

REPORT

PSYCHOLOGY

How “you” makes meaning

Ariana Orvell,* Ethan Kross,* Susan A. Gelman*

“You” is one of the most common words in the English language. Although it typically refers to the person addressed (“How are you?”), “you” is also used to make timeless statements about people in general (“You win some, you lose some.”). Here, we demonstrate that this ubiquitous but understudied linguistic device, known as “generic-you,” has important implications for how people derive meaning from experience. Across six experiments, we found that generic-you is used to express norms in both ordinary and emotional contexts and that producing generic-you when reflecting on negative experiences allows people to “normalize” their experience by extending it beyond the self. In this way, a simple linguistic device serves a powerful meaning-making function.

“I fight like hell to pay as little [in taxes] as possible ... I’m a businessman. And that’s the way you’re supposed to do it.”

— Donald Trump, 2 August 2015, on CBS’s Face the Nation

“I think when tragedy occurs, it presents a choice. You can give in to the void, the emptiness that fills your heart, your lungs, constricts your ability to think or even breathe. Or you can try to find meaning.”

— Sheryl Sandberg, 3 June 2015, on Facebook

Few words are as frequent in the English language as the pronoun “you” (1). Typically, “you” is characterized as a second-person pronoun, referring to the individual(s) one is addressing (for example, “Are you free for lunch tomorrow?”). It is the verbal equivalent of pointing to one’s audience. Yet as the quotations that begin this paper illustrate, “you” has a secondary usage as well: It is often used to refer to people in general.

Thus, a word that is typically characterized by its specificity, context-dependence, and focus on the addressee can also convey broad generalizations that extend beyond time or place. We refer to this usage as “generic-you” (2–4).

Despite speakers’ frequent use of “you” in these opposing ways (3), the psychological function of generic-you has not been empirically examined. Here, we suggest that generic-you is a linguistic mechanism that people use to make meaning from human experience—to derive insights that extend beyond the self (5, 6)—and that it does so by expressing norms. We first demonstrate that people use generic-you to express norms about common, everyday behaviors (such as how to use

a hammer, or what to do on a rainy day). Next, we show that generic-you serves a similar function in a different context: It helps people “normalize” negative experiences by extending them beyond the self. In these ways, a simple linguistic device serves a powerful meaning-making function.

As a starting point, we propose that generic-you is used to express norms: general rules or expectations about how things should be (7). This hypothesis is motivated by research linking generic noun phrases (for example, “dogs,” “boys,” or “scientists”) and norms. Generic statements (such as “Dogs are four-legged”) have normative implications and are characterized as having a “law-like character,” as reflected in their temporal unboundedness (8). Further, generic nouns can be used in a normative sense (for example, “Boys don’t cry”), even when they are not descriptively accurate (9–11). Relatedly, norms and values are themselves fundamentally abstract and general across individuals (12), something even young children grasp (13–15). Although generics and norms have been linked in prior research, such demonstrations may reflect what people have learned about particular concepts or categories (such as dogs, boys, or games). We tested the broader hypothesis that the generic form of the word “you” preferentially expresses normative concepts about people in general.

To examine this idea, experiment 1 used an online writing task to test the hypothesis that people use generic-you more when expressing norms than preferences. Participants were randomly assigned to either a Norms ($n = 100$ participants) or Preferences ($n = 107$ participants) condition and presented with questions about six everyday objects (for example, hammers or shirts). Participants in the Norms condition were asked, “What should you do with Xs [for example, hammers]?”; participants in the Preferences condition were asked, “What do you like to do with Xs [for example, hammers]?” (16, 17). The prompts were deliberately ambiguous, so that a written response with “I” (for example, “I should pound in nails”) would indicate that “you” in the question was interpreted in its canonical sense

(referring to the addressee, the participant), whereas a response with “you” (for example, “You should pound in nails”) would indicate that “you” in the question was interpreted in its generic sense (referring to people in general). As illustrated in Fig. 1A, participants’ responses shifted significantly as a function of condition; they used generic-you more in their responses in the Norms condition and used first-person singular pronouns more in their responses in the Preferences condition [condition \times response interaction, $F_{1,205} = 194.47$, $P < 0.001$, partial eta-squared (η_p^2) = 0.49].

Experiment 2 tested whether a subtler prompt that only implied a normative context would also elicit a generic interpretation of “you.” Conventional interactions with artifacts are guided by norms and rules (18, 19); thus, we expected that simply asking people what they do with various objects would lead them to draw on rules associated with each type of object. Participants were randomly assigned to either a Rules condition ($n = 100$ participants)—for example, “What do you do with Xs [for example, hammers]?”—or a Preferences condition ($n = 104$ participants)—for example, “What do you like to do with Xs [for example, hammers]?” As shown in Fig. 1B, the results of this experiment mirrored experiment 1 (condition \times response interaction, $F_{1,202} = 139.71$, $P < 0.001$, $\eta_p^2 = 0.41$) (20).

In experiments 1 and 2, participants were presented with different questions to prompt them to think in terms of norms versus preferences. To demonstrate that the critical factor driving the use of “you” versus first-person singular pronouns in participants’ responses was their normative versus non-normative interpretation of the questions, rather than particular features of the questions they received, experiment 3 presented all participants with precisely the same questions (for example, “How do you cook a turkey?” or “What do you do on a rainy day?”) but varied the context in which they were presented. Participants who were randomly assigned to the Norms condition ($n = 101$ participants) were asked to consider “what should and should not be done,” whereas participants who were randomly assigned to the Preferences condition ($n = 104$ participants) were asked to consider “what is liked and disliked.” As illustrated in Fig. 1C, the results of this experiment directly replicated experiments 1 and 2 (condition \times response interaction, $F_{1,203} = 40.12$, $P < 0.001$, $\eta_p^2 = 0.17$).

Experiments 1 to 3 demonstrate that generic-you is used to express norms about routine actions associated with everyday objects and behaviors (such as “You pound in nails” or “You swim at the pool”), but both anecdotal observations and qualitative research suggest that generic-you may also be used to express norms regarding deeply personal, negative experiences (as in the Sandberg quote at the beginning of this paper) (21, 22). Given the findings from experiments 1 to 3, we hypothesized that using generic-you to reflect on such experiences should promote meaning-making by allowing people to “normalize” their situation—that is, by situating their experience beyond the self and considering it as an exemplar of a broader,

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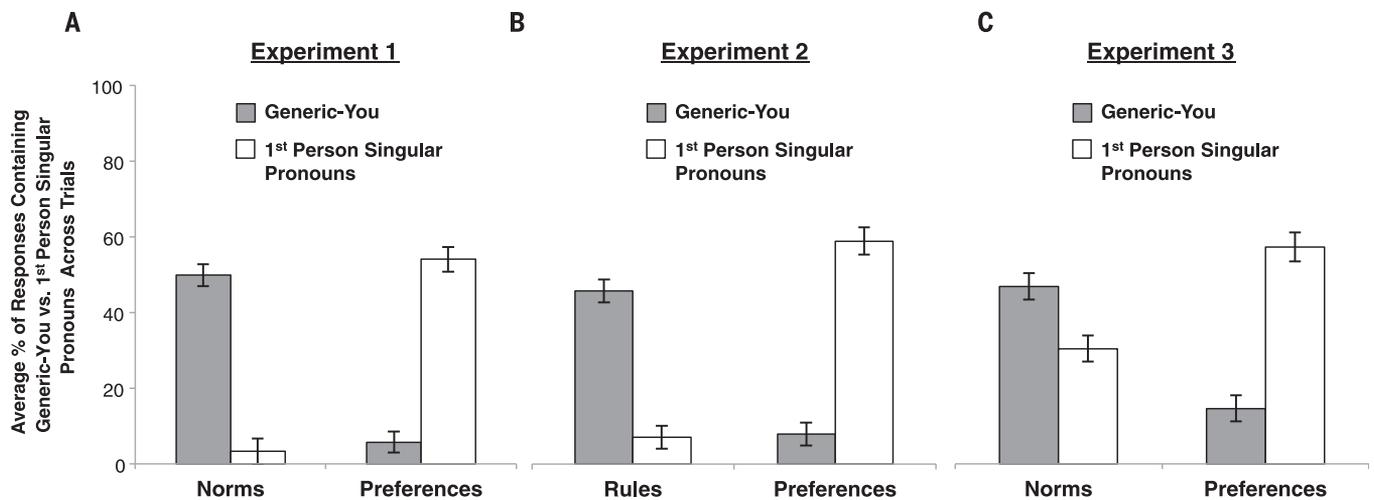


Fig. 1. Average percentage of responses including generic-you versus first-person singular pronouns by condition for experiments 1 to 3.

(A) In experiment 1, pairwise comparisons indicated that participants in the Norms condition used generic-you significantly more than those in the Preferences condition ($t_{205} = 10.94$, $P < 0.001$, $d = 1.53$). In contrast, participants in the Preferences condition used first-person singular pronouns significantly more than those in the Norms condition ($t_{205} = 10.71$, $P < 0.001$, $d = 1.50$). (B) In experiment 2, pairwise comparisons indicated that participants in the Rules condition used generic-you significantly more than did those in

the Preferences condition ($t_{202} = 8.81$, $P < 0.001$, $d = 1.24$). In contrast, participants in the Preferences condition used first-person singular pronouns significantly more than did those in the Rules condition ($t_{202} = 10.14$, $P < 0.001$, $d = 1.43$). (C) In experiment 3, pairwise comparisons indicated that participants in the Norms condition used generic-you significantly more than did those in the Preferences condition ($t_{203} = 6.56$, $P < .001$, $d = 0.92$). In contrast, participants in the Preferences condition used first-person singular pronouns significantly more than did those in the Norms condition ($t_{203} = 4.90$, $P < 0.001$, $d = 0.69$).

more normative phenomenon. Experiments 4 to 6 tested these predictions.

As a starting point, experiment 4 examined whether people use generic-you when reflecting on negative experiences. Prior work indicates that people are highly motivated to make meaning out of negative events (23–26). Thus, we predicted that people who were randomly assigned to write about a negative autobiographical experience ($n = 41$ participants) would be more likely to use generic-you than people who were randomly assigned to write about a neutral autobiographical experience ($n = 48$ participants). Two judges coded participants' essays for all instances of generic-you. As predicted, individuals in the negative writing condition used generic-you more in their essays (56.1% generated generic-you at least once) than did those in the neutral writing condition (6.3% generated generic-you at least once) [nonparametric Mann-Whitney U test, $U = 1509$, $z = 5.38$, $P < 0.001$, correlation coefficient (r) = 0.57].

But is generic-you explicitly linked to efforts to make meaning, as the theory guiding this work suggests, or is it elicited more broadly when people reflect on negative (versus neutral) emotional experiences? Experiment 5 sought to identify the mechanism eliciting generic-you in negative emotional contexts by randomly assigning participants to one of three conditions. In the Meaning-Making condition ($n = 201$ participants), participants were instructed to recall a negative experience and then write about what lessons they could learn from it. In contrast, in the Relive condition ($n = 198$ participants), participants were instructed to recall a negative experience and then write about the emotions they experienced during the

Box 1. Generic-you statements from experiment 5. Excerpts from the essays of participants who were randomly assigned to the Meaning-Making condition.

- You can actually learn a lot from others who see things differently than you.
- Stand your ground firmly, and don't alter your life if you're not ready for a big change.
- Sometimes people don't change, and you have to recognize that you cannot save them.
- When you take a step back and cool off, sometimes we see things from a different perspective.
- When you are angry, you say and do things that you will most likely regret.
- Pride is something that can get in the way of your happiness.

event; they were not instructed to make meaning. Last, we included an additional control group, in which participants wrote about a neutral experience ($n = 203$ participants). As predicted, there was a significant effect of condition on generic-you usage (Kruskal-Wallis nonparametric H test, $H(2) = 141.08$, $P < 0.001$). Participants in the Meaning-Making condition used generic-you significantly more in their essays (45.8% generated generic-you at least once) than did participants in the Relive condition (10.1% generated generic-you at least once) ($z = -9.17$, $P = 0.001$, $r = 0.46$) and in the Neutral condition (2.5% generated generic-you at least once) ($z = 11.12$, $P < 0.001$, $r = 0.55$) (27).

A central idea motivating this work is that generic-you allows individuals to establish norms that extend beyond their own experience (sample generic-you responses produced by participants in the Meaning-Making condition are provided in Box 1) (2, 7, 28). Thus, we predicted that generalizing beyond the self by using generic-you should promote psychological distance, a process that has been shown to enhance people's ability to make meaning out of negative experiences (29–31). To examine this prediction, participants in experiment 5 rated their degree of psycholog-

ical distance from the event (how close or far it felt) after writing about it (32). As expected, mediation analyses indicated that asking people to make meaning out of their negative experience led them to use more generic-you in their writing, which in turn was associated with higher levels of psychological distance (Fig. 2) (33, 34).

Experiment 6 was designed to gather causal evidence that generic-you enhances psychological distance. All participants were asked to derive meaning from a negative autobiographical experience but, in contrast to the prior experiment, were instructed to do so by using either first-person singular pronouns (such as "I" or "my") ($n = 202$ participants) or generic-you (such as "you" or "your") ($n = 143$ participants) (35). Participants then reported their degree of psychological distance from the event. As predicted, participants in the generic you-condition [mean (M) = 3.53] reported significantly more distance from the event than those in the "I" condition ($M = 3.00$, $F_{1,343} = 6.95$, $P = 0.009$, $\eta_p^2 = 0.02$).

Although generic-you is similar to other forms of generic language, which are used to express broad generalizations (36, 37), it is distinctive in two key respects. First, generic-you often expresses

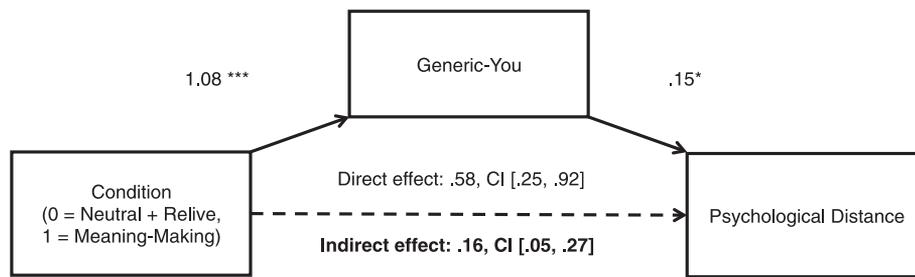


Fig. 2. Mediation results for experiment 5. Model tests the indirect effect of condition (0 = Relive + Neutral, 1 = Meaning-Making) on psychological distance through generic-you by using a 95% confidence interval with 10,000 bootstrapped samples. The confidence interval for the indirect effect does not cross zero, indicating significant mediation. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

generalizations that are deeply self-relevant. It may seem paradoxical that a means of generalizing to people at large is used when reflecting on one's most personal and idiosyncratic experiences. However, we suspect that it is precisely this capacity to move beyond one's own perspective to create the semblance of a shared, universal experience that allows individuals to derive broader meanings from personal events (5, 12, 29). That generic-you is recruited at such high rates in this context suggests that this linguistic device may constitute a central way that people derive meaning from their emotional experiences in daily life.

The second distinctive aspect of generic-you is the word itself—namely, a pronoun that is highly specific and context-bound can also express meanings that are general and context-free. This double usage is not a peculiarity of English; it appears in a variety of unrelated languages (2, 28, 36, 37). The current findings suggest a resolution to this seeming paradox: We propose that “you” may have taken on a generic meaning precisely because it stands in opposition to “I” (“you” is “not-I”) and thus provides a stark form of distancing from the self. Together, these findings demonstrate how language is structured to facilitate the process of making meaning from one's experiences.

REFERENCES AND NOTES

1. M. Davies, *Word Frequency Data from the Corpus of Contemporary American English (COCA)* (2011); www.wordfrequency.info.
2. S. Laberge, G. Sankoff, “Anything you can do,” in *Discourse and syntax*, T. Givón, Ed. (Academic Press, 1979).

3. R. Berry, *Engl. Today* **25**, 29 (2009).
4. A. Kamio, *J. Pragmatics* **33**, 1111–1124 (2001).
5. C. L. Park, *Psychol. Bull.* **136**, 257–301 (2010).
6. K. C. McLean, M. W. Pratt, *Dev. Psychol.* **42**, 714–722 (2006).
7. D. L. Bolinger, *Am. Speech* **54**, 194–209 (1979).
8. A. Mari, C. Beyssade, F. Del Prete, Eds., *Genericity* (Oxford Univ. Press, 2012).
9. S. Prasada, E. M. Dillingham, *Cognition* **99**, 73–112 (2006).
10. J. Knobe, S. Prasada, G. E. Newman, *Cognition* **127**, 242–257 (2013).
11. D. Wodak, S. J. Leslie, M. Rhodes, *Philos. Compass* **10**, 625–635 (2015).
12. Y. Trope, N. Liberman, *Psychol. Rev.* **117**, 440–463 (2010).
13. S. Göckeritz, M. F. H. Schmidt, M. Tomasello, *Cogn. Dev.* **30**, 81–95 (2014).
14. C. W. Kalish, *Dev. Psychol.* **48**, 1133–1143 (2012).
15. H. Rakoczy, M. F. H. Schmidt, *Child Dev. Perspect.* **7**, 17–21 (2013).
16. All experiments were approved by the University of Michigan Institutional Review Board. All participants were paid and thanked for their participation and excluded from participating in subsequent studies.
17. Materials and methods are available as supplementary materials.
18. D. R. Siegel, M. A. Callanan, *J. Cogn. Dev.* **8**, 183–203 (2007).
19. K. Casler, T. Terziyan, K. Greene, *Cogn. Dev.* **24**, 240–247 (2009).
20. Supplementary experiments A and B conceptually replicated the above findings by use of a sentence judgment task.
21. L. Stirling, L. Manderson, *J. Pragmatics* **43**, 1581–1602 (2011).
22. P. E. O'Connor, *Text* **14**, 45–76 (1994).
23. T. D. Wilson, D. T. Gilbert, *Perspect. Psychol. Sci.* **3**, 370–386 (2008).
24. V. E. Frankl, *Man's Search for Meaning* (Simon & Shuster, 1985).
25. R. Janoff-Bullman, M. Berg, in *Perspectives on Loss: A Sourcebook*, J. H. Harvey, Ed. (Brunner/Mazel, 1998), pp. 35–47.
26. S. J. Heine, T. Proulx, K. D. Vohs, *Pers. Soc. Psychol. Rev.* **10**, 88–110 (2006).
27. Supplementary experiment C conceptually replicates these findings in a positive emotional context, demonstrating the generality of these results. Specifically, participants assigned

to a positive-meaning-making condition ($n = 189$ participants) were significantly more likely to use generic-you than those assigned to a positive-relive condition ($n = 206$ participants). The supplementary material contains description of materials, methods, and results for these findings.

28. C. Kitagawa, A. Lehrer, *J. Pragmatics* **14**, 739–759 (1990).
29. E. Kross, O. Ayduk, “Self-distancing: Theory, research and current directions,” in *Advances in Experimental Social Psychology*, J. Olson, M. Zanna, Eds. (Elsevier, 2017), vol. 55.
30. E. Kross, O. Ayduk, *Curr. Dir. Psychol. Sci.* **20**, 187–191 (2011).
31. E. Kross, O. Ayduk, W. Mischel, *Psychol. Sci.* **16**, 709–715 (2005).
32. L. Van Boven, J. Kane, A. P. McGraw, J. Dale, *J. Pers. Soc. Psychol.* **98**, 872–885 (2010).
33. A. F. Hayes, *Commun. Monogr.* **76**, 408–420 (2009).
34. A. F. Hayes, *PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling* (2012); www.afhayes.com/public/process2012.pdf.
35. These sample sizes reflect the number of participants who complied with the instructions and provided self-reported distancing data. Performing analyses on the full sample of those who provided distancing data, and including instruction compliance as a covariate ($n_{\text{you}} = 200$ participants; $n_1 = 202$ participants), did not affect the significance of any of the results we report.
36. T. Jensen, *Acta Linguistica Hafniensia* **41**, 83–115 (2009).
37. A. Siewierska, *Person* (Cambridge Univ. Press, 2004).

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SUPPLEMENTARY MATERIALS

www.sciencemag.org/content/355/6331/1299/suppl/DC1
Materials and Methods
Supplementary Text
Figs. S1 to S2
Tables S1 to S5
References (38–45)

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How "you" makes meaning

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Using "you" to generalize from me to others

Sometimes "you" is used when addressing another person, but in many situations, "you" is used to indicate anyone or everyone—the generic "you." Orvell *et al.* studied the underlying psychological function of the generic "you." When asked to write about a past negative experience, people were more likely to distance themselves and derive meaning from the experience if tasked with using the generic "you" rather than the first-person pronoun "I."

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