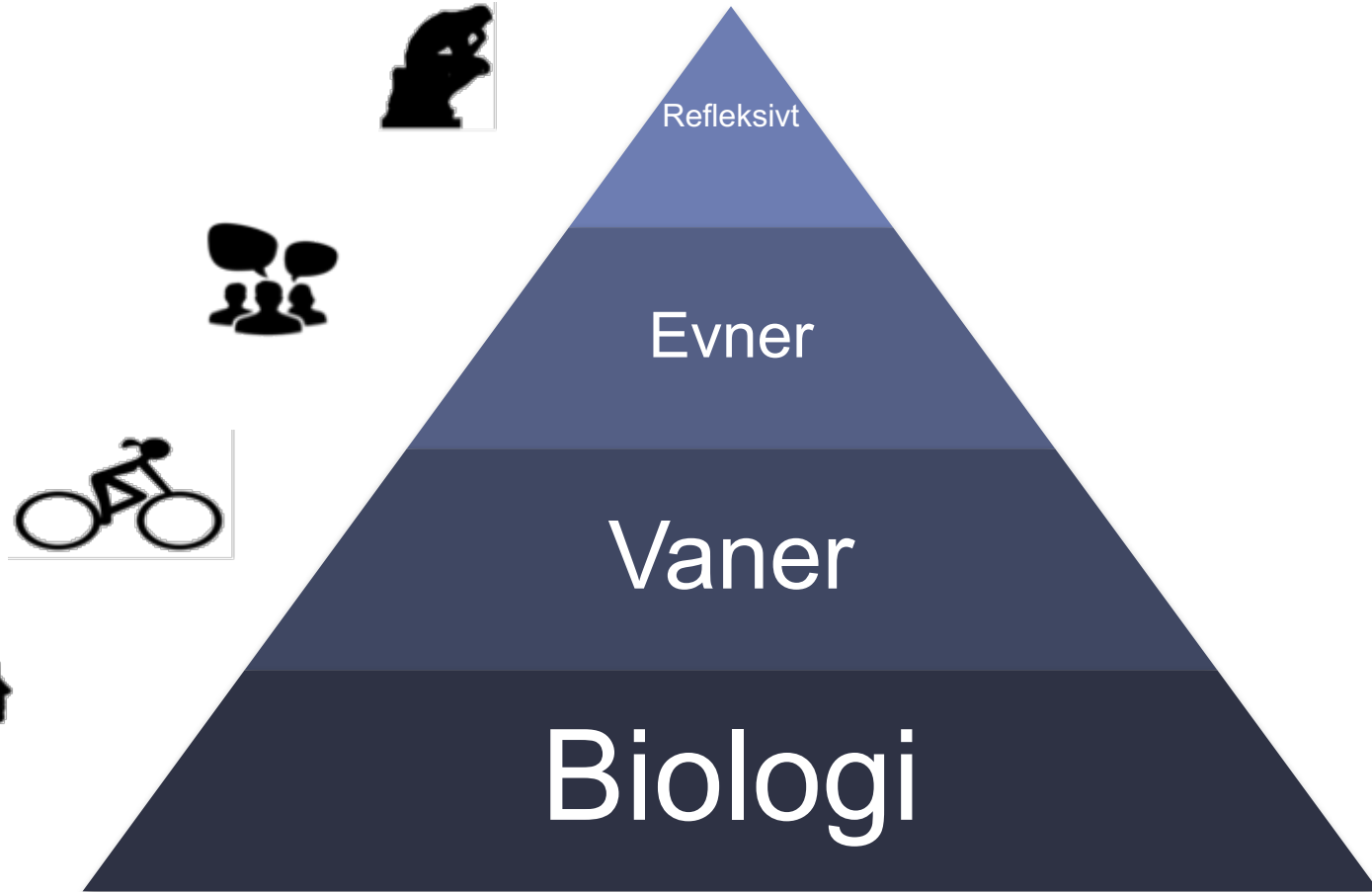
Peter Ungar is a distinguished professor and director of environmental dynamics at the University of Arkansas, where he heads the Ungar Lab. His latest book is *Evolution's Bite: A Story of Teeth, Diet, and Human Origins* (2017).

+ FOLLOW PETER

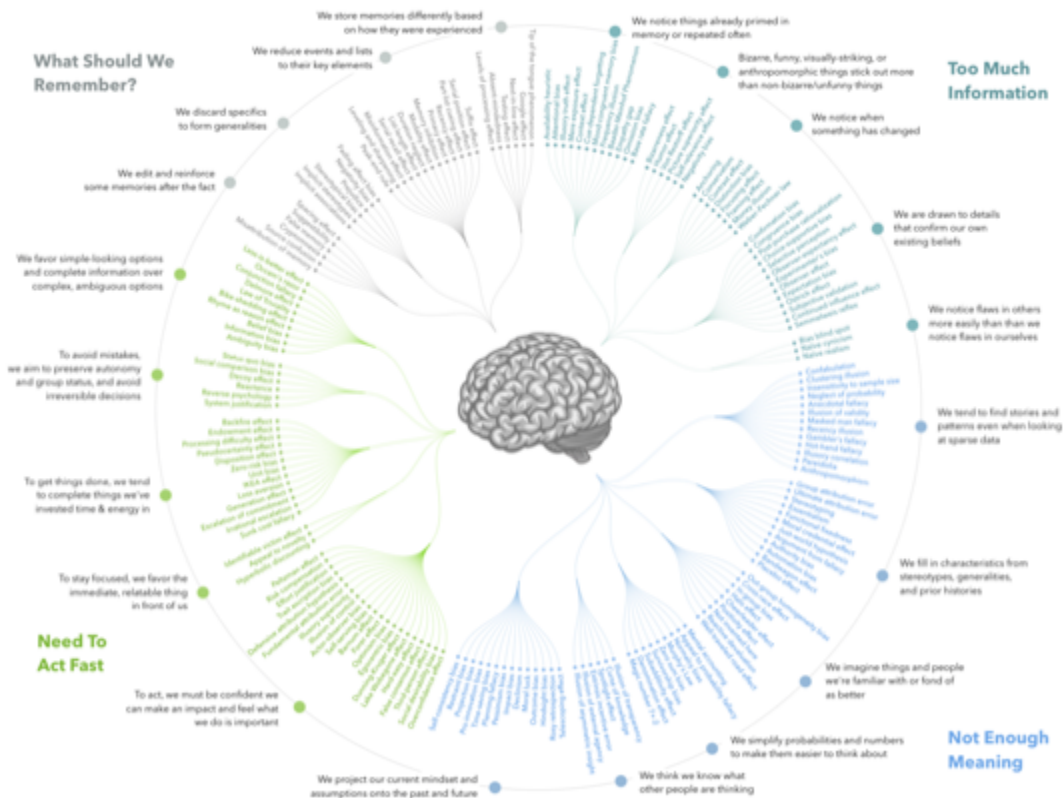
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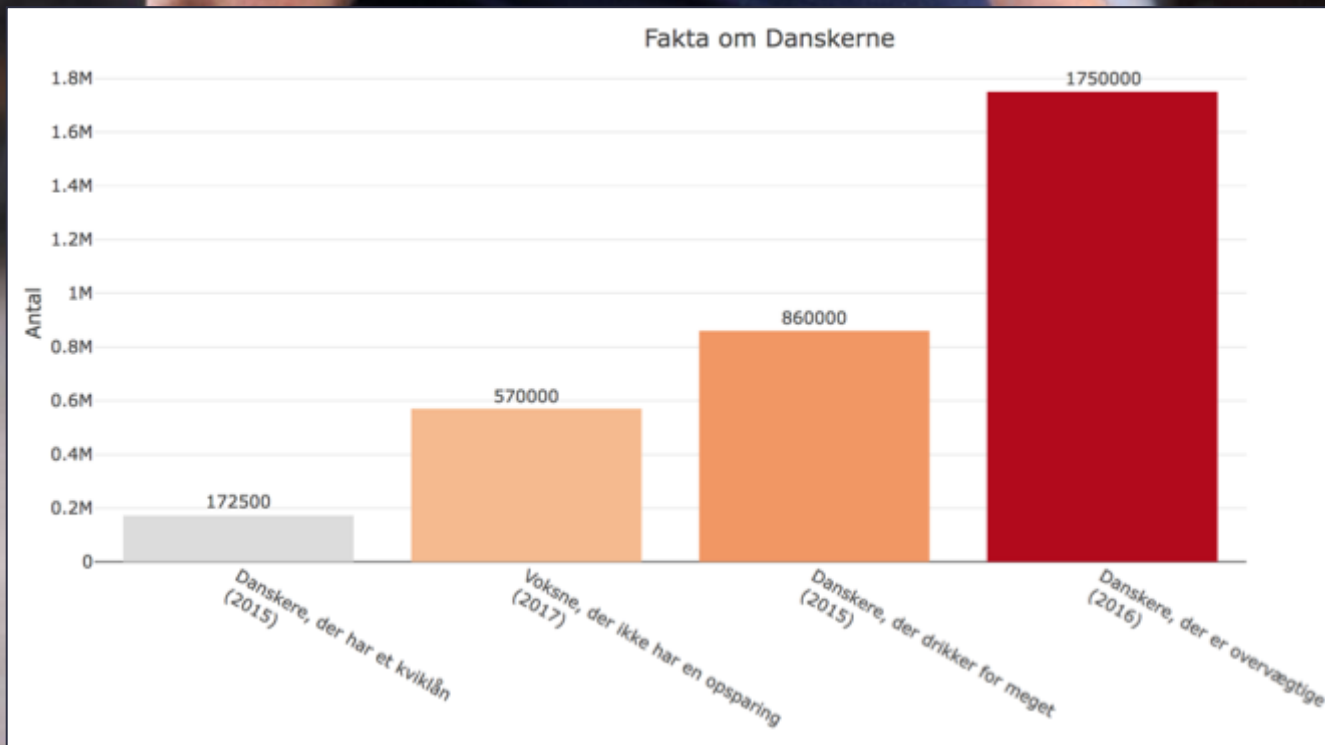
+ FOLLOW

8



## COGNITIVE BIAS CODEX











Adfærdsvidenskab



**Designmetoder**



**Data**



<http://kl7.dk/om-kl.7.html#publikationer>

Sprogdesign



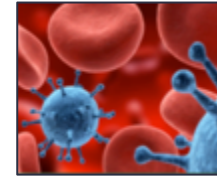
A)  
Crime is a wild beast preying on the city of Addison. The crime rate in the once peaceful city has steadily increased over the past three years. In fact, these days it seems that crime is lurking in every neighborhood. In 2004, 46,177 crimes were reported compared to more than 55,000 reported in 2007. The rise in violent crime is particularly alarming. In 2004, there were 330 murders in the city. In 2007, there were over 500.

B)  
Crime is a virus infecting the city of Addison. The crime rate in the once peaceful city has steadily increased over the past three years. In fact, these days it seems that crime is plaguing every neighborhood. In 2004, 46,177 crimes were reported compared to more than 55,000 reported in 2007. The rise in violent crime is particularly alarming. In 2004, there were 330 murders in the city. In 2007, there were over 500.

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What should Addison do to reduce crime?





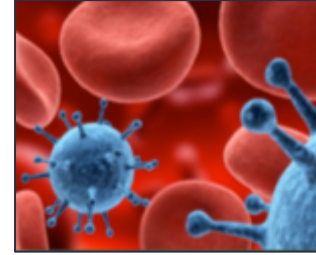
Ustyrlig

Bekæmpes

Stor

Styrke

*“Den stærkeste overlever”*



Ustyrlig

Bekæmpes

Lille

Forebyggelse

*“Den smarteste overlever”*

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Underline those passages that had the greatest impact on your decision.



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Har du et lån, hvor renten skal tilpasses 1. april? Den 30-årige rente er helt nede på 2%, så det er måske nu, du skal slå til og omlægge til fast rente?

Hvis du vælger et lån med lidt længere løbetid, kan du sidde med en uændret ydelse – og samtidigt få sikkerheden med en fast rente. Kontakt os og hør om dine muligheder.

Læs mere her: <http://bit.ly/2kmnMJ4>



Har du et **lån**, hvor **renten** skal tilpasses 1. april? Den **30-årige rente** er helt **nede på 2%**, så det er måske nu, du skal slå til og **omlægge til fast rente**?

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Læs mere her: <http://bit.ly/2kmnMJ4>



Sætter du også vinterdæk på bilen? Eller går til tandlægen, når visdomstanden dunker? De fleste af os husker alt det praktiske, vi skal have styr på i løbet af et år.

Men husker du, at din pension også bør få et servicetjek?  
Det tager kun én time – og det giver dig tryghed resten af livet.

Læs mere her: <http://bit.ly/2kmnMJ4>



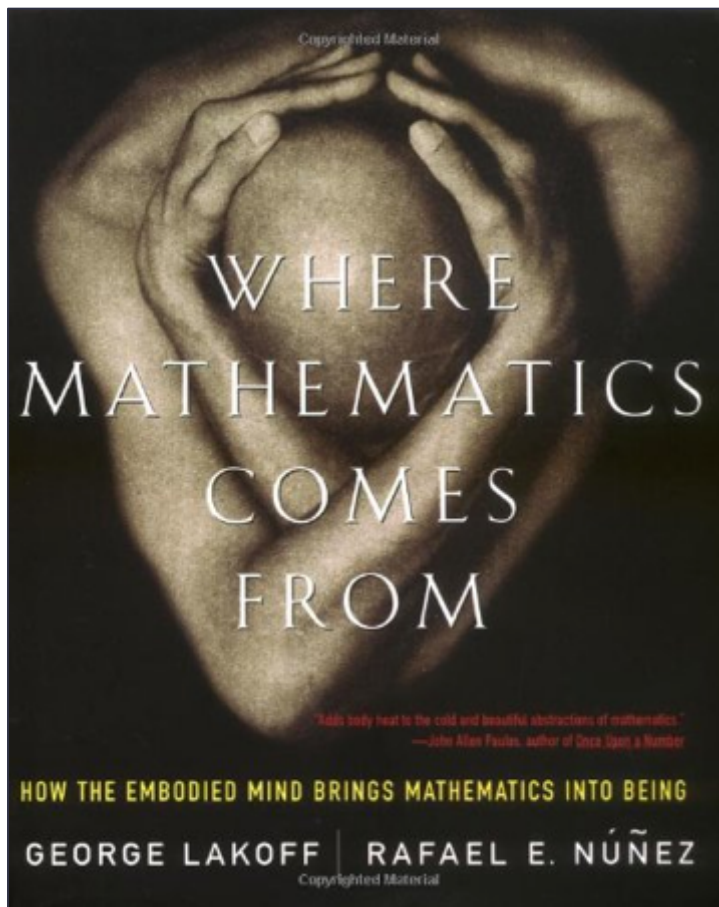


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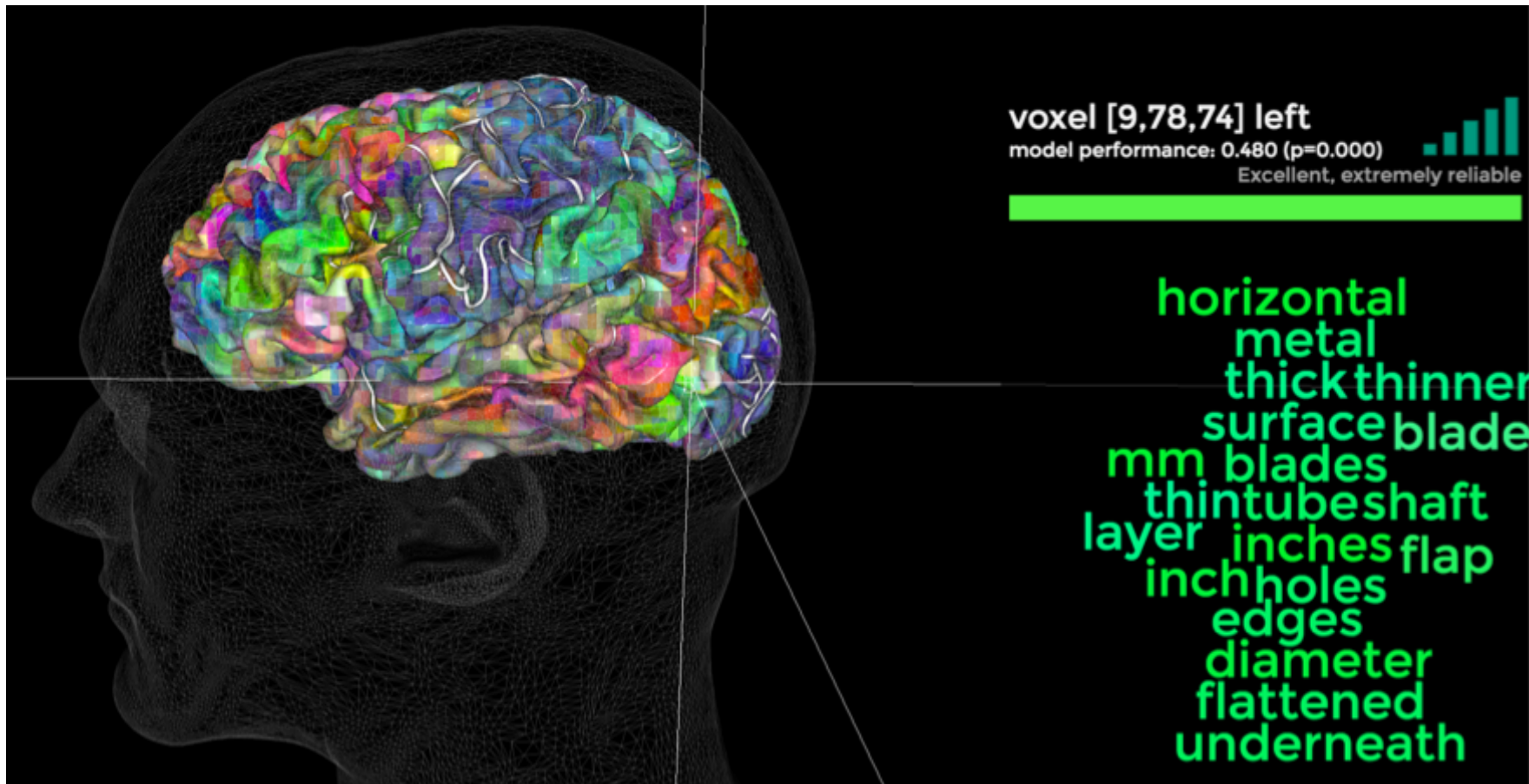
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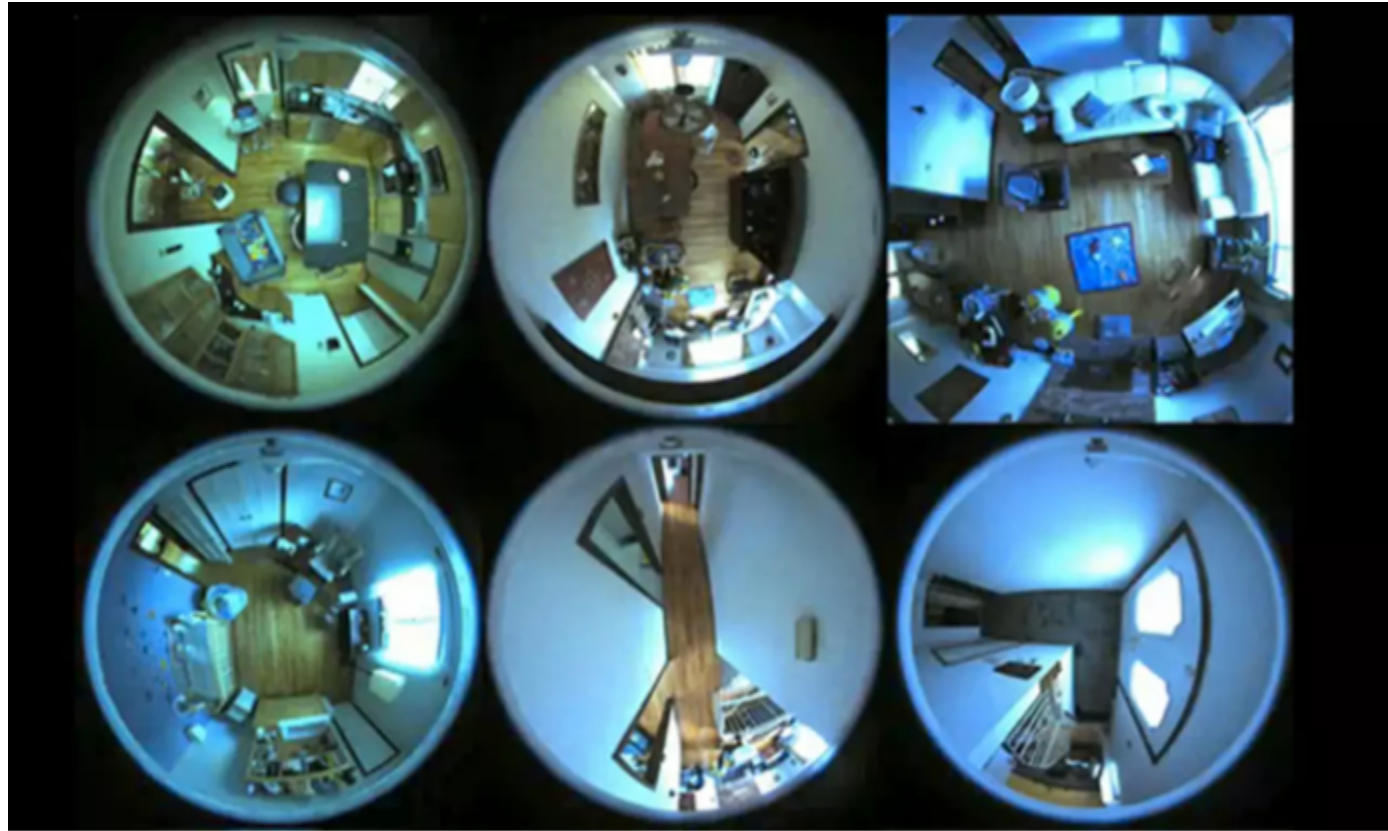
Læs mere her: <http://bit.ly/2kmnMJ4>









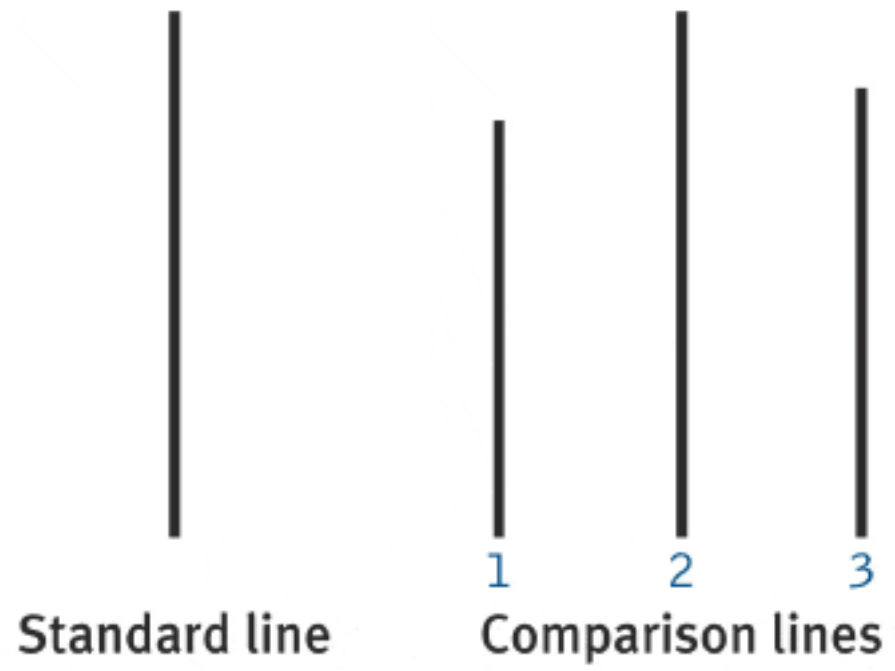






Deb Roy: The birth of a word


# Samarbejde og Misforståelser







”By examining a large dataset of reviews from Amazon.com, we were able to build a statistical model of how people should choose products. We found that, faced with a choice between two low-scoring products, one with many reviews and one with few, the statistics say **we should actually go for the product with few reviews**, since there’s more of a chance it’s not really so bad,” Powell explains. “**But participants in our studies did just the opposite:** They went for the more popular product, despite the fact that they should’ve been even more certain it was of low quality.”



**People Favor Highly-Reviewed Products, Even When They Shouldn't**

TAGS: COGNITIVE BIAS | COGNITIVE PROCESSES | COGNITIVE PSYCHOLOGY | DECISION MAKING | HEURISTICS | JUDGMENT | NUMBER COMPREHENSION | PSYCHOLOGICAL SCIENCE

When we're trying to decide which cell phone case to buy or which hotel room to book, we often rely on the ratings and reviews of others to help us choose. But new **research** suggests that we tend to use this information in ways that can actually work to our disadvantage.





**Be careful when you blindly follow the Masses...  
sometimes the 'M' is silent.**

## Avoid the scourge of groupthink in collaborative decisions:



THU

FRI

SAT

SUN

MON

TUE

WED

"There's a 30% chance of rain tomorrow."

Which of the following statements is the most appropriate?

Partly  
Cloudy

81

1. It will rain tomorrow for 30% of the time.
2. It will rain tomorrow in 30% of the region.
3. It will rain on 30% of the days like tomorrow.

68

66

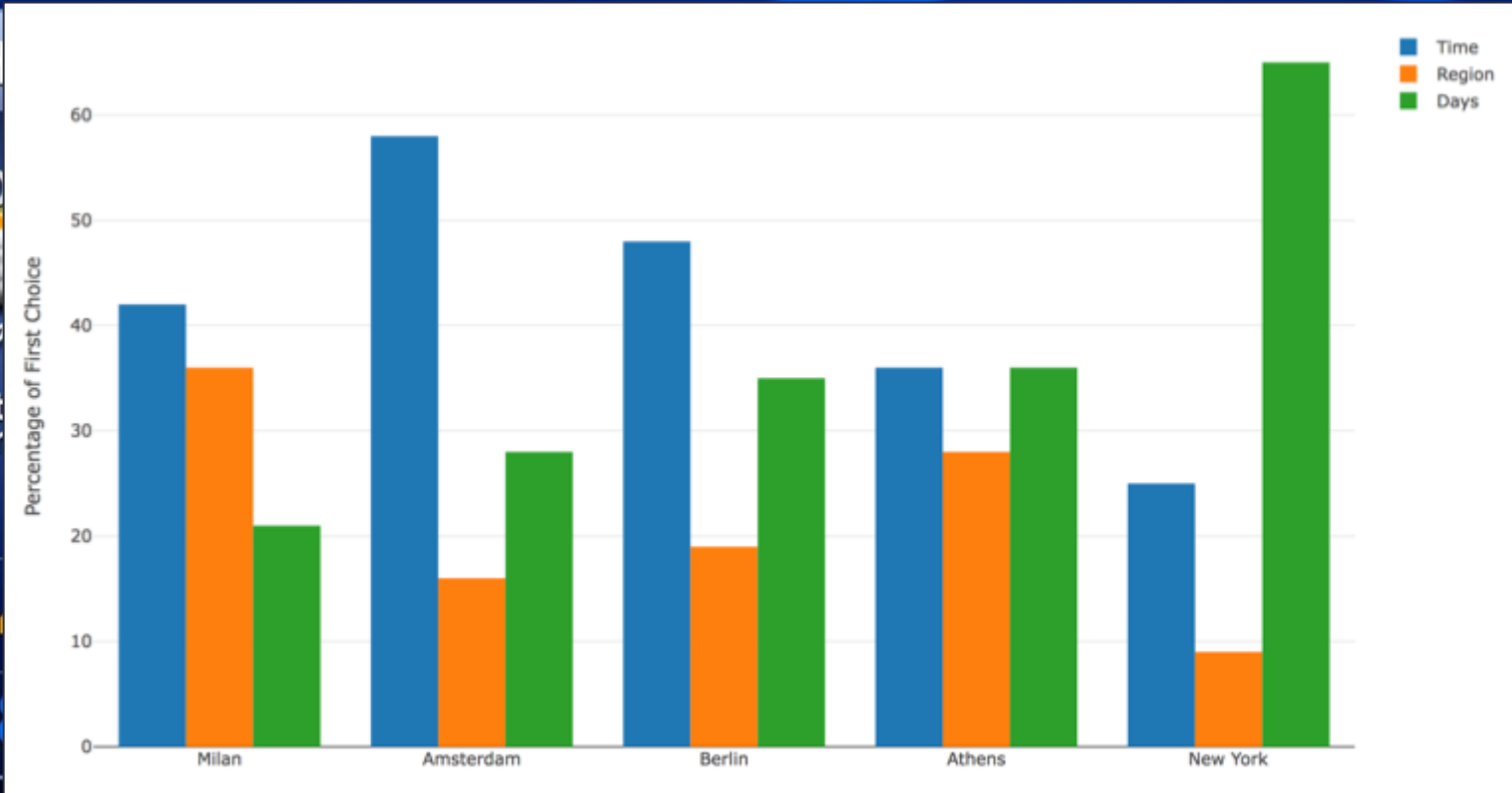
66

64

64

66

66



## Agreeing is not enough

### The constructive role of miscommunication

Johanne Stege Bjørndahl<sup>1,2</sup>, Riccardo Fusaroli<sup>1,2</sup>, Svend Østergaard<sup>1</sup> & Kristian Tylén<sup>1,2</sup>

<sup>1</sup>Center for Semiotics, Department for Aesthetics and Communication, Aarhus University / <sup>2</sup>The Interacting Minds Centre, Department of Culture and Society, Aarhus University, Denmark

Collaborative interaction pervades many everyday practices: work meetings, innovation and product design, education and arts. Previous studies have pointed to the central role of acknowledgement and acceptance for the success of joint action, by creating affiliation and signaling understanding. We argue that various forms of explicit miscommunication are just as critical to challenge, negotiate and integrate individual contributions in collaborative creative activities. Through qualitative microanalysis of spontaneous coordination in collective creative LEGO constructions, we individuate three interactional styles: *inclusive*, characterized by acknowledgment and praise; *instructional*, characterized by self-repair; and *integrative*, characterized by widespread self- and other-repair. We then investigate how different interaction styles leave distinct material traces in the resulting LEGO models. The inclusive interaction style generally results in concatenations of individual contributions with little coherence and core narrative. The instructional style produces coherent, but largely individually driven models. Finally, the integrative style generates more innovative models, synthesizing individual contributions in shared narratives or schemas.

**Keywords:** distributed Cognition; miscommunication; collaboration; creativity

#### 1. Introduction

Many organizations, corporations and professions rely on the abilities of groups to collaborate on creative problem solving and these activities are regarded as central and valuable in the construction or design of new concepts, processes and products (Hargadon & Beachy, 2006; Nijstad & De Dreu, 2002; Sutton & Hargadon, 1996). However such activities can have a wide variety of outcomes. Sometimes

#### Research Article

## Coming to Terms: Quantifying the Benefits of Linguistic Coordination

Riccardo Fusaroli<sup>1,2</sup>, Bahador Bahrami<sup>2,3,4</sup>, Karsten Olsen<sup>2</sup>,  
Andreas Roepstorff<sup>2</sup>, Geraint Rees<sup>3,4</sup>, Chris Frith<sup>3,4</sup>,  
and Kristian Tylén<sup>1,2</sup>

<sup>1</sup>Center for Semiotics, Institute of Aesthetics and Communication, Aarhus University; <sup>2</sup>The Interacting Minds Project, Center for Functionally Integrative Neuroscience, Aarhus University; <sup>3</sup>Institute of Cognitive Neuroscience, University College London; and <sup>4</sup>Wellcome Trust Centre for Neuroimaging, Institute of Neurology, University College London

#### Abstract

Sharing a public language facilitates particularly efficient forms of joint perception and action by giving interlocutors refined tools for directing attention and aligning conceptual models and action. We hypothesized that interlocutors who flexibly align their linguistic practices and converge on a shared language will improve their cooperative performance on joint tasks. To test this prediction, we employed a novel experimental design, in which pairs of participants cooperated linguistically to solve a perceptual task. We found that dyad members generally showed a high propensity to adapt to each other's linguistic practices. However, although general linguistic alignment did not have a positive effect on performance, the alignment of particular task-relevant vocabularies strongly correlated with collective performance. In other words, the more dyad members selectively aligned linguistic tools fit for the task, the better they performed. Our work thus uncovers the interplay between social dynamics and sensitivity to task affordances in successful cooperation.

#### Keywords

language, social interaction, problem solving, cooperation, psycholinguistics

Received 8/16/11; Revision accepted 12/23/11

It has been argued that, as a distinctive human trait, mimicry is involved in many aspects of human social interaction, such as coordination and learning, cultural evolution, and group cohesion (Chartrand & Van Baaren, 2009; Mesoudi, 2009; Tomasello, 1999). Likewise, mimicry is a characteristic of human language: Interlocutors have been found to mutually adapt to each other's linguistic behaviors (Fusaroli & Tylén, 2012; Pickering & Garrod, 2004). Such linguistic alignment has been shown to facilitate the development and stabilization of linguistic vocabularies employed to achieve joint problem solving and coordination (Garrod & Anderson, 1987; Garrod & Doherty, 1994; Garrod & Pickering, 2009; Healey & Mills, 2006). Thus, it can be considered one of the mechanisms through which language comes to act as a device for social coordination (Clark, 1996; Tylén, Weed, Wallentin, Roepstorff, & Frith, 2010).

However, although previous research has emphasized the existence of linguistic alignment (Gries, 2005; Pickering & Ferreira, 2008) and its general role in social coordination (Pickering & Garrod, 2004), a more detailed understanding and articulation of the interplay of linguistic alignment and coordination mechanisms is still to be elaborated. In the experiment

reported here, we presented an experimental paradigm that allowed for a quantification of linguistic alignment as well as its effects on social coordination, which made it possible to test hypotheses related to the dynamics of linguistic alignment and social coordination.

#### General Versus Selective Alignment

Previous studies have indicated that linguistic alignment is motivated by *structural priming*, that is, the automated repetition of linguistic forms across interlocutors (Pickering & Ferreira, 2008). Listening to a linguistic form is thought to activate the structures necessary to produce it. Thus, interlocutors engage in reciprocal and continuous priming that leads them to not only mirror each other's speech locally but gradually converge on a shared set of linguistic expressions, a common language (Pickering & Garrod, 2004). It has been

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Afrunding

## **Mennesker er:**

- sjældent rationelle
- altid energioptimerende

## **Metaforer og erfaringsrammer:**

- bestemmer, hvordan vi tænker og får mening ud af ord

## **Succesfuldt samarbejde opstår, når:**

- der bliver stillet spørgsmålstejn ved de mest *basale* antagelser
- der bliver givet eksplicit udtryk for misforståelser







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