

Mitteilungsbedürfnis: What do we know about the human drive to share what's on our minds?

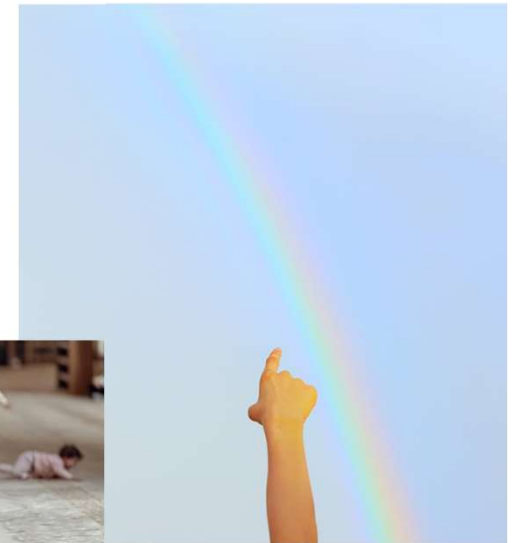
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Roadmap

1. What is MtB | Empirical evidence
2. Role of MtB in human evolution/culture
3. Open questions

Background | *What is MtB?*

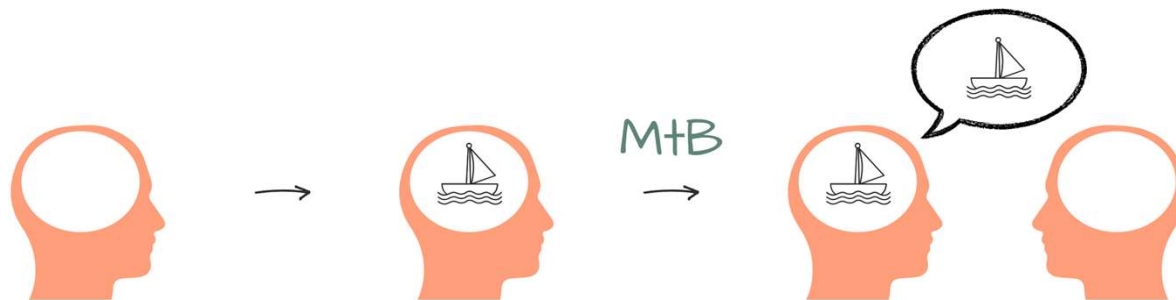


Background | *What is MtB?*

- Sharing what's on our minds with others is a significant human behaviour not found to the same extent in other primates (Baumeister et al. 2018; Csányi, 2000; Dor 2023; Fitch 2010, 2011, 2017; Suddendorf, 2013; Tomasello et al. 2005)
- Term *Mitteilungsbedürfnis* (German for *the need to communicate one's thoughts to others*) introduced by Fitch (2010) to highlight importance and potential uniqueness of the trait

Background | *What is MtB?*

- Human sharing is often strategic and appears to have largely social goals such as impression management, information acquisition, and social bonding (Berger, 2015)
- But: Some sharing seems driven by strong internal motivation *independent* of other external motivations – e.g. evidence that wanting to share your thoughts and feelings with others can be visceral, impulsive, and drive-like (Carbone & Loewenstein, 2023) → that motivation/drive is MtB



Empirical evidence for MtB

Survey evidence

- 79% of participants (N=215) indicated that they had previously felt like they were “dying” to tell someone something (Carbone & Loewenstein, 2023)

- ❖ Survey of individuals who posted anonymous confessions to Reddit to find out how long they experienced a desire to share this information with others prior to posting it online (Carbone et al., 2022)
 - 43% of survey respondents (N = 402) indicated that they confessed online immediately after the catalysing event

- 21% (N=321) of survey respondents regretted posting something on Facebook, e.g. because of having been in a heightened emotional state or not thinking about consequences (Wang et al., 2011)

Empirical evidence for MtB

Behavioural/Neuroimaging evidence (Tamir & Mitchell, 2012; Tamir et al., 2015)

- ❖ Participants chose to forgo money to answer questions about themselves or inform others
- ❖ Brain regions previously shown to be associated with reward activated when participants shared
 - Humans value sharing information with others, in the same way we might value receiving money, or eating something we find delicious
 - Participants shared information that was random and did not provide an obvious benefit to them or the receiver – general drive to share information?

Empirical evidence for MtB

Role of partner choice in information sharing (Jimenez et al. 2025 [preprint])

- ❖ Series of experiments to test if knowledge holders would share with those who had high reputations for sharing and withhold information from those who had low reputation
- ❖ 8 participants interacted in real time and made two choices (innovate or not; share or not); were able to see if other participants had previously shared or not, could obtain bonus payments for holding more information
- ❖ Participants shared their knowledge quite indiscriminately, even when they could have obtained higher pay-offs by being selfish

Empirical evidence for MtB | *Limitations*

- Tentative evidence for MtB
- Some limitations - population samples almost exclusively from WEIRD countries

MtB in other apes

Analysis of ape communication with caregivers



Greenfield & Savage-Rumbaugh, 1990

- 96 % imperative (e.g. FOOD + pointing to fridge)
- 4 % declarative (e.g. DOG + go gesture)

MtB in other primates

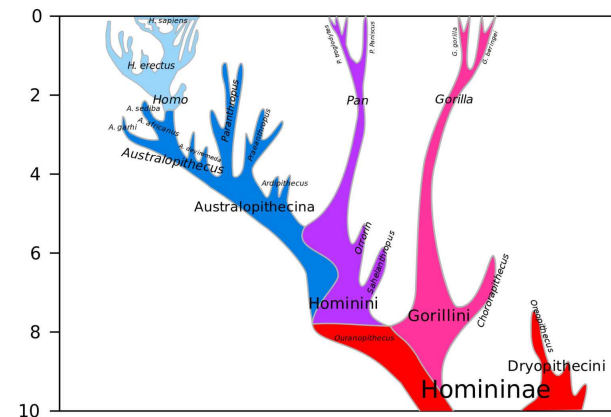
Declarative referential sharing in a wild chimpanzee



Wilke et al., 2022

Role of MtB in human evolution and culture?

- Socioecological explanation for cognitive and behavioural differences in human and other apes (Csányi, 2000; Dor 2023; Tomasello et al. 2012)
- At some point after split of the *Pan* and *Homo* lines (~6 mya), being able to collaborate with others became obligatory for archaic humans
- Strong social selection for individuals with cooperative skills and motivations



Role of MtB in human evolution and culture?

- Sharing emotions and thoughts aids collaboration by establishing trust between potential collaborators & facilitates collaborative acts themselves (Mauss et al. 2011; Van Doorn et al., 2012; Wu et al., 2016)
- *Gossip* (reputational sharing of information) keeps human collaboration honest + adaptive (Dunbar et al. 1997; Emler, 1994; Feinberg et al. 2014)



Role of MtB in human evolution and culture?

- Humans collaboratively construct information & innovate together – depends on motivation to share thoughts and ideas (*Collaborative computation*; Dor, 2023; Muthukrishna & Henrich, 2016)
- Many mental skills unique to humans are not directly observable (*behaviourally silent*) and can only be transferred if they are spelled out to others (Enquist et al., 2023)



Role of MtB in human evolution and culture?

Desire to share emerges very early on and might be a pre-requisite for the ability to collaborate (Tomasello et al., 2005)

- dyadic engagement (from a few months after birth) – sharing behaviour and emotions (*proto-conversations*) to
- triadic engagement (from around 6-12 months) – sharing goals and perceptions (*pointing, hold-out gestures*) to
- collaborative engagement (12 months onwards) – understanding and sharing joint intentions and attention (e.g. building a block tower with someone – initially with adults, from around 3 years with peers; Tomasello et al., 2005; Tomasello, 2024)
- children as young as 3-4 years old innovate new behavioural sequences and artefacts by collaborating/co-operating with peers (Lew-Levy & Amir, 2024; McGuigan et al., 2017)



Open questions

❖ *Cross-cultural variation*

Verbosity valued differently in different cultures; "baseline MtB"? Extents and origins of this variation? Does restriction or enhancement of expressiveness lead to differences in other traits?

❖ *Inter-individual variation*

Does MtB vary between individuals; to what extent? Do certain cognitive and personal traits map onto higher or lower MtB? How do these differences affect other traits and skills? Does MtB differ in special populations (e.g. neurodivergent individuals)?

Open questions

- ❖ *Understanding human development of MtB better*

Are proto-conversations an indicator for the existence of MtB in infants? How does the expression of MtB change throughout human ontogeny (e.g. do children learn to suppress it?)

- ❖ *Understanding if/how MtB influences the transfer of uniquely human mental skills*

What motivates people to share their knowledge with others, is it MtB, or something else?

- ❖ *Understanding if/how MtB influences language evolution*

How exactly does our drive to share our thoughts (and cultural/individual variation) shape the evolution of language and languages? Could language have evolved without our drive to share?

Main takeaways

- Humans seem to have an internal motivation to share what is on their minds with others
- This motivation does not seem to exist to the same extent in other primates
- We have some empirical evidence tentatively confirming the existence of such a motivation, but data from more diverse populations is needed
- One idea about why humans rely on an internal motivation to share more than our primate relatives do is that we need it to be able to participate in collaboration, which is at the heart of human culture and cumulative cultural evolution

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