

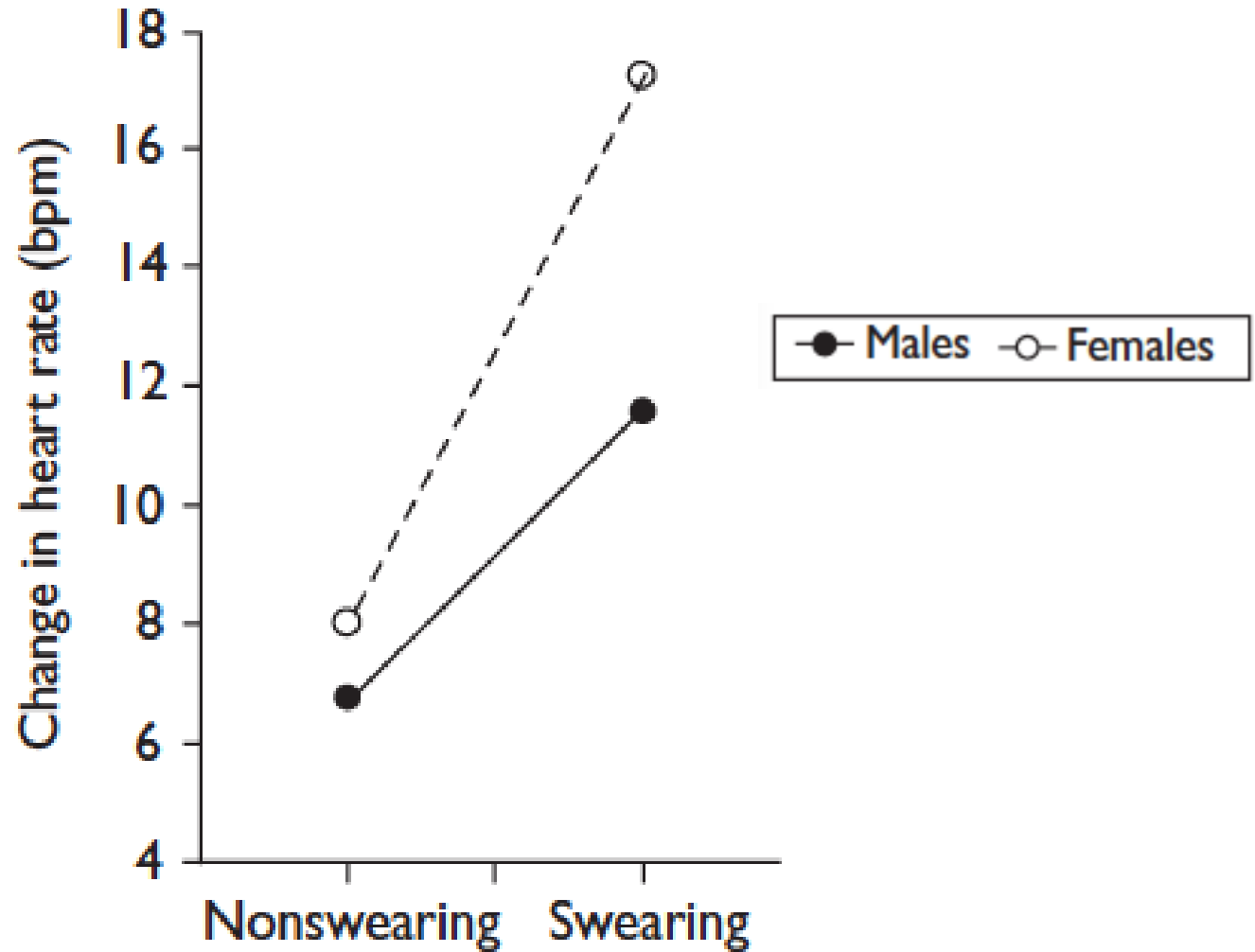
WHAT THE



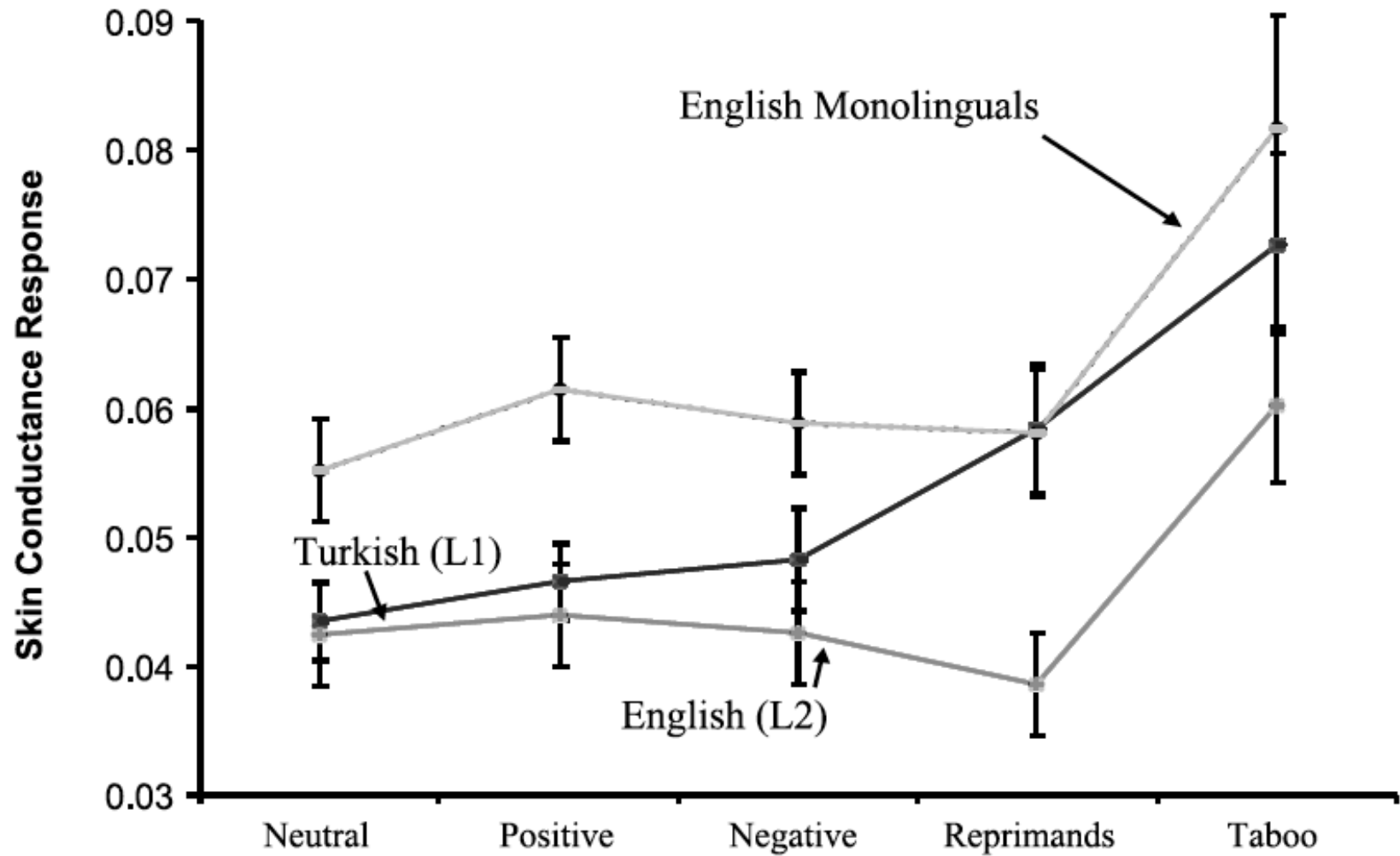
WHAT SWEARING
REVEALS ABOUT
OUR LANGUAGE,
OUR BRAINS,
AND OURSELVES

BENJAMIN K. BERGEN

INCREASED HEART RATE

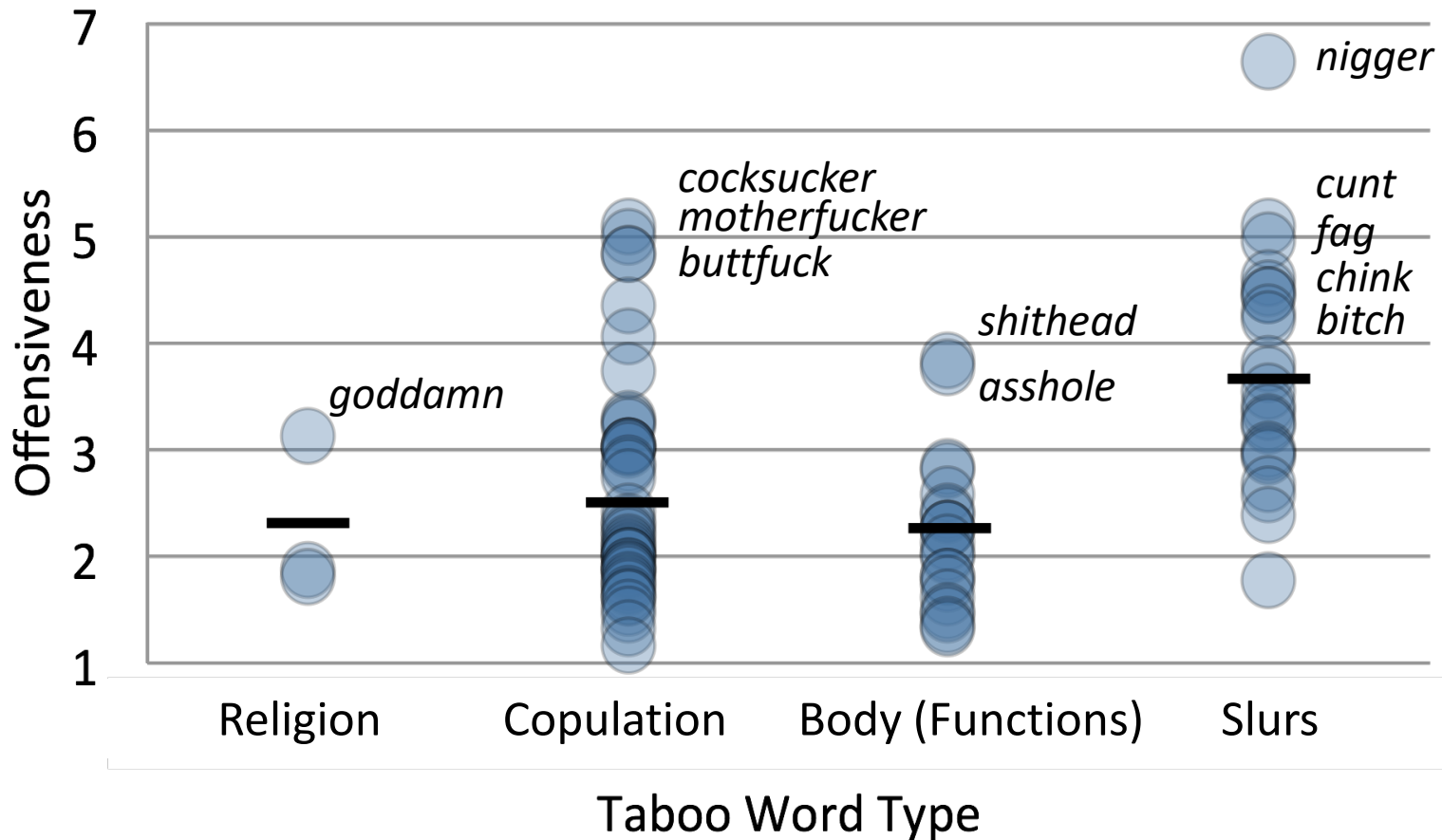


SWEAT

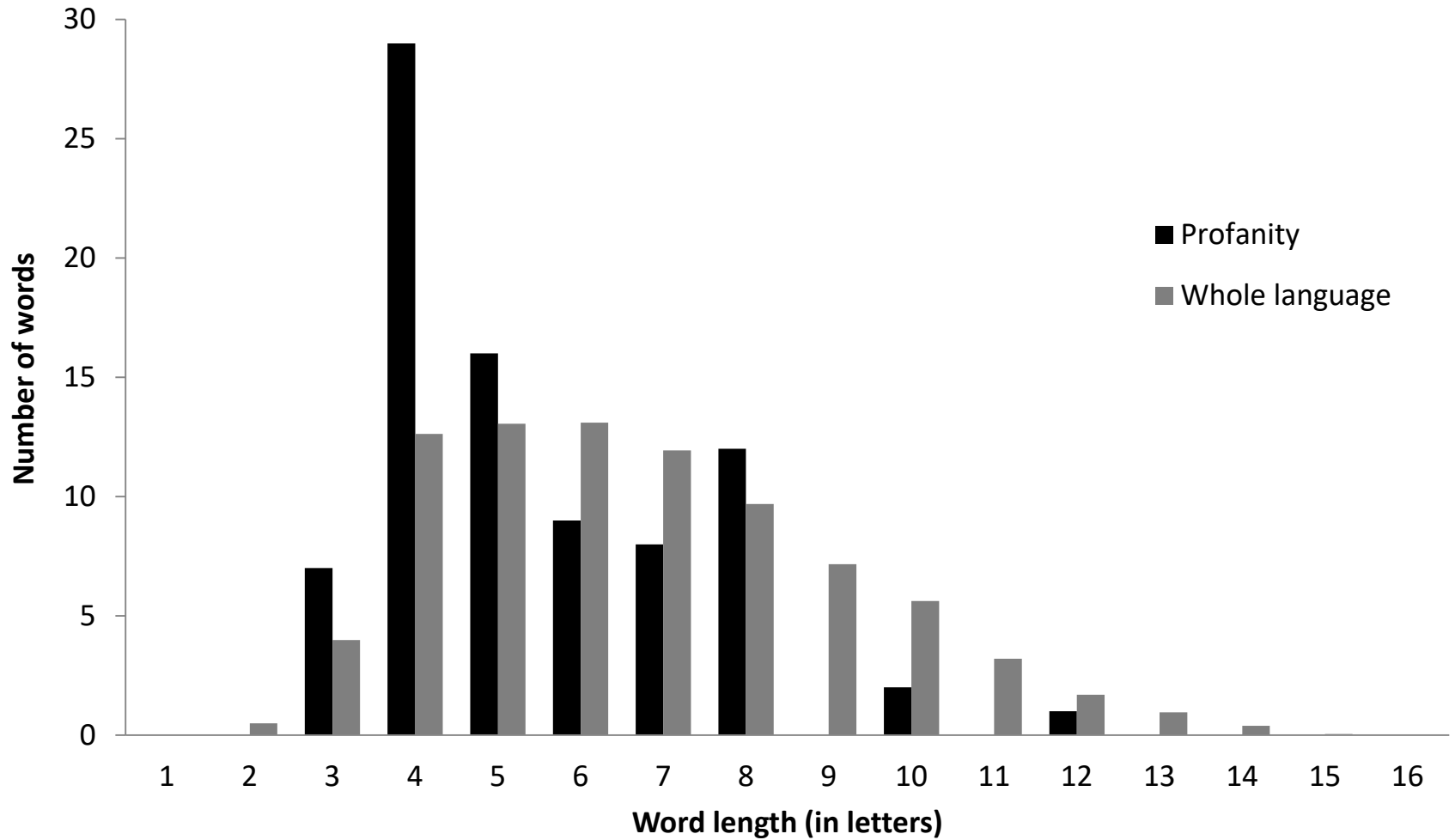




OFFENSIVENESS OF ENGLISH PROFANITY



ENGLISH ORTHOGRAPHIC WORD LENGTH



SYLLABLE STRUCTURE

Open (ends with V)

see

spy

rue

Closed (ends with C)

sass

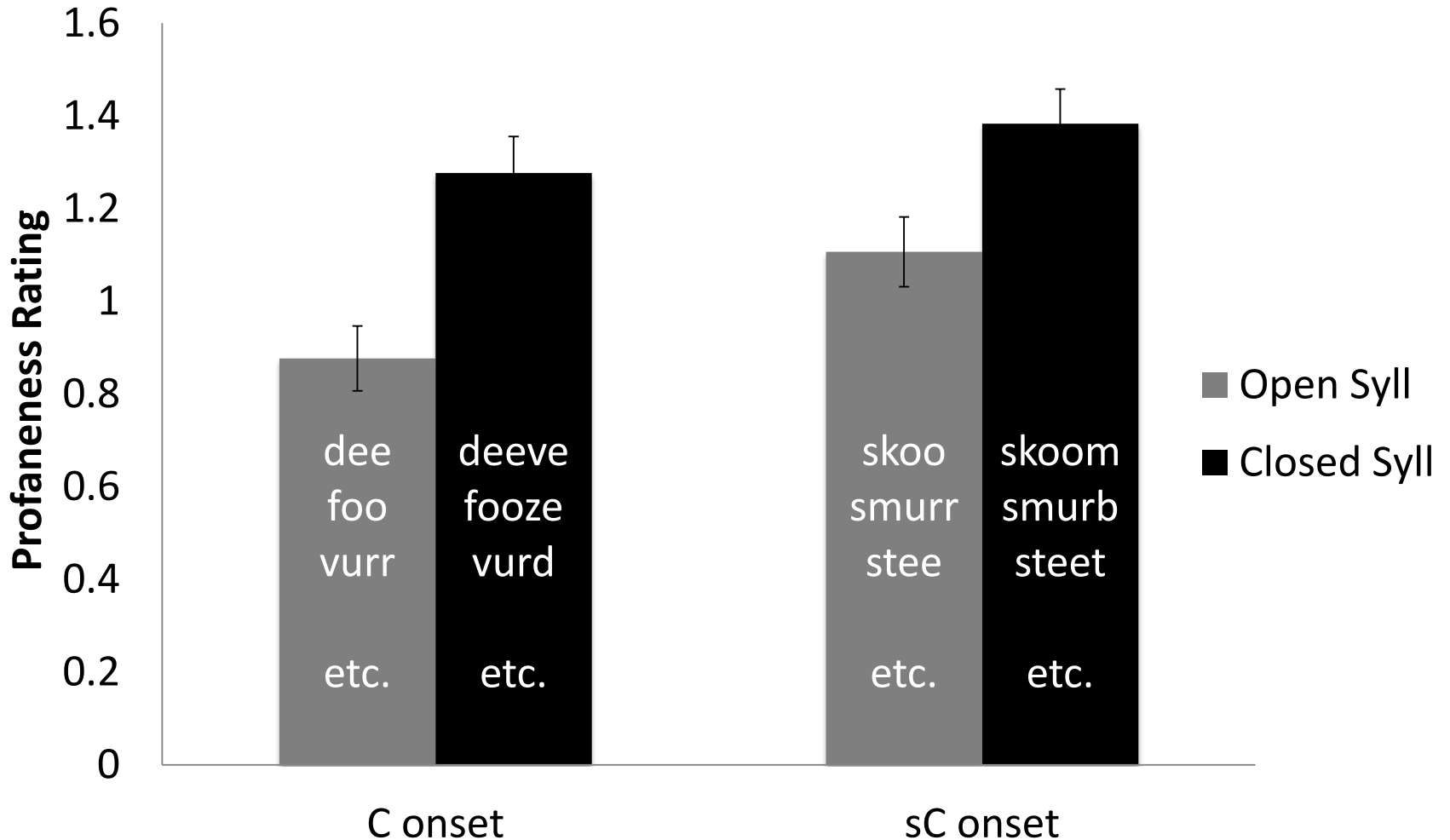
spit

runt

Only \approx 5% of profane
English monosyllabic
words

And \approx 95% of profane
English monosyllabic
words

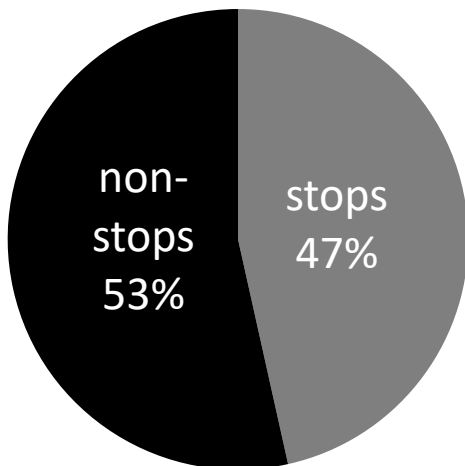
PROFANE MONOSYLLABLES



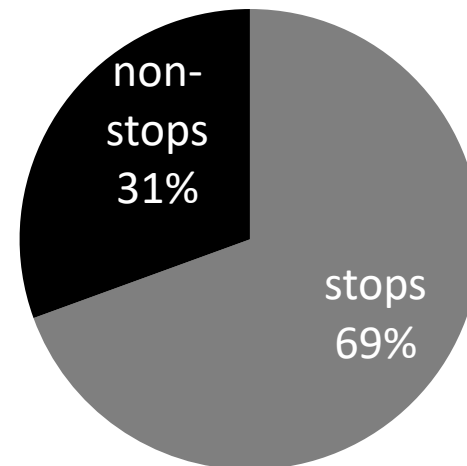
WHY?

- Snowballing from a random seed?
- Non-childlike language?
- Suitability to the functions of profanity?

All English monosyllables



Profane English monosyllables



CROSS-CULTURAL DIFFERENCES

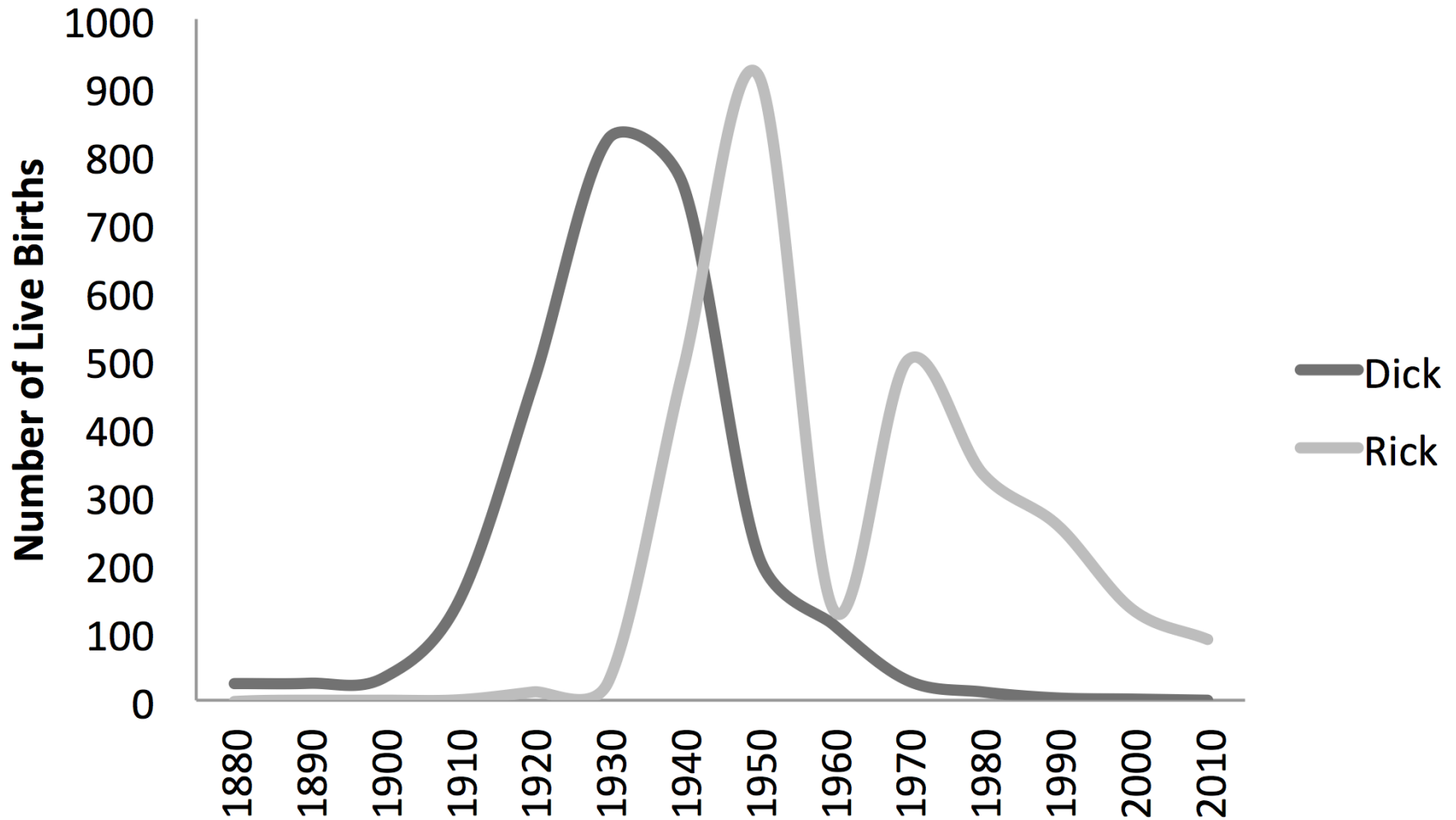
Some languages/cultures have been reported to not have any equivalent to profanity

In Japan, there's no class of words deemed intrinsically offensive. *Baka* 'fool' or *chinchin* 'wee-wee' are about as bad as words get

In parts of Afghanistan, blasphemy is a capital crime

In France, *gros mots* "big words" aren't so bad that they need to be bleeped

WHY YOU DON'T KNOW *DICK*





WHAT MAKES PROFANITY

A cultural belief that some words are bad (in some contexts).

That belief applied to specific words.

- That are likely to be drawn from certain semantic fields
- That may pattern together in sound

Cultural structures for reinforcing those norms (punishment, censorship, etc.)

SPEECH ERRORS

Speech is peppered with errors

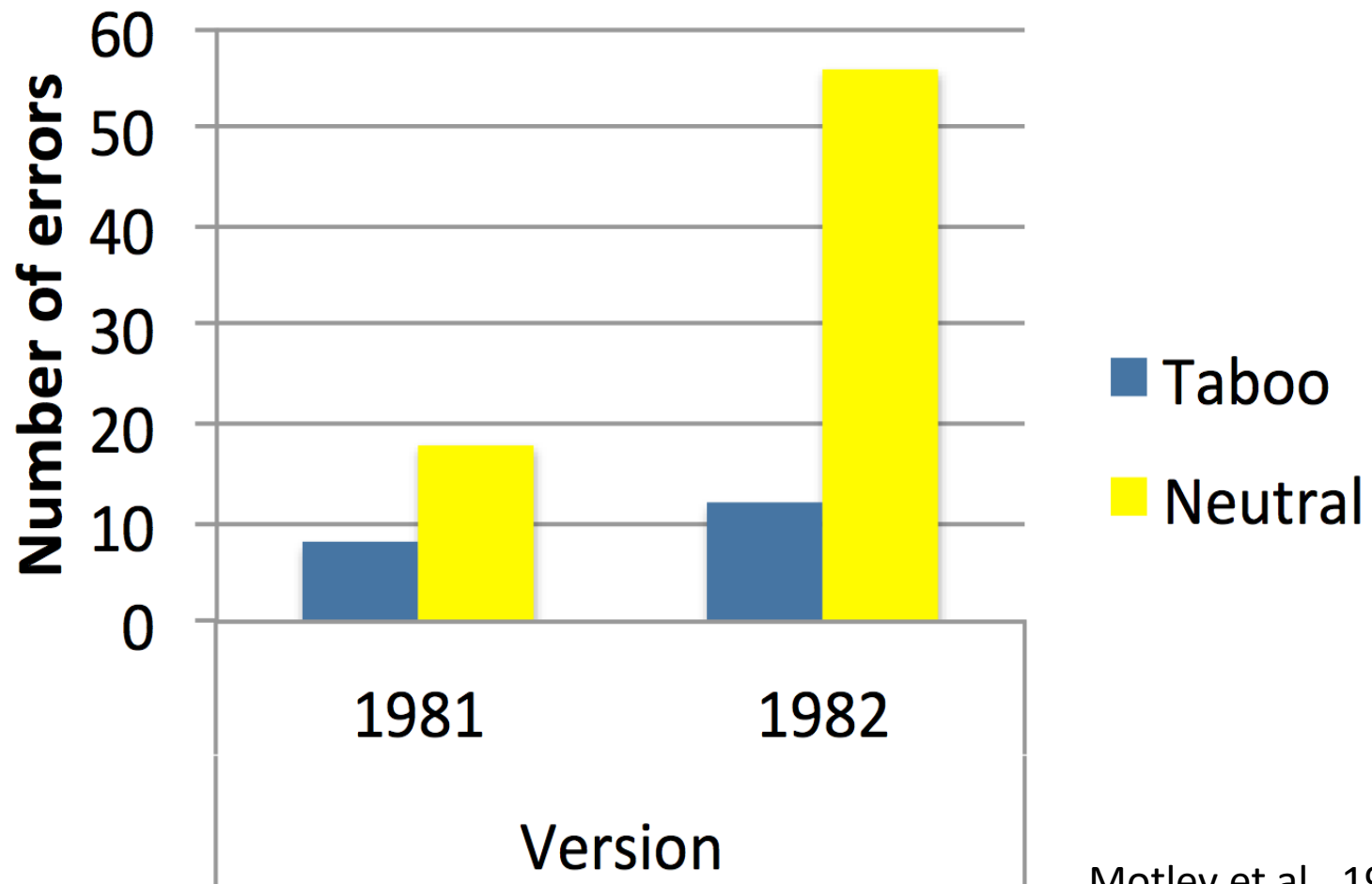
Errors may reflect otherwise unstated and repressed thought (Freud, 1901)

If these repressed thoughts are more likely to be about taboo topics than not, then speech errors should be more likely to result in taboo language than not.



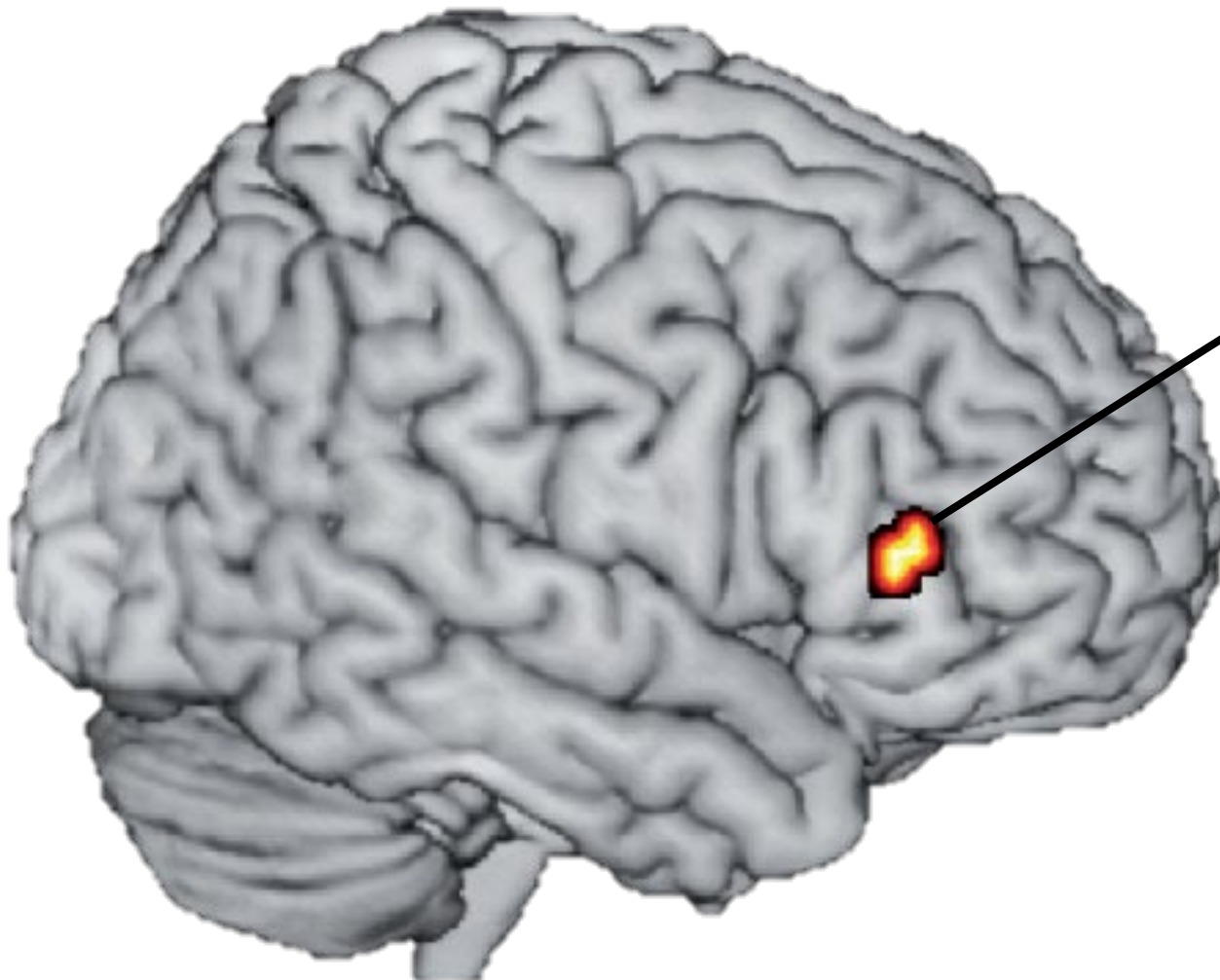


MEAN SPEECH ERRORS PER PARTICIPANT



Motley et al., 1981; 1982

ERROR-FREE TABOO-ELICITING (*HIT SHED*) MINUS NEUTRAL PAIRS (*HIT SAID*)



Right inferior
frontal gyrus

(implicated in
inhibitory
control)

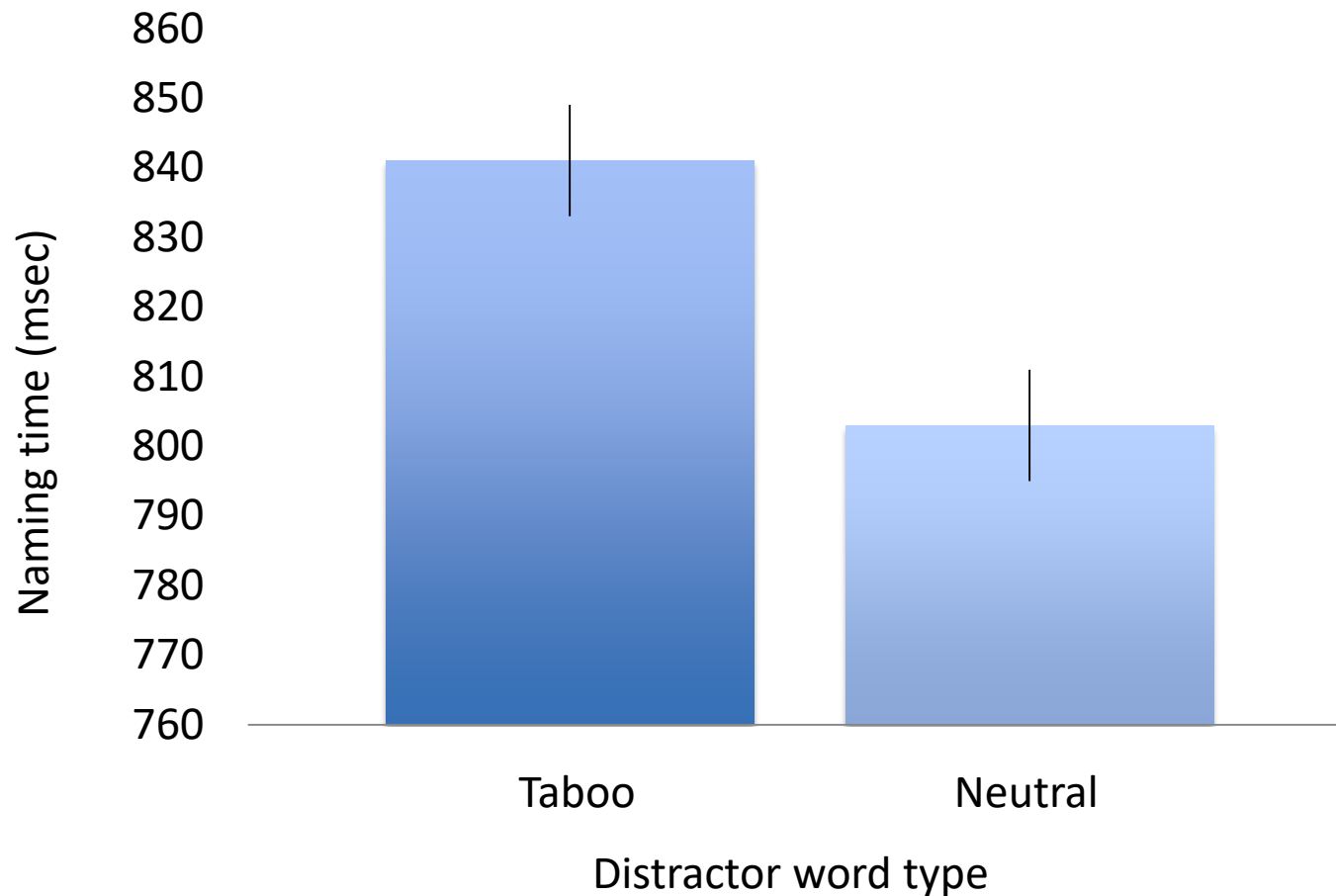
PICTURE-WORD INTERFERENCE



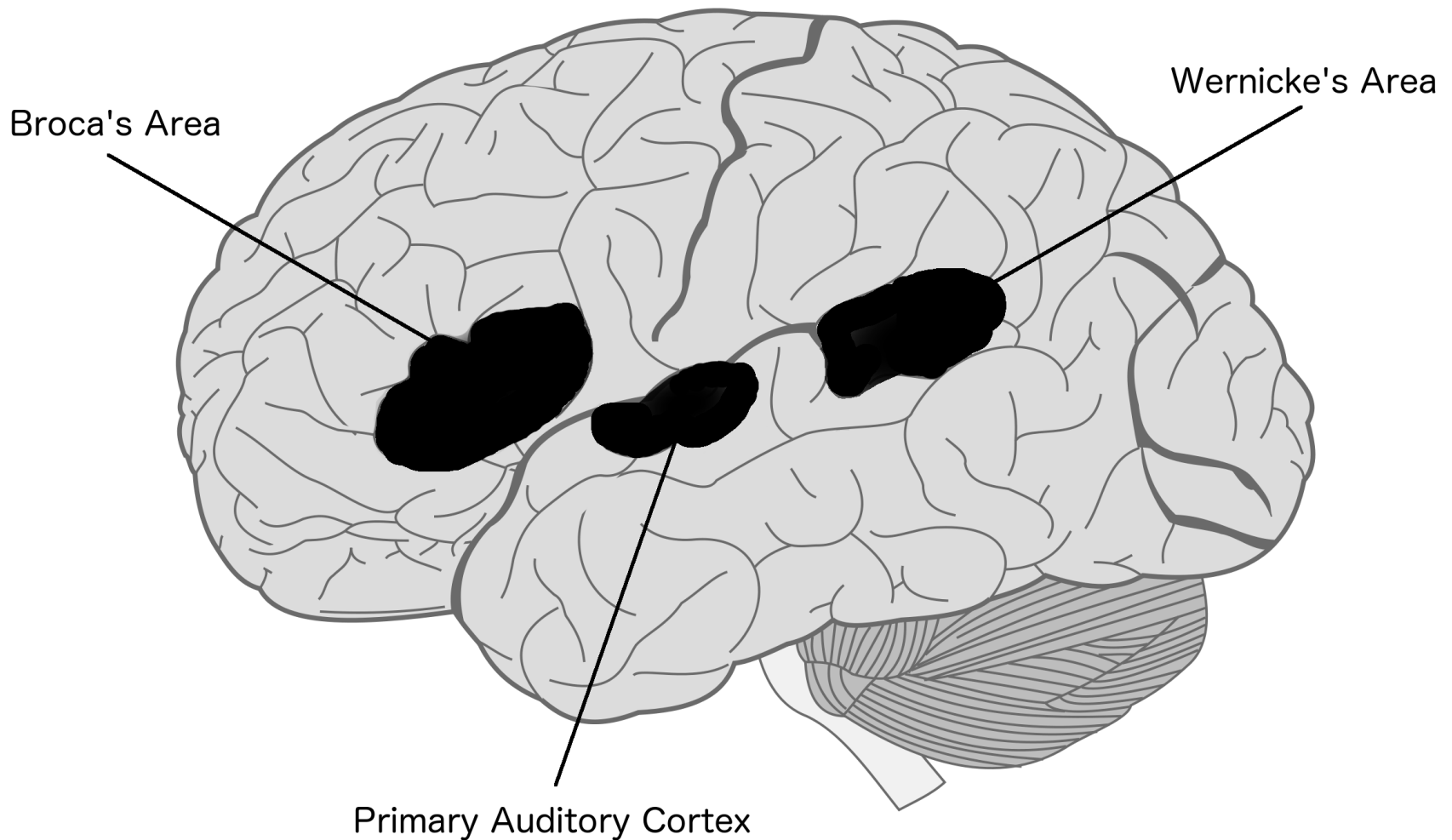
PICTURE-WORD INTERFERENCE



PICTURE-WORD INTERFERENCE



LANGUAGE CENTERS OF THE BRAIN



JACQUES LORDAT

“the most forceful oath of the tongue, which begins with an ‘f’ and which our Dictionaries have never dared to print”

Lordat, 1843



E.C.

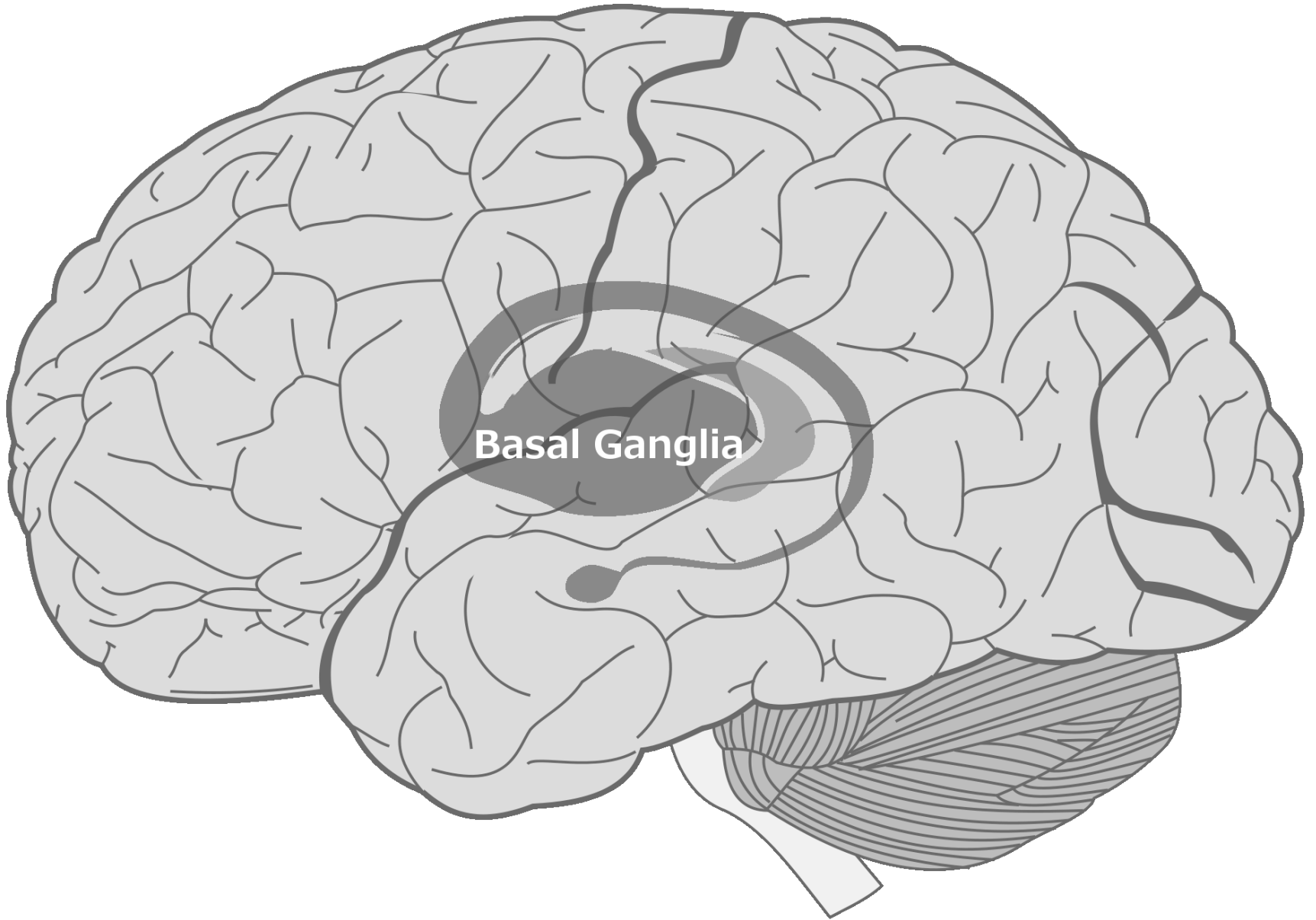
“E.C.'s attempts to reply to questions immediately after operation were totally unsuccessful. He would open his mouth and utter isolated words, and after apparently struggling to organize words for meaningful speech, recognized his inability and would utter expletives or short emotional phrases (e.g., 'Goddamit!'). Expletives and curses were well articulated and clearly understandable.”

Smith, 1966

AUTOMATIC APHASIA

“could not provide the correct expletive for situations described to him nor could he complete a curse”

Speedie et al., 1993



Basal Ganglia

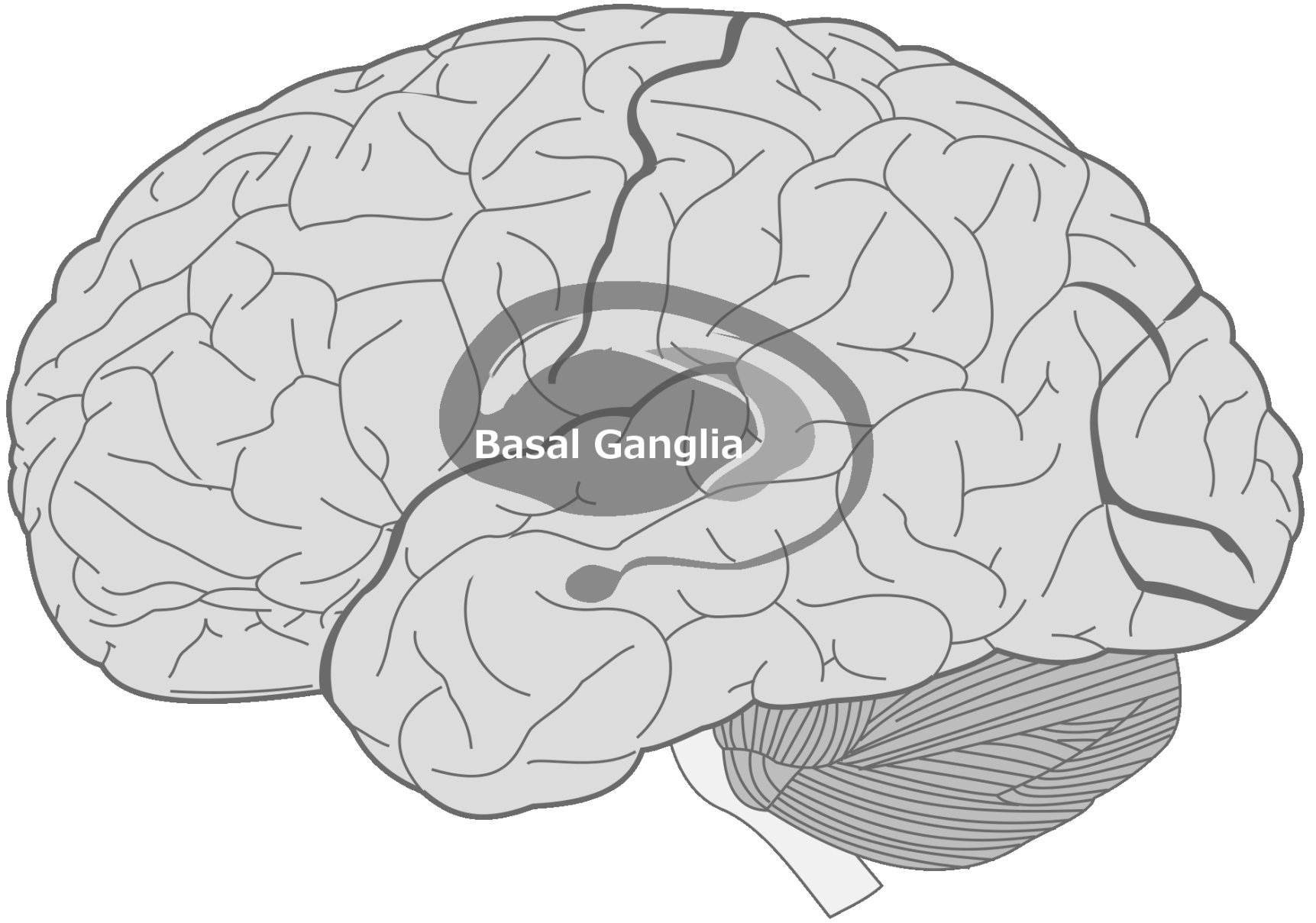
COPROLALIA

Associated with Tourette Syndrome (10%-50% incidence)

Characteristic, attested phrases (Lancker & Cummings, 1999)

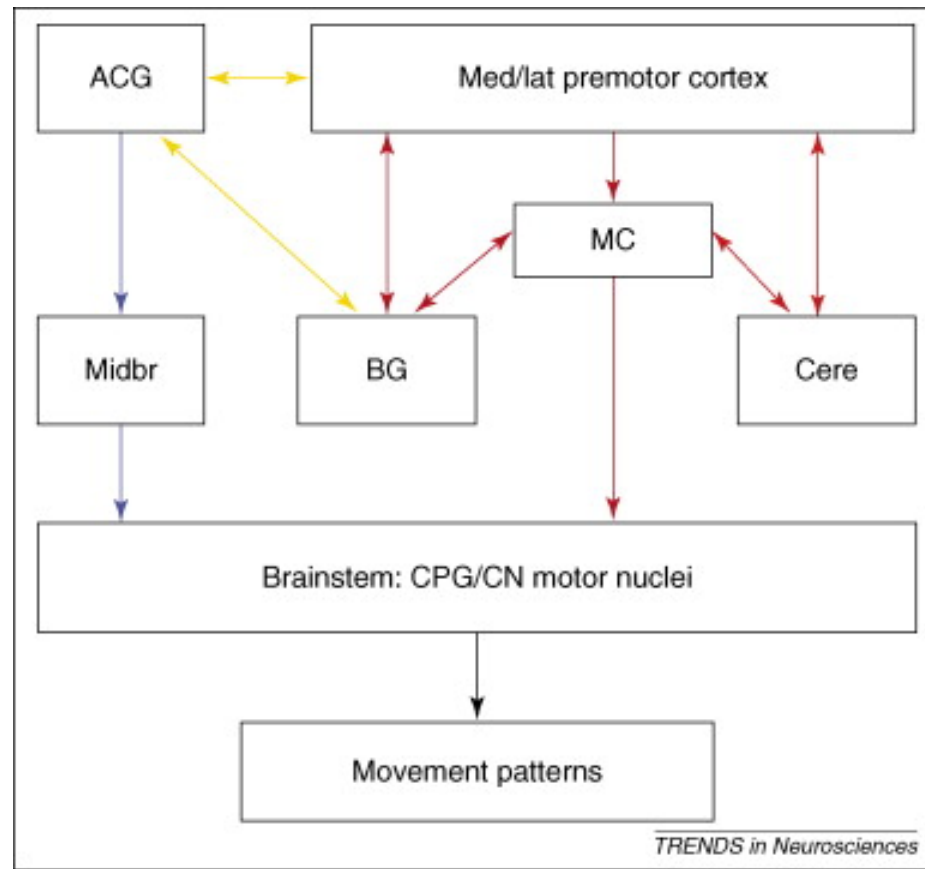
fuck, shit, cunt, mother-fucker, prick, dick, cocksucker, nigger, cockey, bitch, pregnant-mother, bastard, tits, whore, fu . . . , doody, penis, queer, pussy, coitus, cock, ass, shi . . . , bowel movement, homosexual, screw, fag, faggot, schmuck, blow-me, wop, God damn it, damn fool, fuck my your, fucking, fucking. fucking. cunts, fuck, shit, ass, bitch, cock, fart, suck, you fucking idiot, asshole, fuck you, shit on you, fucka, fu . . .

What brain mechanisms are impaired in Tourette Syndrome?



Basal Ganglia

TWO VOCALIZATION PATHWAYS IN HUMANS



THANK YOU.