8 'Women talk more than men'

Language differences mark social differences in many different ways. Certain ways of speaking may be associated with a particular geographic region, socioeconomic class, ethnicity, or age. Since gender is such a socially important characteristic of a person, we shouldn't be surprised to find language differences along gender lines as well.

But as soon as we move beyond a general acknowledgment that men and women might speak differently, things become murky very quickly. Plenty of people have ideas about exactly *how* men and women use language differently; in the United States, for example, the following opinions are very common:

- Women talk more than men.
- Men are more direct; women are more polite.
- Women speak more correctly than men.
- Men speak more confidently than women.

For linguists, the first step is figuring out whether claims like these are actually true. And if a study does find that men and women speak differently in some way, we're left with a whole new set of questions. For example, suppose you conducted an experiment and found that women were more likely to say *um* than men. Does this mean that women are more insecure than men? Or that they're more thoughtful and take more time deciding what to say next? How much do the results depend on the design of the experiment? For example, was the data collected in a lab setting, or from a corpus of spontaneous conversation? If it was a lab setting, could the task have biased the results? Were the subjects discussing a topic that men might traditionally be expected to know more about? Were subjects giving monologues, conversing in pairs, or talking in small groups? Were they talking with others of the same sex or the opposite sex?

As we will see, factors like these have a huge effect on how men and women speak. It turns out that there are very few statements of the form 'Women are X-er than men' (or vice versa) that are generally true, with the obvious

exception of 'Men tend to have lower voices than women'.[1] Usually, the best we can do is say 'Women tend to be X-er than men *in such-and-such a situation*'.

Before we turn to two specific case studies – whether women talk more than men in general, and whether women are more likely to use tag questions – we will survey observations about men's and women's language from a variety of settings. Beliefs about differences between men and women, and actual differences in men's and women's speech, vary surprisingly in different circumstances – a fact that underscores the importance of understanding the social context in which language is used before we make broad generalizations.

8.1 Western commentary on language and gender

Many people today believe that women tend to have better verbal skills than men – girls learn to talk sooner than boys, women perform better on tests of verbal ability, and so on. There's some research to support this idea, although the differences (if real) are very small: there's much more variation among individual men and women than there is between the two groups.

Historically, though, the belief that women's language is superior to that of men is something of an anomaly. A medieval English song collected in Salisbury (2002, 247–249) praises women effusively, with many glowing descriptions of their speech: women keep secrets, never gossip, and aren't prone to talking too much; they are pleasant company. But every stanza ends with the line *Cuius contrarium verum est* – Latin for 'of which the opposite is true'. The joke is that the song appears to praise women, but a person who knows Latin (at the time, almost exclusively men) would realize that the song is actually highly insulting.

8.1.1 Jespersen on women's language

Closer to our own era, we can see examples of early-twentieth-century views of women's language in the work of Otto Jespersen. One of the fathers of modern linguistics, Jespersen devoted one chapter of his classic book on language (Jespersen 1922) to gender differences. The title of the chapter – 'The woman' – suggests from the start that ordinary language use is defined by the way men speak; if women speak differently, they're deviating from the norm.

Many of Jespersen's specific comparisons suggest that women's language is deficient relative to men's. He says that women tend to use

[1] Even differences that are physiologically based aren't immune to social influences. Men typically have longer throats than women (because they tend to be taller), and this difference affects the acoustics of their vowels – but Johnson (2006) shows that some societies have larger male-female differences than others.

more 'refined' expressions, but goes on to address the 'danger of the language becoming languid and insipid if we are always to content ourselves with women's expressions . . . vigour and vividness count for something' (p. 247). He claims that women have smaller vocabularies than men, although to his credit he considers (but ultimately rejects) the possibility that this could be the result of unequal educational opportunities. Jespersen goes so far as to recommend that a person who is just beginning to study a foreign language should read 'ladies' novels' because they will be easier to understand.

Even when Jespersen goes out of his way to compliment women for their unique linguistic abilities, it's hard to avoid the impression that women are being damned with faint praise:

> Woman is linguistically quicker than man: quicker to learn, quicker to hear, and quicker to answer. A man is slower: he hesitates, he chews the cud to make sure of the taste of words, and thereby comes to discover similarities with and differences from other words, both in sound and in sense, thus preparing himself for the appropriate use of the fittest noun or adjective.
>
> [W]omen much more often than men break off without finishing their sentences, because they start talking without having thought out what they are going to say. . . .
>
> Jespersen (1922, 249, 250)

Jespersen paints a picture in which women's language is simple and superficial, while men's language is deep, complex, and thoughtful. His evidence is scant and unsystematic – in fact, many of his examples of 'women's speech' are taken from women's dialogue in plays and novels written by men! Clearly, we're seeing a summary of some common beliefs about women's language from Jespersen's time, not a scientific investigation.

8.1.2 Men Are from Mars, Women Are from Venus

The end of the twentieth century saw the rise of an alternative view of men's and women's language, one that is just as much a product of its time as Jespersen's views were a product of his. Books such as John Gray's *Men Are from Mars, Women Are from Venus* and Deborah Tannen's *You Just Don't Understand* argue that men and women have different ways of speaking – different 'languages' – that are equally good. When men and women talk to each other, the result is frequent miscommunication, and the solution is for each gender to learn the other's language. Gray's book famously frames gender differences with a parable of interspecies communication – he imagines that men and women come from different planets, and provides 'translations' of common Martian and Venusian expressions.

Many of Gray's specific observations sound a lot like Jespersen's; the difference is that Gray, much more than Jespersen, goes to great lengths to argue that women aren't deficient, just different. Jespersen claims, for example, that women overuse intensifiers: *awfully pretty*, *terribly nice*, *I'm so glad you've come*. Gray, too, states that women are prone to exaggeration and overgeneralization (*No one listens to me anymore*), but he argues that statements like these are really requests for understanding and support and aren't meant to be taken literally. Similarly, Gray claims that women don't think before speaking, but he puts this in a positive light:

> Women think out loud, sharing their process of inner discovery with an interested listener. Even today, a woman often discovers what she wants to say through the process of just talking. This process of just letting thoughts flow freely and expressing them out loud helps her to tap into her intuition. This process is perfectly normal and especially necessary sometimes.
>
> But men process information very differently. Before they talk or respond, they first silently "mull over" or think about what they have heard or experienced. Internally and silently they figure out the most correct or useful response. They first formulate it inside and then express it.
>
> Gray (1992, 67–68)

Both *Men Are from Mars, Women Are from Venus* and *You Just Don't Understand* were extraordinarily popular and spent years on bestseller lists. They offered a non-threatening and reassuringly egalitarian diagnosis of male-female relationship problems: both partners are acting in good faith, but they're speaking different languages. Neither language is 'better' than the other; they're just different, and the solution is easy: learn your partner's language.

8.1.3 Claimed gender differences: Empirical and social assessments

Are Gray and Tannen right that men and women differ in these ways? In some cases, the answer is clearly 'no'. Gray, for example, claims that women (but not men) say things like *oh*, *hmmm*, and *uh-huh* while the other person is speaking. This phenomenon is known as *backchanneling*; it's a way for the listener to indicate that he or she is paying attention. Backchanneling is *not* exclusive to women: some of the studies we will examine below collected data on backchanneling and found that men do it just as much as women (see sections 8.3.4 and 8.3.5).

On the other hand, one reason these books are so popular is that some people genuinely recognize themselves in these descriptions of men and women. It would be naïve to say that there's nothing there. Tannen, for example, sums up

the two communication styles she identifies as 'report talk' (men) and 'rapport talk' (women). We will see below that there is indeed evidence that men, at least in some situations, are more likely to use language to accomplish tasks, while women are more likely to use language as a tool to maintain social relationships.

But to the extent that Gray and Tannen may have identified a genuine difference between (some) men and (some) women, what is the *cause* of that difference? One possibility, of course, is that we're dealing with an inherent sex-linked biological difference. Although we can't rule it out as a possibility, this hypothesis turns out to be very difficult to prove because it's so hard to control for social factors that might also lead to differences between women and men.[2] In addition, the striking cross-cultural variation in the supposed 'natural' behavior of men and women should make us suspicious of the conclusion that our own culture has happened to hit on an innate biological difference. If community A believes that women naturally behave one way, while community B believes that they are naturally the opposite, we can't avoid the conclusion that social expectations play a crucial role in what men and women actually do.

A second possible cause of gender differences is separate socialization; Tannen explicitly argues for this hypothesis. The basic idea is that girls play with girls, boys play with boys, and in the process they learn different ways of speaking – different languages – that persist into adulthood. According to this hypothesis, girls grow up in communities that place a high value on using language to maintain social relationships, while boys grow up in communities where language is a tool for getting tasks done. There is some research that lends partial support to this idea, but it's unlikely to be the whole story. It's not true, for example, that children play exclusively in single-sex groups; moreover, there are more similarities than differences between girls' and boys' interactions during play.

A third possible explanation appeals to differing social expectations of men and women, particularly as they relate to power. Men, for example, may be expected to take the lead in a group problem-solving task: contributing ideas, debating what to do, and formulating a solution. Women may be expected to take a more indirect (and possibly less valued) role: acknowledging others' contributions, facilitating compromise, and generally ensuring that the group works smoothly. According to this view, it's not that men and women have inherently different ways of speaking; rather, to the extent that they adopt conventional male and female roles (which

[2] Biological explanations for sex differences have recently had a resurgence in popularity; examples include Sax (2005), Brizendine (2006), and Brizendine (2010). Unfortunately, much of this work appears to suffer from careless handling of the scientific evidence; for discussion, see Liberman (2006a) and links therein.

often involve a power difference), they use language in service of those roles.

These last two ideas roughly correspond to two models of gender and communication known as the *difference* model and the *dominance* model, respectively. Ultimately, it seems that neither model by itself is likely to give us a full understanding of the relationship between gender and language. The difference model falls short when it ignores the fact that both men and women are perfectly capable of using a variety of linguistic tools when the situation requires; the difference model may also minimize the role that social power undeniably plays in some situations. Critics have also noted that even though proponents argue that men's and women's ways of speaking are equally valid, they're more likely to advise women to accommodate to men's styles rather than vice versa. The dominance model, on the other hand, may be in danger of ascribing *all* typically 'female' communication strategies to power differences, rather than valuing those strategies on their own terms.

8.2 Language and gender in context: Ideals and behavior

One thing the difference and dominance models have in common is that they both emphasize the *context* in which language is used. The difference model invites us to consider how all-male and all-female groups may differ in their ideals regarding how language should be used and in the kind of behavior that's expected from group members. The dominance model focuses on how broader beliefs affect actual language use and how these things interact with status and power, especially in male-female interaction.

In this section, we will look at two common beliefs about men's and women's language – that women are more polite than men, and that they speak more correctly – as they relate to specific sociolinguistic contexts. The specific examples illustrate two larger themes: first, that beliefs about what men and women 'naturally' do vary widely across communities; and second, that men and women's actual behavior is influenced heavily by community ideals about language and expectations about men and women.

8.2.1 Polite men and aggressive women

In contemporary western contexts, women are widely seen as indirect and polite where men are direct and blunt. Women's indirectness is sometimes framed as a problem or deficiency – hence the abundant advice for women in the business world on how to negotiate, ask for what they want, and be assertive. Alternatively, this indirectness is also sometimes framed as an asset; one of the arguments for including more women in management positions is that they bring with them a more cooperative and collaborative style than their

male peers. Either way, the belief that women are inherently more indirect than men is very strong.

For this reason, many people are surprised to learn that this belief isn't universal. As it turns out, different communities can have very different ideas about how men and women naturally behave.

Politeness in rural Madagascar

Keenan (1996) describes how indirectness and avoiding confrontation are highly prized in rural Madagascar. Direct questions, criticism, and any other behavior that might put another person on the spot are strongly tabooed. Indirectness is especially important in the formal speech mode known as *kabary*, which involves heavy use of allusions, proverbs, and other roundabout ways of making a point. *Kabary* involves elaborate self-deprecation on the part of the speaker and doesn't directly criticize others; when such criticism is necessary (for example, when a wrongdoing in the community needs to be discussed, or when another person's *kabary* is inadequate), the ability to do so in a subtle and non-confrontational way is the mark of a skilled speaker.

These highly valued ways of speaking and acting are associated with men: it's men who know how to act appropriately and maintain good social relationships. Men and women alike believe that only men are skilled enough for *kabary*; women are too direct and unsophisticated. Women are more likely to display anger and behave in other socially inappropriate ways.

Interestingly, there are situations where women's 'unskilled' behavior is useful. When someone in the community has behaved inappropriately, it's women who will publicly and directly criticize the person's actions. In the marketplace, women are the ones who bargain with customers. In a sense, women are called upon whenever it is socially necessary to be direct and aggressive – not because they are seen as having a skill set complementary to men's, but because they are seen as lacking the sophistication that prevents men from engaging in those kinds of activities.

The kros *in Papua New Guinea*

Madagascar isn't the only place where public displays of anger are associated with women. Kulick (1993) describes a specifically female speech genre in the village of Gapun in Papua New Guinea: the *kros*. During a *kros*, the speaker delivers a long, angry monologue from inside her house, directed at the person or persons who have wronged her. The following excerpt, translated from Tok Pisin, gives the flavor of a *kros*:

> You're a fucking rubbish man. You hear?! Your fucking prick is full of maggots. You're a big fucking semen prick. Stone balls!...

Fucking black prick! Fucking grandfather prick! You've built me a good house that I just fall down in, you get up and hit me on the arm with a piece of sugar cane! You fucking mother's cunt!

Kulick (1993, 522)

Only women deliver *kroses*; a married man who has been wronged will get his wife to deliver one for him. (This option is obviously unavailable to widowed and divorced men, who do occasionally give their own *kroses*.) Both men and women see the *kros* as an example of natural female behavior: women are 'disruptive, divisive, begrudging, antisocial, and emotionally excessive' (Kulick 1993, 512). With the possible exception of 'emotionally excessive', these characteristics are precisely the opposite of the ones westerners typically associate with women.

By this point, contemporary western ideas about women's superior verbal skills are starting to look anomalous. Obviously, societies vary in what they believe about women's speech: according to the medieval song discussed above, women are gossipy and unable to keep secrets; according to Jespersen, women are languid and insipid; according to rural Malagasy communities, women are unskilled and blunt. What all these beliefs have in common is not the specific characteristics that are attributed to women, but the idea that women are inferior to men. Where assertiveness and directness are highly valued, those behaviors are considered to be characteristic of men; where indirectness and self-effacement are highly valued, *those* behaviors are attributed to men.

This is not to say that men and women are exactly the same after all. It seems clear that Malagasy women really do engage in more public displays of anger than men, and that women in Jespersen's day really were more likely than men to use euphemisms when referring to bodily functions. Rather, these examples tell us that before we conclude that some difference between men and women in our own culture is a natural consequence of male and female biology, we need to seriously consider the role that social expectations play in shaping that behavior.

One final note: it's not entirely true that women are generally believed to have superior verbal skills, even in contemporary western contexts. One glaring exception is the fact that many speech patterns associated with young women are heavily stigmatized – consider the 'valley girl' stereotype. Another example is the phenomenon known as 'uptalk': rising intonation at the end of a sentence. The popular story about this pattern is that it shows that the speaker – almost always assumed to be a young woman – is uncertain, lacks self-confidence, and can't commit to anything. (A person who uses this pattern, of course, may have entirely different reasons for doing so: to signal that the

conversation isn't over, for example, or to invite the listener to respond to what has just been said.) Thus, even in a context where women in the abstract are believed to have better verbal skills, the particular speech patterns associated with young women are often dismissed as annoying habits that are unworthy of a serious speaker.

8.2.2 The correctness of women's speech

Another common idea is that women speak more 'correctly' than men – or, as linguists would say, that women's speech is closer to the standard than men's speech. As it turns out, there's a great deal of truth to this idea: in many communities, men are more likely to use certain non-standard forms than women are (see Labov 1990 for a review of research in this area). However, the following two examples demonstrate that we can't just stop there and proclaim that women's speech is generally more standard than men's; as it turns out, gender interacts with community ideals and with social class in complex and interesting ways.

Covert prestige in Norwich

Sociolinguists have consistently found that individual people use language differently in different situations, and that this variation has social meaning. In one common pattern, there are two different versions of a sound, word, or other linguistic unit. One version is prestigious and associated with the standard dialect of the language; the other version is stigmatized and associated with a non-standard dialect. Although some members of the community are more likely to use one version than the other, most people use both, and their choice depends on the situation.

In many dialects of English, the verbal suffix *-ing* (*walking*, *talking*, *reading*) shows this kind of variation. The prestige variant of this suffix is pronounced [-iŋ], where [ŋ] is the *ng* sound in *singer*. The non-prestige variant is pronounced [-ən], where [ə] is the short vowel in the second syllable of words like *bacon* and *woman*. Using the non-prestige variant is often referred to as '*g*-dropping', but this is inaccurate: neither variant actually contains a [g]. (Compare the [g] in *finger* to the lack of [g] in *singer*; the prestige pronunciation of *-ing* is like *singer*, not *finger*, for most people.) Practically everyone uses both pronunciations of *-ing*; people tend to use [-iŋ] more often in formal contexts and [-ən] in informal contexts.

Trudgill (1983) found many examples of this pattern in a study of sociolinguistic variation in the city of Norwich. Consistent with previous research, he identified three factors that affected how likely a person was to use the prestige or non-prestige variant:

1. Middle-class speakers were more likely to use the prestige variant than lower-class speakers.
2. People were more likely to use the prestige variant in more formal contexts.
3. Women were more likely to use the prestige variant than men.

In addition to recording people's speech and counting how often they used each variant in different contexts, Trudgill explicitly asked his subjects how they spoke. Not surprisingly, he found that people weren't very good judges of their own speech; moreover, the ways in which people's self-evaluations were inaccurate tells us something about their attitudes toward the standard dialect. A sizeable number of women claimed that they were more likely to use the prestige variant than the non-prestige variant, even when this wasn't true. This *over-reporting* of their use of the prestige variant isn't terribly surprising; it suggests that many women aspired to speak 'correctly' (i.e., the standard dialect) and were a bit too optimistic about whether they were succeeding.

Among men, a different story emerged. A surprising number of men *under-reported* their use of the prestige variant: that is, they claimed that they were more likely to use the non-prestige variant, even when this wasn't true. (Some women under-reported as well, but men were far more likely to do so.) In other words, these men thought their speech was less 'correct' than it actually was. Trudgill suggests that there is a difference between the *overt prestige* of the standard dialect and the *covert prestige* of the local, non-standard dialect: even though most speakers claim that the standard is better, the behavior of the under-reporting men suggests that what they really value is the non-standard variety of the local community, perhaps because it's associated with 'toughness' and 'maleness'.

What we see here is a difference between men and women that involves attitudes as well as behavior. The standard dialect is valued by both men and women as the correct and proper way to speak. The non-standard dialect, by contrast, may hold subtly different social meanings for the two groups: men are more likely than women to assign a different kind of prestige to non-standard forms, one related to its role in maintaining solidarity in the local community.

Jocks and burnouts

Eckert (2011) found a different kind of interaction between gender and language ideals in a Detroit high school, where about half the students identified themselves as members of one of two salient social groups. *Jocks* were oriented toward the school and the world outside Detroit; they were typically middle-class and college-bound. *Burnouts* were typically working-class and were oriented toward the local community.

Students used a number of behaviors to mark themselves as either jocks or burnouts, and naturally one of these behaviors was their speech. Eckert

analyzed three sounds that were in the process of changing; for each sound, there was a 'conservative' variant (the one associated with the standard dialect) and a 'progressive' variant (the one associated with the local community). Not surprisingly, the jocks tended to use the conservative variants, while the burnouts tended to use the progressive variants.

If women's speech is generally more standard than men's, then we would expect the most conservative speakers to be the jock girls; this is exactly what Eckert found. But the burnout girls had the most *progressive* speech: it was marked by local features even more than the speech of the burnout boys. In other words, we can't say that women are always more standard in their speech than men; the burnout girls in this high school had the most non-standard speech of any group.

Eckert suggests that girls in both groups needed to mark their identity using language. Boys could participate in a variety of activities to demonstrate their status as jocks or burnouts; for example, jock boys could run for student government or play sports. But fewer of these opportunities were available to girls in the 1980s (when the research was conducted), so they found it necessary to use language instead. Thus, the girls went even further than the boys in making sure that their speech showed which group they belonged to.

The larger lesson to be learned from this example is that it's inappropriate to treat gender separately from other social categories such as class. A person speaks, not just as a man or a woman, but as a particular *kind* of man or woman. Just as men and women don't differ in the same ways in Madagascar and the United States, they also may not differ in the same ways in separate local communities even in the same country.

8.3 Case study: Do women talk more than men?

One of the most popular current beliefs about language and gender is that women are more talkative than men. The idea appears periodically in popular science writing or in relationship advice, often accompanied by authoritative-sounding numbers: 'Women use an average of 20,000 words a day; men use only 7,000.' Liberman (2006b) documented as many examples as he could find of purported male and female words-per-day averages, and discovered two things. First, the numbers vary hugely: women are claimed to use anywhere from 7,000 to 50,000 words per day; men, from 2,000 to 25,000. Second, not a single author backs up his or her numbers with a reference to a scientific study of male and female speech patterns. The numbers appear to be plucked out of thin air, and some of them live on as zombie statistics, lumbering from one popular science book to the next.

Few researchers have actually tried to calculate daily word counts for men and women (although see section 8.3.6 below), but a huge number of studies

have explored how much men and women talk in particular situations. We will survey a small sample of the enormous literature on this subject, examining how the behavior of both men and women is affected by the specific setting they're in.

8.3.1 Decision-making in small groups: Aries (1982)

Studies of gender and amount of talk can be divided roughly into two groups: those in which subjects were asked to accomplish a specific task (and had to talk in order to do so), and those in which subjects engaged in relatively unstructured conversations. We will begin with several examples of studies of the former type.

Aries (1982) tested college students in groups of 5 to 6. Each group was presented with a hypothetical ethical dilemma and had 40 minutes to arrive at a consensus on what should be done. Some of the groups were all-male or all-female; others were mixed-sex. Aries chose to study students at a competitive liberal arts college on the hypothesis that they would be less likely to exhibit gender stereotypes than the general population.

Table 8.1 shows three measures of subjects' verbal behavior. *Verbal Acts Initiated* is a count of how many times a subject spoke during the group discussion; Table 8.1 displays proportions of verbal acts initiated by men and women separately out of the total number of verbal acts in their group. For the single-sex groups, obviously, the proportions are at 1.0 because only men (or women) were present. But for the mixed-sex groups, an interesting difference emerges: women spoke more than men, contributing 55% of the total verbal acts (a difference that Aries reports as significant at $p < .02$). So far, the results support the idea that women tend to talk more than men.

However, further differences emerge when we examine specific types of verbal acts. Aries coded verbal acts into two categories: *Attempts Answers*, opinions or suggestions relevant to the task at hand; or *Reactions*, statements of agreement or disagreement with something someone else had said. Table 8.1 presents these types of verbal acts as proportions of the total verbal acts initiated for each gender in each group type; thus, in mixed-sex groups, 55% of men's contributions were coded as Attempts Answers. The proportions don't add up to 1.0 because some verbal acts didn't fall into either category.

The results show that in mixed-sex groups, men and women were engaging in different *kinds* of talk. When men spoke, they were more likely than women to offer an original contribution to the problem at hand; when women spoke, they were more likely than men to react to something someone else had said. (Aries reports that both of these differences were significant at

Table 8.1 *Proportions of total verbal acts initiated by act type, gender, and group type. Reproduced with permission of authors and publisher from: Aries, E. J. Verbal and nonverbal behavior in single-sex and mixed-sex groups: Are traditional sex roles changing?* Psychological Reports*, 1982, 51, 127–134. © Psychological Reports 1982.*

		Single-sex Groups		Mixed-sex Groups	
Category		Male $n = 7$	Female $n = 6$	Male $n = 8$	Female $n = 8$
Verbal Acts Initiated	*M*	1.0	1.0	.45	.55
	SD	0.0	0.0	.07	.07
Attempts Answers	*M*	.47	.46	.55	.45
	SD	.08	.05	.05	.06
Reactions	*M*	.19	.25	.22	.30
	SD	.06	.07	.06	.02

$p < .02$.) We can characterize this difference by saying that men engaged in more task-oriented behavior than women, while women engaged in more social-emotional behavior (acknowledging others' contributions) than men. Interestingly, this difference appears to be much smaller or even absent in the single-sex groups, where men and women had similar rates of both types of verbal acts.

One notable feature of this study is how the overall amount of talk contributed by each gender was measured: a simple count of how many times each person spoke. Alternatively, we could measure the total amount of time each person spent talking, or how many words each person said. Neither measurement is clearly better than the other, but the fact that men and women in the mixed-sex groups engaged in different kinds of talk suggests that the two measurements might lead to different conclusions. Specifically, it seems likely that offering an opinion or suggestion would tend to involve more talking than reacting to someone else's statement; the latter could be no more than a simple *Yeah*. It's possible that the men in the mixed-sex groups actually spent *more* time talking than the women, even though they took fewer conversational 'turns'. We don't have the relevant data for this study, but a number of other experiments have found exactly that: when measured by number of conversational turns, women appear to talk more; when measured by total time speaking or number of words, men appear to talk more. (For an example, see section 8.3.4 below.) This effect complicates our conclusions in two ways: it further demonstrates that men and women appear to be engaging in different kinds of talk, and it forces us to specify exactly what we mean by 'talking a lot'.

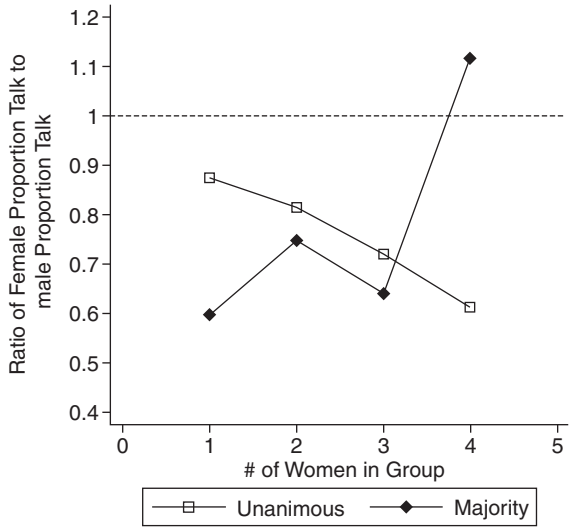
8.3.2 *Gender imbalance in small groups: Karpowitz et al. (2012)*

If men and women behave differently depending on whether they're in single-sex or mixed-sex groups, we might also expect their behavior to be affected by the *composition* of mixed-sex groups. Does a man behave differently in a group composed mostly of other men, versus a group composed mostly of women?

Karpowitz et al. (2012) investigated this question in the context of democratic deliberation. They presented groups of five subjects each with four principles of income redistribution; examples included one rule by which no income was redistributed at all, and another by which just enough was redistributed so that everyone received at least some minimum amount. Each group was required to choose the principle they felt would be most just for society at large, and which would also be applied to group members' own income from work they did later in the experiment. (This work involved correcting misspelled words, although subjects didn't know the nature of the work when they voted – for all they knew, they might have been pulling weeds or playing the harmonica.) Karpowitz et al. systematically varied both the gender composition of the groups and the decision rule that they used in voting, either unanimous vote or majority rule. A total of 470 subjects participated in the experiment; they included both college students and non-student members of nearby communities.

Figure 8.1 shows the ratio of female-to-male speech in each condition, where amount of talk is measured by a person's talking time as a proportion of the entire group. Note that equal proportional participation by men and women would result in a ratio of 1.0. (Results are omitted for all-male and all-female groups, where such a ratio cannot be calculated.) Two major trends are obvious in Figure 8.1. The first is that regardless of the decision rule or the composition of the group, women almost always spent less time speaking than men. The only exception is in groups with four women who voted according to majority rule, where women on average spoke slightly more than men – but in this case, the difference between the ratio and 1.0 isn't statistically significant; therefore, the best we can say is that women and men in this condition spoke approximately the same amount. The second trend is that when the group required a unanimous vote, men spoke proportionally more when they were in the minority: the more women there were in the group, the more the remaining men talked.

Karpowitz et al., who were primarily interested in the implications of this study for democratic participation, observe that the mere presence of women in a group – even a lot of women – doesn't automatically ensure that women contribute equally to the discussion. (It would be interesting to study whether this effect remains the same in different contexts – for example, if the women



Note: A ratio of 1 means equality of speech participation.

Figure 8.1 Ratio of female to male speech participation by experimental condition. Christopher F. Karpowitz, Tali Mendelberg, and Lee Shaker, Gender inequality in deliberative participation, *American Political Science Review* 106(3):533–547, 2012, Figure 1.

are elected officials who represent constituents and not just themselves.) For our purposes, it's clear that this study provides no evidence for the supposed inherent talkativeness of women: it was the men who talked either the same amount or more in every case.

8.3.3 College classrooms: Sternglanz and Lyberger-Ficek (1977)

The group discussions examined in the previous two studies we have seen are somewhat artificial. Perhaps most saliently, the groups were composed of strangers: people who, for the most part, didn't know each other and were unlikely to meet again after the study was over. In the obvious everyday examples of groups that would be likely to engage in this kind of intense interaction – friends, co-workers, colleagues – group members know each other reasonably well, and this acquaintance is likely to affect how they behave.

One reason studies typically use artificially constructed groups of strangers is that this is much easier than going out and finding pre-existing groups that are willing to be observed, while simultaneously controlling for important demographic and situational variables. However, there is a substantial body of literature on one particular group interaction setting: the college classroom.

There's certainly no guarantee that fellow students are intimately acquainted, especially in large classes, but at the very least the class has become a familiar environment by the end of the term.

Sternglanz and Lyberger-Ficek (1977) observed one session each of 60 college classes. They were interested in whether men tended to participate more than women, and whether students' participation was affected by the gender of the teacher. The results revealed two gender-related patterns:

1. When a male teacher initiated an interaction with students, men were more likely to respond than women ($p < .002$). When a female teacher initiated an interaction, there was no difference.
2. Men initiated more interactions (e.g., raising their hands or asking questions) than women did ($p < .003$). The effect was stronger in classes taught by male teachers than in classes taught by female teachers.

A number of similar studies have found the same pattern: in classrooms, men tend to do more talking than women. One thing we can't learn from Sternglanz and Lyberger-Ficek's study is how big this difference was; the authors report tests of statistical significance but not, for example, the average number of times men and women raised their hands. But what we *can* be certain of is that this study provides no evidence that women are inherently more talkative than men.

8.3.4 Casual conversation: Frances (1979)

All the studies we have seen so far examined talk in formal situations: subjects were asked to answer a question, solve a problem, or participate in the relatively formal setting of a college classroom. But people obviously behave differently in formal and informal settings, and the stereotype of women's talkativeness is closely associated with informal settings: women chatting with friends or haranguing their spouses. Maybe the studies we've seen so far just haven't looked for talkative women in the right places.

With this in mind, we turn now to Frances (1979), a study in which the participants were strangers who were asked to do nothing more than get to know each other during a brief conversation. The participants were students at the University of Chicago, 22 men and 22 women each from the Law School and the School of Social Service Administration. Each participant was recorded in two conversations, one with someone of the same sex and another with someone of the opposite sex. Conversations were seven minutes long, but only the last five minutes were analyzed.

Table 8.2 summarizes the results for the number of conversational turns and the average duration of those turns, broken down by the gender of the speaker

Table 8.2 *Amount of talk by gender of speaker and gender of addressee. Average total talk time is calculated from number of talk turns and average duration of talk turns; this figure was not present in the original table, and Frances reports that the differences are not significant. Time is given in seconds. Adapted from Table II of Susan J. Frances, Sex differences in nonverbal behavior,* Sex Roles *5(4): 519–535, 1979. With kind permission from Springer Science and Business Media.*

				Univariate	
Variable	Sex of partner	Mean for males	Mean for females	F	$p <$
Number of talk turns	Male	10.66	14.30	9.07	.004
	Female	14.32	14.32		
Average duration of talk turns	Male	16.64	11.02	3.93	.051
	Female	12.80	11.42		
Total talk time	Male	177.38	157.59		
	Female	183.30	163.53		

and the gender of the addressee. The paper doesn't report the average total talk time, because it wasn't significantly affected by sex, but we can calculate this from the other two averages; those numbers are included in Table 8.2 as well. The statistical test reported in the table tests whether there was a significant interaction between the sex of the speaker and the sex of the listener.

Subjects took an average of about 14 talk turns each during a conversation, except in one type of pair: men talking to men, who took only about 11 turns. By this measure, then, it appears that the women talked more – or, more accurately, that the presence of at least one woman in the pair encouraged more talk overall. But the average duration of those conversational turns suggests the opposite conclusion: during a given turn, men talked longer than women. (The test reported here shows a marginally significant interaction between the sex of the two speakers; in a separate analysis of the speaker only, Frances reports that men took significantly longer turns than women.) In fact, men's longer turns seem to have been enough to overcome the fact that they took fewer of them: there's a trend toward men spending more total time talking than women, regardless of the gender of their partner (although the trend isn't significant).

It's difficult to know what to make of these results. Do we conclude that the women talked more, since they took (and heard) more conversational turns; or that the men talked more, since their turns lasted longer? At the very least, this study does not support popular ideas about the talkativeness of women; there's little evidence here that the women were a great deal more talkative than the men. In addition, as with Aries (1982), there's a suggestion that men

and women may have been engaging in different kinds of talk: women took and heard more conversational turns, but those turns were shorter. Finally, these results drive home the importance of being thoughtful about how we measure overall talkativeness: in this case, measuring the number of conversational turns and measuring the average length of those turns lead to opposite conclusions.

One other thing to note about Frances' results is that she also collected a great deal of data on backchanneling: she measured brief backchannel utterances (*Yes* or *I agree*) as well as some related non-verbal behaviors such as nodding. There were no significant differences between men and women for any of these behaviors. Of course, it may well be that women are more likely to backchannel than men (or vice versa) in other contexts. But, clearly, Gray's claim in *Men Are from Mars, Women Are from Venus* that men don't backchannel at all is simply false.

Like most studies, this one is vulnerable to the criticism that its subjects aren't representative of the broader population. Not only were they all students at a prestigious university, but they were enrolled in programs of study (Law and Social Service Administration) that might be likely to attract talkative people. Maybe the men weren't out-talked by the women here because we're dealing with a group of unusually talkative men to begin with. Alternatively, since all the pairs were strangers, maybe the men wanted to impress their conversational partners and talked more in order to do so.

8.3.5 Gender and power in romantic relationships: Kollock et al. (1985)

Kollock et al. (1985) is a striking study of how men and women behave in conversation, for two reasons: first, because the authors studied couples in existing romantic relationships, and thus (perhaps) elicited more natural conversation than you would expect between strangers in a lab; and second, because they carefully controlled for the relative power held by each member of each couple. Another unique aspect of this study is that the researchers studied both opposite-sex and same-sex couples. The data for same-sex couples is extremely interesting but turns out to be a bit difficult to interpret, so for reasons of space we will restrict our attention here to opposite-sex couples.

The researchers recruited couples who were either married or living together. Each couple filled out a questionnaire that assessed, among other things, the relative power of each member of the couple. (The couples were asked, for example, who usually had more influence in deciding where to go on vacation.) On the basis of these results, three groups of five couples each were selected for further interviews: couples where power was shared equally, couples where the male was substantially more powerful, and couples where the female was substantially more powerful.

Table 8.3 *Mean talking time in seconds by gender and couple type; Table 1 of Kollock et al. (1985).*

	Males	Females	Group Mean
Balanced couples	292	286	289
Couples with male more powerful	385	330	358
Couples with female more powerful	465	373	419
Group Mean	381	330	

During part of the interview, the couples read a series of five stories that described a conflict in a romantic relationship. Each member of the couple read the story separately and wrote down which character he or she believed was more justified; the couples then compared their answers and had to decide *together* who was more justified. To encourage the couples to disagree, the researchers secretly gave each partner a slightly different version of the story, slanted to favor one of the characters over the other. The interviewer left the room during these discussions, which were tape-recorded for later analysis.

Mean talking times for all three types of couples are summarized in Table 8.3. Among the couples where power was shared equally (the 'balanced' couples), both partners talked approximately the same amount. If the man was more powerful, he also tended to talk more; this suggests that talkativeness may be related to power rather than (or in addition to) gender. However, the couples where the woman was more powerful reveal a surprising pattern: the women talked far less than the men; in fact, the men in these couples were the most talkative group of all.[3]

This study seems likely to have elicited pretty natural behavior – the participants were long-established couples, and the interviews happened in their homes. This non-laboratory data fails to support the idea that women are inherently more talkative than men, or that wives typically talk more than their husbands. The results also demonstrate that the power dynamics of the situation have an important effect on how much people talk. However, the effect is not a simple one such as 'the more powerful person talks the most'; clearly, there's a complex interaction between gender and power at work here. (Kollock et al. did find a simpler effect of power on some other types of behavior: the more powerful partner was more likely to interrupt, and there was a trend towards the less powerful partner doing more backchanneling.) Perhaps the

[3] Kollock et al. report that there was a near-significant overall trend ($p < .10$) for men to talk more; however, they don't report male-female comparisons separately for each couple type, so we don't know which of these differences, if any, are significant.

most important conclusion we can draw from this study is that power matters, and it's unwise to draw conclusions from any study about how men and women talk without considering how power dynamics may have come into play.

8.3.6 Behavior over an entire day: Mehl et al. (2007)

The problem with nearly every study on the talkativeness of men and women is that laboratory experiments are inevitably situation-specific: subjects are asked to perform a particular task in a strange environment, often in a limited amount of time. If a study fails to find that women talk more than men, it's always possible that the researchers just happened to choose one of the few situations in which women are unusually quiet. The best evidence that women are natural talkers would come from a variety of situations: talking to friends, chatting with cashiers, engaging significant others in conversation, and so on. If we wanted to design a perfect study of this hypothesis, we would find a whole bunch of men and women, record them unobtrusively for days at a time, and compare the number of words each group spoke.

As it turns out, Mehl et al. (2007) is very close to this ideal experiment. The researchers studied the everyday speech of six groups of college students, five in the United States and one in Mexico, between 1998 and 2004. Subjects wore a microphone connected to a small digital recorder that recorded 30-second snippets of their speech periodically throughout the day; subjects didn't know when the recorder was on or off. Each subject wore the recorder for several days, and afterwards had the opportunity to delete any recordings he or she wished to (although, as it turned out, they did this only rarely). Subjects reported that they believed they were mostly unaffected by the presence of the recorder, although there's always the possibility that they had unconsciously altered their behavior.

The researchers counted the number of words spoken in each recording and, assuming that subjects were awake for 17 hours a day, used their sample to estimate the total words spoken per day by each subject. Although these numbers are clearly approximate (and we might ask whether the 17-hour day is an accurate estimate for college students), the extrapolation seems relatively safe in this case because the speech samples were taken throughout the day. Thus, the figures represent subjects' speech (or lack thereof) in a wide range of situations – attending class, folding laundry, eating lunch, or whatever else they happened to be doing.

At the low end, some subjects were estimated to speak only a few thousand words per day; at the high end, a few talkative individuals managed nearly 50,000. (Both extremes included both men and women.) For both men and women, though, the average is around 16,000; more precisely, the average for

women is 16,215 and the average for men is 15,669. At $p = .248$, this difference is not statistically significant. Moreover, even if the difference *were* significant, the difference *between* the two groups is dwarfed by the variation *within* each group. There's simply no evidence here for the claim that women talk more than men, or that women talk three times as much as men, or that men use only 7,000 words per day.

As close as this experiment is to the perfect study of how much men and women talk, it is not above reproach. Like many social science experiments, this one involves a relatively homogenous group of college students, who may not be representative of the broader population. Furthermore, it's possible that certain types of people were less likely to volunteer for this study in the first place; for example, maybe especially talkative women were reluctant to be recorded for fear that they would reveal sensitive personal information. The huge amount of variation among both men and women makes this scenario unlikely, and we would have to add a very large number of talkative women or taciturn men to the results in order to come up with anything like the differences that have been claimed in the popular press – but it's always possible that the subjects were to some degree self-selected. Imperfect though it may be, this study casts further serious doubt on the claim that women talk a lot more than men; it's the best study of the question to date, and it's certainly more trustworthy than the *zero* studies supporting the numbers cited in Liberman (2006b).

8.3.7 Perception and reality: Cutler and Scott (1990)

The idea that women talk three times as much as men is clearly a myth: it's thoroughly discredited by the experimental literature, and the numbers that are often cited to accompany this claim were apparently plucked out of thin air. So why do so many people believe it anyway?

The cynical answer is that people will believe anything they're told, especially by reputed experts in the popular press, but this doesn't seem to be the whole story. One reason these statistics have such staying power appears to be that many people already believe something like this, and are convinced that their own experience is full of talkative women and laconic men. When yet another story about chatty women makes the rounds in the media, one of the most common reactions is 'Why did we need a study to tell us that?'

In all likelihood, many people genuinely *do* see more talkative women and silent men in their daily lives – they simply don't notice talkative men and silent women, or else consider them exceptions to the rule. Cutler and Scott (1990) is a fascinating illustration of the ways in which our beliefs about the world affect the way we perceive it. In this study, subjects listened to four brief

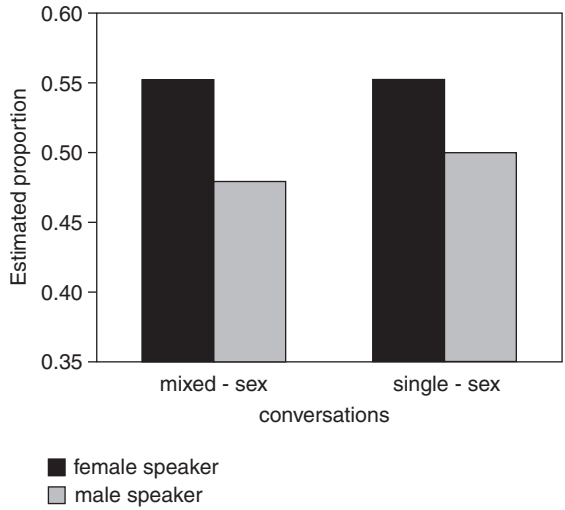


Figure 8.2 Average proportion of the conversation attributed to the first speaker, by gender of the first speaker and composition of the pair. Anne Cutler and Donia R. Scott, Speaker sex and perceived apportionment of talk, *Applied Psycholinguistics* 11(3):253–272, 1990, Figure 1.

dialogues and estimated what proportion of the total talking was done by each speaker.

As a matter of fact, three of the four dialogues had almost perfectly equal contributions from the two speakers, as measured by number of words; in the fourth, one participant spoke twice as much as the other. The dialogues were recorded by actors, and there were four versions of each: one in which the first speaker was female and the second speaker was male, one in which the first speaker was male and the second speaker was female, and two in which both speakers were of the same gender. Each subject heard only one version of each dialogue.

Figure 8.2 summarizes subjects' judgments about how much talk was contributed by the first speaker. For single-sex couples, subjects accurately estimated that both speakers contributed about 50% of the dialogue, regardless of whether the speakers were male or female. For mixed-sex couples, though, there is a striking difference: the first speaker was judged as contributing more than half of the conversation when the part was read by a woman, but as contributing less than half when the part was read by a man. In other words, when subjects heard a conversation between a man and a woman, they perceived the woman as talking more than she actually did.

The differences here aren't enormous – female speakers in mixed-sex pairs were estimated to contribute, on average, about 55% of the conversation – but the bias is clear. Our belief that women tend to talk more than men causes us to actually see more talkativeness in women, even when it's not there. It's easy to imagine other ways confirmation bias could reinforce popular opinion: a group of women chatting over drinks after work is a living demonstration of women's talkativeness, while a group of men doing the same thing is just normal social behavior.

8.3.8 General conclusions

There is not a shred of evidence that women use an average of 20,000 words a day while men use only 7,000 (or any of the other numbers that have been plugged into this formula). In fact, one consistent finding in the experimental literature has been that in many (but not all) situations, it's *men* who talk more. In the real world, gender is at best just one factor among many that affect language use; social expectations (some of which are related to gender), interpersonal dynamics and power relationships, and of course individual differences have a huge effect on how, and how much, people talk.

8.4 Case study: Do women use more tag questions than men?

In a now-famous book, *Language and Woman's Place*, Robin Lakoff argues that women's use of language is related to their subordinate place in society. She claims that women have been socialized to use language in a way that is polite, non-threatening, and submissive; this puts women in a double bind, because women who speak this way are viewed as uncertain and incompetent, while women who use 'masculine' language are labeled unfeminine and aggressive. Lakoff's conclusions were based on her personal impressions of language use among men and women she knew, and her work spawned a cottage industry of research on whether men and women really do differ in the ways that she claimed.

One of Lakoff's specific claims was that women are more likely to use a syntactic construction known as *tag questions*. A tag question appears at the end of a sentence and contains a pronoun plus *do*, *be*, *have*, or the modal verb of the main sentence; the tag is negative if the main sentence is positive, and vice versa. Lakoff argues that a tag question typically indicates that the speaker is uncertain about the statement, and that women tend to use tag questions in order to avoid expressing their opinions too directly.

(1) An 'uncertain' tag question, from Lakoff (1975, 16)
The way prices are rising is horrendous, isn't it?

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Before we start counting tag questions in men's and women's speech, we should take a moment to consider the premise that tag questions express uncertainty. This is certainly a plausible function of tag questions; compared to the straightforward statement *The way prices are rising is horrendous*, the tag question in (1) seems to convey uncertainty or at least imply that the claim is open for discussion. On the other hand, when we look at a broad range of examples, it's easy to find tag questions that are anything but uncertain. Harris (1984), for example, studied questions of all kinds in the proceedings of magistrates' courts in Nottinghamshire County, where defendants are brought in for non-payment of fines or maintenance. Some of the tag questions uttered by the magistrates when questioning the defendants are downright aggressive:

(2) Non-tentative tag questions, quoted in Harris (1984, 10, 21)
   a. Everybody else seems to have done something but you, don't they?
   b. You'd better not argue with any foreman in the future, had you?
   c. But you've shown no good will about that, have you?

Rather than conveying uncertainty about the main proposition, the tag questions in these examples essentially demand that the defendant agree with, or at least respond to, the magistrate's accusatory statement. It's inaccurate, then, to say that tag questions are always tentative.

Holmes (1982) studied tag questions in a large corpus of recorded speech from a variety of contexts – formal interviews in radio or television, classroom discussion, and casual conversation among friends. She argues that, considered from the point of view of their role in the larger discourse, there are two major types of tag questions. The first type, which she calls *modal* tags, provide information about the speaker's degree of conviction; basically, they express doubt or uncertainty.

(3) Modal tag questions, quoted in Holmes (1982, 51)
   a. TEACHER: Is there a blackboard?
      PUPIL: That could be a blackboard couldn't it?
   b. A: It used to be – now what did it use to be called? The Estancia or something or other.
      B: Used to be the Cantina didn't it?
      A: No well well it's been various things.

By contrast, the tag questions that Holmes calls *affective* express something about the speaker's attitude toward the addressee. Holmes distinguishes among several subtypes of affective tags; *facilitative* tags, for example, are used to encourage the addressee to talk.

(4) Affective (facilitative) tag questions, quoted in Holmes (1982, 53–54)
   a. HOSTESS: Ray had some bad luck didn't you Ray?
   b. TEACHER: The hen's brown isn't she?
   c. INTERVIEWER: It was because of the tension wasn't it?

Other tag questions are appended to relatively uncontroversial statements of opinion; Holmes argues that these tags establish solidarity between the speaker and the addressee by inviting the addressee to agree.

(5) Affective tags that express solidarity, quoted in Holmes (1982, 57–58)
   a. These veggies are bloody good aren't they?
   b. That's really strange isn't it?

These categories aren't intended to be exhaustive; for example, the magistrates' questions quoted above do not obviously fit into any of Holmes' categories. Nor are they mutually exclusive: Holmes notes that tag questions can be both modal and affective at the same time. The point is to emphasize that a single syntactic construction can have many different discourse functions; it's naïve to count tag questions and conclude, as a number of studies have done since Lakoff's work was published, that this is equivalent to measuring 'tentative language'.[4]

8.4.1 The social function of tag questions: Cameron et al. (1989)

Cameron et al. (1989) analyzed tag questions using Holmes' system of classification. They were interested in the relationship between gender and power, so they obtained data from two separate corpora: one set of conversations among middle-class adults, and one group of recordings from broadcast media in which there was a clear power difference between participants.

In the first corpus, a subset of the Survey of English Usage (SEU), Cameron et al. coded every tag question as either modal or affective and noted the gender of the speaker. Contrary to Lakoff's hypothesis, they found that men tended to use more tag questions of both types. Moreover, women and men used different kinds of tag questions: men were more likely than women to use modal tags. This latter pattern is particularly interesting because it suggests that men, not women, were more likely to use the kinds of tag questions that genuinely convey uncertainty.

The second corpus consisted of nine hours of recordings from a medical call-in radio show, televised classroom interaction, and a general television

[4] Lakoff's discussion of tag questions is very brief, but she does acknowledge that they have functions other than expressing uncertainty; she was certainly not suggesting that we can simply count tag questions as a proxy for tentativeness.

discussion program. In each setting, Cameron et al. distinguished between the 'powerful' conversational participants (doctor, teacher, presenter) and the 'powerless' participants (caller, student, guest). If tag questions mark uncertainty or tentativeness and therefore tend to be used by individuals in subordinate positions, we would expect the powerless participants in these conversations to use more tag questions.

But that's not what Cameron et al. found. Instead, the overwhelming majority of the tag questions in the corpus were spoken by the *powerful* participants; hardly any tag questions were used by the powerless participants, and those few that they did produce were all modal. (It's intriguing that the type of tag question favored by the powerless participants in these settings is the same as the type of tag question that emerged as characteristic of men in the SEU corpus.) Affective tags were used frequently and exclusively by the powerful participants. Moreover, in contrast to the SEU corpus, this dataset suggests that men and women use tag questions at approximately the same rate overall.

Where Lakoff suggested that overusing tag questions was related to the subordinate status of women, these results suggest that at least some tag questions are actually characteristic of people in positions of power. Facilitative tags may be the best illustration of why these two very different interpretations are both plausible: using a tag question to encourage you to speak could be an act of submission (I acknowledge that you have a better right to speak than I do) or just the opposite (I have the authority to give you permission to speak). It's the second dynamic that appears to play out in Cameron et al.'s real-world dataset.

These results are extremely suggestive, but we can't take them as the final word on the relationship between gender, power, and tag questions. One limitation of the second corpus is that it involves only 'friendly' power differentials – a very different dynamic from the one that Harris found in magistrates' courts, for example. It would be instructive to explore whether patterns of tag question use are different in a more confrontational setting. In addition, the power dynamic in television discussion shows is more complex than the simple powerful-powerless dichotomy. The powerful status of the television presenter is very clear if she's interviewing a local man who discovered the image of L. Ron Hubbard on his grilled cheese sandwich; it's much less clear if the interviewee is a high-ranking politician. Finally, Cameron et al. don't report any tests of statistical significance for their data, which means that we must treat these results with extreme caution.

What we can conclude for certain is that the meaning of tag questions, and how they're used by men and women, is anything but straightforward. Cameron et al. argue even more strongly than Holmes that tag questions, like any syntactic construction, have a variety of uses that are heavily influenced

by the social context. Tag questions don't necessarily convey tentativeness – sometimes they convey just the opposite – and there is no evidence here that women are more likely to use tag questions anyway.

8.4.2 Group membership and solidarity: Reid et al. (2003)

Holmes argues that one function of tag questions is to maintain solidarity between the speaker and the addressee. What happens if that solidarity is disrupted? Reid et al. (2003) studied how men's and women's use of tag questions is affected by the degree to which they see themselves as part of the same group as their conversational partners.

Reid et al. asked 42 students at the University of Queensland, in pairs, to discuss a controversial topic for 10 minutes. The topics, such as 'Capital punishment should be instituted in Australia', had been determined by a screening questionnaire to be gender-neutral – that is, they found no differences between men and women in their position on the topics. Each pair consisted of one man and one woman; they were assigned a topic for which they had indicated opposite positions on the screening questionnaire. Before the discussion began, subjects received instructions that purported to tell them what the experiment was about. The researchers laid it on thick:

> We are comparing males and females in the way that they co-ordinate their discussions of different issues. In our previous research we have found that males and females differ quite sharply in the way that they approach issues such as (the topic of discussion). We can't give you any details, because we will be testing an explanation for these differences in today's study. What we can tell you, is that there is a very stable and consistent difference between males and females that has been found in several other studies. We will point these out to you after the discussion. We have separate databases for males and females, and at the end of today's study, we will enter your data into these databases for later comparison.

Half of the pairs received these instructions; the other half received instructions that were identical except that they substituted 'university and high-school students' for 'males and females'. Thus, pairs who were told that the study was about gender were made to feel that they were part of separate groups, while the pairs who were told that the study was about university and high-school students were made to feel that they were part of the same group.

Reid et al. were interested in 'tentative language' in general; in addition to tag questions, they counted 'hedges' (*probably*, *kinda*, etc.) and 'disclaimers' (*I think*, *seems to be*, etc.). Results for tag questions are not reported separately. We have already seen that it's dangerous, to say the least, to assume that tag questions are automatically tentative; Reid et al. state that they didn't count tag questions and other constructions that were used non-tentatively, but

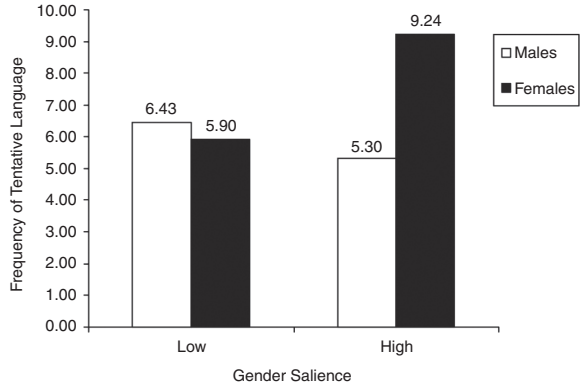

Figure 8.3 Frequency of 'tentative' language by gender and experimental condition. Scott A. Reid, Natasha Keerie, and Nicholas A. Palomares, Language, gender salience, and social influence, *Journal of Language and Social Psychology* 22(2), pp. 210–233, Figure 2, copyright 2003. Reprinted by permission of SAGE Publications.

unfortunately they provide no details on how they made these judgments. Thus, we should interpret these results with a great deal of caution.

These problems notwithstanding, Figure 8.3 reveals a striking difference between the two experimental conditions. In the low gender salience condition – where subjects were told that the experiment was about the difference between university and high-school students – there was no appreciable difference between men and women. But in the high gender salience condition, women used 'tentative' language much more, while men remained about the same.

We can't draw easy conclusions from this experiment about how men and women use tag questions; we don't know how much of the increase in women's tentative language involved tag questions as opposed to hedges or disclaimers. Nor can we be confident about men's and women's use of tentative language in general, given what we know about the dangers of using tag questions as an index of uncertainty. But these results strongly suggest that there is yet another layer of complexity to the contextual factors that affect language use: even something as simple as reminding the two participants in a conversation that they belong to two different genders can have a striking effect on their behavior.

8.4.3 Solving tasks as a group: McMillan et al. (1977)

In contrast to the largely dyadic interactions explored in the previous two studies, McMillan et al. (1977) investigated tag questions in a group setting. In this

Table 8.4 *Average number of tag questions per speaker by gender and composition of the group. Adapted from Table II of Julie R. McMillan, A. Kay Clifton, Diane McGrath, and Wanda S. Gale, Women's language: Uncertainty or interpersonal sensitivity and emotionality?,* Sex Roles *3(6): 545–559, 1977. With kind permission from Springer Science and Business Media.*

	Women	Men
Same-sex	2.64	1.83
Mixed	7.29	2.52

study, subjects solved a murder mystery in groups of 5 to 7; each member of the group received index cards with clues, which they had to share verbally (meaning that everyone in the group had to talk). The group sessions lasted 30 minutes.

As shown in Table 8.4, the women in this study tended to use more tag questions than the men; McMillan et al. report that not only was the overall difference between men and women significant, but that women used significantly more tag questions in mixed-sex groups than in same-sex groups ($p < .001$ for both comparisons). This pattern of results supports Lakoff's hypothesis that tag questions are used especially by women.

Interestingly, even though their results are consistent with Lakoff's hypothesis, McMillan et al. argue against the idea that tag questions (and other constructions mentioned by Lakoff, such as intensifiers and commands in question form) express women's uncertainty or tentativeness. Instead, they argue, these constructions are part of women's greater interpersonal sensitivity. On their view, using a tag question isn't a way of apologizing for expressing an opinion, but rather a way of showing active concern for other members of the group. They point out that men used slightly more tag questions in the presence of women (although the increase was not significant) and suggest that it's unlikely that the men were adopting a more subordinate position in mixed-sex groups.

Thus, even this set of results, which is more consistent with Lakoff's hypothesis than anything we have seen so far, is open to other interpretations. More generally, the complexity that we see associated with tag questions should make us cautious about trying to draw conclusions about people's thoughts or attitudes from low-level linguistic constructions or even individual words. Large linguistic datasets are becoming increasingly available, and researchers in many fields are eager to use them: journalists want to identify bias in the

media; marketers want to monitor the mood of their customers on social media; historians want to study how social attitudes have changed over time; governments want to pinpoint potential criminal activity. Before we decide that a particular syntactic construction or a particular set of words reveals something about the thoughts and attitudes of the people who use it, we must be certain that it really is consistently associated with particular kinds of meanings. In the case of tag questions, we have a syntactic construction that simply has no straightforward connection to a single social meaning.

8.4.4 General conclusions

Lakoff's influential analysis of language and gender argued that women are more likely than men to use tag questions and other linguistic devices that indicate uncertainty. Subsequent studies have found some evidence that women are slightly more likely to use tag questions, although the difference (when there is one) is highly dependent on contextual factors. More importantly, however, detailed analysis has shown that tag questions have many uses and don't necessarily demonstrate tentativeness. In fact, there are situations where tag questions are characteristic of the more powerful individual. Overall, we should be extremely cautious when attempting to make simple connections between the linguistic form of an utterance and its social meaning.

8.5 Summary

- Many societies believe that men and women speak differently. Historically, men have typically been perceived as better speakers than women.
- Specific beliefs about how men and women are different vary from culture to culture. In modern western society, women are seen as more polite and indirect than men; in some other parts of the world, women are believed to be aggressive and unsophisticated.
- One popular current view is that men and women have different, but equally good, ways of speaking. Experimental work suggests that there are indeed some differences, but they are subtle and highly context-dependent. The reasons for these differences are still hotly debated.
- Women are frequently claimed to talk more than men. There is no experimental evidence to support this idea; the best studies show than men and women, on average, talk about the same amount.
- One scholar proposed the influential hypothesis that women use more tag questions than men and therefore are more tentative. There is evidence that

women use more tag questions in some situations, but tag questions have many functions other than expressing uncertainty.

For further reflection

(1) Interview two people you know who come from different countries; ask them whether they think men and women use language differently, and if so, for specific examples of these differences. In what ways are your interviewees' answers similar, and in what ways are they different? Which, if any, of the common beliefs about male-female differences discussed in this chapter were mentioned by your interviewees?

(2) Go to www.cambridge.org/kaplan and download the file 'Tag Questions', which contains excerpts from the Switchboard corpus with tag questions underlined. Read a sample of the conversations and identify one tag question with each of the following properties:

a. A modal tag question.
b. An affective tag question.
c. A tag question that is both modal and affective.
d. A tag question that shows uncertainty or tentativeness.
e. A tag question that does *not* show uncertainty or tentativeness.
f. A tag question that you are unsure how to interpret. Explain what kind of information you would need in order to understand it better (e.g., the intonation the speaker used).

To familiarize yourself with what is going on in these conversations, read Section 1, Section 8, and Attachment 2 of the Switchboard manual at the following url:

https://catalog.ldc.upenn.edu/docs/LDC97S62/swb1_manual.txt

(3) Other examples of research on language and gender include Hammen and Peplau (1978) and Brooks (1982) on amount of talk and Grob et al. (1997) on tag questions. Read and evaluate one of these papers. In addition to considering general questions of experimental methodology, think about the specific social context that the authors studied. In what ways might this context have interacted with gender to affect subjects' behavior?

Further reading

Cameron (2007) is a non-technical account of popular views on men and women and related linguistic research; this book emphasizes similarities between men and women. Eckert and McConnell-Ginet (2003) and Coates

(2004) are textbooks on language and gender; Coates and Pichler (2011) is a collection of important scholarly papers in the field. Cameron and Kulick (2003) is an accessible overview of research more generally on language, sexuality, and sexual identity.

The difference and dominance models discussed in section 8.1.3 are not the only way to understand gendered behavior. An alternative, known as the 'social constructionist' approach, considers how speakers use language to construct and maintain social identities, and emphasizes that gender and other social factors interact in ways that are highly context-specific. An example of this approach is Bucholtz (1998), a case study of 'nerd girls' in a Bay Area high school.

McLemore (1990) analyzes the functions of 'uptalk' in a Texas sorority.

The experimental literature on gender differences in language is enormous. Further examples of research on gender and amount of talk, at various levels of technicality, include Marlatt (1970) (interview setting), Hammen and Peplau (1978) and Martin and Craig (1983) (casual conversation among undergraduates), Martin et al. (1996) (casual conversation among elderly adults), Leet-Pellegrini (1980) (interaction between gender and expertise), and Boersma et al. (1981) and Brooks (1982) (college classrooms). James and Drakich (1993) present a highly accessible descriptive summary of a large number of studies on gender and amount of talk, arguing that the setting and task have an important effect on men's and women's behavior. Leaper and Ayres (2007) is a meta-analysis of gender and amount of talk, and Leaper and Robnett (2011) of gender and 'tentative language' (including tag questions). For a technical overview of gender differences in verbal ability, see Wallentin (2009).

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