

IT'S probably one of the oldest gags in the book. A husband browsing through the newspaper finds an article saying that women use far more words than men. He gleefully points this out to his wife. "Listen to this – it says here that men use about 15,000 words a day, but women use 30,000."

"It's because we have to repeat everything we say," she replies.

"What?" says the man.

It's a deeply ingrained perception – women talk more than men, right? But two recent studies have knocked this myth on the head. The first study was provoked by a 2006 book called *The Female Brain*, by neuropsychiatrist Louann Brizendine. The first edition claimed that a woman says about 20,000 words per day while a man utters only about 7000.

This sounded bizarre to Matthias Mehl, a psychologist at the University of Arizona in Tucson. His team had recorded college students' everyday speech between 1998 and 2004 as part of a project to understand the influence of talking on emotional health.

Hundreds of students had worn digital devices that recorded 30 seconds of sound every 12.5 minutes. If women talked three times as much as men, they would have noticed, Mehl says. "We knew there just couldn't be such a big difference."

So his team analysed archived recordings of 210 women and 186 men. They estimate the women spoke on average 16,215 words per day while the men said 15,669 words – not a statistically significant difference, they reported in July (*Science*, vol 317, p 82). "We were surprised that there was essentially no difference whatsoever," says Mehl. "I suppose we were also susceptible to the stereotype, so we thought it would go slightly in favour of the women."

Their conclusion, however, has plenty of support. Campbell Leaper and Melanie Ayres of the University of California, Santa Cruz, recently combined the results from more than 60 earlier studies that measured talkativeness in adults of various ages. They reported in November that the men were actually more

talkative than the women in general, although the difference was very slight (*Personality and Social Psychology Review*, vol 11, p 328). "Basically, there's no meaningful difference," says Leaper.

So why have we so wholeheartedly bought the stereotype? "To a large extent, it's probably sexism," says Leaper. "It's a way of disparaging women's contributions. The implied assumption is that they're talking, but what they say doesn't matter." He adds that it's common to exaggerate gender differences to reinforce our group identities, hence the popularity of books like Men are from Mars, Women are from Venus.

It doesn't help that the myth of the mouthy woman has been stated as fact in several books, not just Brizendine's, and is often repeated in the media. Mark Liberman, a linguist at the University of Pennsylvania in Philadelphia, has been noting instances of what he calls the "sex-linked word-budget meme" on his Language Log blog. These put the daily male word quota at anywhere from



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"It explains a report that women are four times more likely to suffer jaw problems"

2000 to 25,000 words and the female allowance between 7000 and 50,000. Needless to say, none cites scientific sources.

Liberman suspects that a marriage counsellor started the meme about 15 years ago as a parable that might help couples with communication problems, and others have parroted it ever since. Some books even elaborate with curious theories, such as *Why Men Don't Listen and Women Can't Read Maps* by Allan and Barbara Pease, which has sold more than 12 million copies worldwide:

"Italian women are the top talkers speaking up to 6000-8000 words a day. They use an additional 2000-3000 vocal sounds to communicate, as well as 8000-10,000 gestures, facial expressions, head movements and other body signals. This gives these women a daily average of more than 20,000 communication 'words' to relate their messages. Western women speak up to 80 per cent of that figure. That explains just why the British Medical Association recently reported that women are four times more

likely to suffer with jaw problems."

It seems we just can't get enough of this stuff. The Peases followed up their lucrative bestseller with Why Men Don't Have a Clue and Women Always Need More Shoes, which aims to answer such pressing questions as: "Why don't women ever get to the point?"

Hogging the conversation

In a 2004 interview with CNN, Allan Pease explained why men are supposedly reticent at night. "Women can speak 20,000 to 24,000 words a day versus a man's top end of 7000 to 10,000. And where this becomes apparent is at the early evening when you're having dinner, because most men have done their 10,000, right? She might still have 15,000 to go, and someone's got to hear them." This bizarre notion, that people wake up with a woman-sized or man-sized "word tank" that must be emptied by the end of the day, now seems to be spreading too.

Whatever the origins of the gabbling-

female stereotype, it seems we're not all ready to give it up. After Mehl's study was reported in the press, his email inbox filled up with complaints from irate men. "I was really surprised by the emotional reactions that I got," says Mehl. Typical comments were: "What a bogus study – not only do women talk more than men, they use 10 times as many words to get a point across" and "This is horrible news – I hope my wife doesn't read this, because I'll never hear the last of it."

While women do not talk more, there are some more subtle gender differences. As well as measuring overall talkativeness, Leaper and Ayres reviewed studies that took account of the context – what men and women were saying and who they were talking with.

While men talked slightly more than women in mixed groups, men and women were equally talkative in same-gender groups. Leaper puts that down to situational pressure. In mixed groups, status differences come into the picture and men may try to assert their dominance by hogging the conversation.

Other differences suggest we're keen to adhere to social norms in same-sex groups. Groups of women tended to use more "affiliative speech" – language that demonstrates support, agreement or bonding. Male groups, on the other hand, were more likely to use assertive speech – giving instructions, for instance, or being critical.

And Mehl's recordings prove that some good old-fashioned stereotypes are firmly rooted in fact. "Women tend to talk more about fashion and relationships, while men talk more about sport, entertainment and money," he says. Women do spend more time on the phone. And men use about five or six times as many swear words as women.

What intrigues Mehl most of all, though, is not the differences between the sexes – which are typically trivial – but the astonishingly huge variation among people in general. "We have huge individual differences, which is fascinating," he says. "In our study, the least talkative person talked 700 words a day and the most talkative person said 47,000 words." That last is a staggering 50 words for every waking minute of the day.

And just for the record, the motormouths who won first, second and third prize were all – you guessed it – men. ●

Hazel Muir is keeping her word count secret



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