

Community + Culture features practitioner perspectives on designing technologies for and with communities. We highlight compelling projects and provocative points of view that speak to both community technology practice and the interaction design field as a whole. — Sheena Erete, Editor

How to Do Better with Gender on Surveys: A Guide for HCI Researchers

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The year was 2015 and Katta, who is nonbinary and uses they/them/their pronouns, wanted to apply as a student volunteer for CHI 2016. Excited, they began to fill in the form, but alas, they were presented with only two options: male or female.

Being nonbinary, though, meant that selecting either of these boxes would be both false and uncomfortable. After Katta expressed their frustration on Twitter, the general chairs quickly addressed the issue and added a third option. Because the change was initially implemented only at the front-end but not at the database level, Katta had to reach out to the CHI chairs a second time. While Katta appreciated the quick response, they were also frustrated at having to nag the chairs twice and then being expected to accept other as the only alternative. This language and the survey structure made them feel different and systematically placed outside of the we in HCI. On Twitter, though, they half-jokingly tweeted, “Next time a free form field? ;)” feeling uncomfortable to request changes a third time.

In 2018, another nonbinary SV applicant publicly brought up the problem with other as the only alternative to female and male. Katta was in the fortunate position of having direct contact with the SV chairs by this point and could push the issue with them, now with the bonus of not having to make it about themselves. As sensible changes were not possible due to the system’s idiosyncrasies, the question was removed entirely and, a few weeks later, the phrasing for shirt size was changed from gendered (women’s and men’s) to tailored versus straight-cut shirts.

For change to happen, marginalized people are often the ones who must do the groundwork of identifying issues and proposing solutions. To break into these power dynamics and take on collective responsibility within the community, we must revisit legacy systems with outdated standards and promote attentiveness toward the fluidity of gender expressions. This article addresses these goals by offering emerging best practices for surveying gender in HCI research.

The past decade has seen a pushback against de facto binary gender classifications [1], with examples ranging from the inclusion of a third gender in the 2011 Indian census to the legal ability to select a third gender on passports in the Netherlands and Germany, and driver’s licenses in several U.S. states in 2018. Systematically excluding nonbinary people in research and in technological systems causes actual harm to them. Thus, HCI researchers should be prepared to ask mindfully

about gender in surveys and on forms. This way, researchers accurately report gender (when participants choose to disclose) and avoid reinforcing gendered stereotypes.

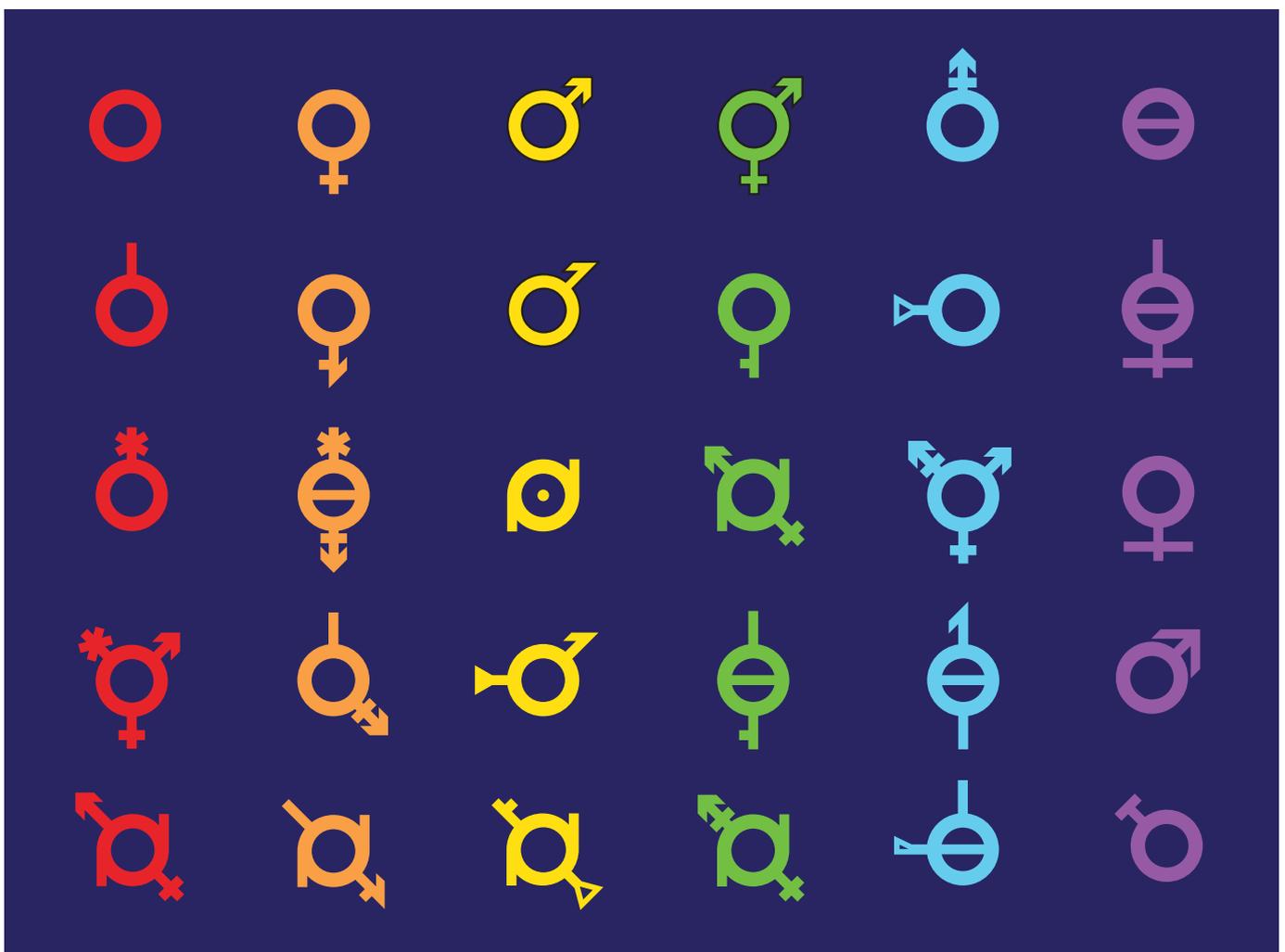
In our own prior work [2], we tried to push back against binary gender classification by surveying gender with a free-form field with two very different populations: respondents from Tumblr and fantasy football players. Respondents from Tumblr were thrilled and expressed their gender in many individual ways, while hundreds of fantasy football players responded aggressively in ways that included personal attacks against the researchers who authored the survey.

Our conclusion from that project was a recommendation to survey gender by asking whether people are a man, woman, and/or something else, with the last option revealing a free-form field for self-expression. Our goal was to move away from *female* and *male* as the sole options; *something else* was an option in line with emerging research in health [3].

However, this version was extremely jarring to several nonbinary researchers, leading Katta to contact the authors to voice their critique. While *something else* avoids the word *other*, it is nonetheless othering and as a phrase also de-subjectifies people outside the assumed gender binary (as things are often objects). It puts the onus on the person filling in the questionnaire. Other phrasings (e.g., *not listed*, *please specify*) come from a point of view where the people inquiring acknowledge the incompleteness of their list of expected genders. This

Insights

- When including gender on surveys, HCI researchers must refrain from using only binary categories, making assumptions about participants’ genders, and employing a one-size-fits-all approach for all research projects.
- HCI researchers have the responsibility to consider the complexity of their research participants’ genders. Inquiring into gender requires humility in attempting to “get it right.”



critique started a discussion leading to the present article, as we collectively realized that the previous one-size-fits-all recommendation was not suitable for HCI researchers interested in gender inclusivity on surveys.

While gender is highly contextualized, several factors determine the question of how one should ask about gender on a survey: 1) sample size, 2) study population, and 3) limitations of the survey software. In most cases, HCI researchers can use either an open-ended text box or the option we recommend in Figure 1. In special cases, such as studies focusing on trans populations, or studies that require specific personal health data dependent on biological sex characteristics (prominent in health and medicine fields but relatively rare in HCI studies), researchers can use a two-step procedure to identify cisgender and binary or nonbinary trans participants (which is outside the scope of this article). In all cases,

researchers must refrain from making assumptions about participants' bodies based on their gender. Bodies, like gender, can change over time, and not all binary or nonbinary trans people who answer gender questions on a survey in the same way will have the same biological characteristics or body parts.

For large-sample HCI surveys, we recommend an optional checkbox format with the following five options: *woman*, *man*, *nonbinary*, *prefer not to disclose*, and *prefer to self-describe*, with the last option opening up a free text field for participants who want to self-describe their gender, while at the

same time not requiring that text field to be filled in. We deem this suitable for most Western contexts with which we are familiar.

First, make the question itself optional. There might be participants who present with different genders in different contexts or who are actively questioning their gender in the time frame they are engaging with a specific survey. Being required to answer can lead to anxiety and distress. Participants might discontinue the entire questionnaire, which would be a loss.

Second, enable multiple selections by using checkboxes instead of radio buttons. Gender is a fluid, multiple, and impermanent identity facet, and participants should be able to choose more than one option if doing so describes their identity more accurately. If participants choose *prefer not to disclose*, other options should be disabled. We acknowledge that most popular survey systems do not

We must revisit legacy systems with outdated standards and promote attentiveness toward the fluidity of gender.

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What is your gender?

- woman
- man
- non-binary
- prefer not to disclose
- prefer to self-describe

(if the last option is checked a free form field opens up)

Figure 1. Our recommendation for how to ask about gender on large-sample HCI surveys.

SurveyMonkey Certified Question

Multiple Choice

Q1 What is your gender?

Answer Choices

- Female
- Male

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CANCEL SAVE

Figure 2. SurveyMonkey's default on gender questions.

Gender

Multiple choice

Suggestions: ADD ALL Female Male Prefer not to say Other

Option 1

Add option or ADD "OTHER"

Figure 3. Google's default on gender questions.

account for such logic. In that case, if a participant chooses *prefer not to disclose* along with another option, we suggest ignoring all other responses.

Third, include our list of five recommended options (Figure 1). We discussed different options at length and decided on this compromise, which allows for individual expressions of identity and enables researchers to reduce the amount of manual coding required for large samples. In this trade-off, we included *nonbinary* as a checkbox option to normalize at least one identity

beyond the binary. Whether it remains an appropriate trade-off is yet to be seen. In cases where the survey logic does not allow for a free text field tied to certain options, it should be made

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available in a separate question; for example, “If you prefer to self-describe, please elaborate here.” Researchers might also consider offering *none* as an option.

We contrast our suggestions by looking at popular survey providers to see which default options they offer to researchers building a survey (as of December 2018).

SurveyMonkey (Figure 2) describes the demographics for their paid panel with only *male* and *female*. By default, this question is set to mandatory and there are no other choices. SurveyMonkey offers the ability to add a radio button with a comment box. The default label is *other (please specify)*, which is editable. SurveyMonkey allows users to add logic so that *prefer to self-describe* can be routed to an open text box; however, this is a paid feature and not available to free accounts.

Google Forms (Figure 3) automatically suggests multiple choice even though they offer radio buttons as a default option. Their suggestions include an opt-out and, again, *other* as the only nonbinary option. However, the fields can be edited and changed. Logic for opening a free-form field in certain cases is absent.

Taken together, we see that dominant survey platforms like Google, SurveyMonkey, and Qualtrics recommend, show, and teach researchers how to ask about gender in certain ways that may seem official, yet cast nonbinary gender identities as other or invisible—survey choices that researchers can and should make in different ways. We observe a standard where the word *gender* automatically displays radio buttons with exclusive choices: *male* and *female*, occasionally with the option to decline or, literally, be othered. As Fred Dervin writes, “Othering means turning the other into an other, thus creating a boundary between different and similar, insiders and outsiders.... The other is also often described through a deficit framework, that is, [they are] not as good or capable as ‘we’ are, which leads to stereotypes and other forms of representation.” [4] Gender nonconforming, genderqueer, nonbinary, agender, and gender-fluid

people are either implicitly othered by omission or explicitly othered through these approaches to gender inquiry.

We note that not all survey platforms allow researchers to include question logic, and our recommendation includes it to show the open text box. We suggest this two-step process to mitigate the trolling that we received from our fantasy sports respondents, many of whom appeared to have been triggered by the conceptualization of gender as nonbinary. Alternatively, we suggest making every option available to participants and including a visible option for self-description to participants who desire to do so. Our recommendation is mindful of the dominant notion on gender but attempts to also provide options for gender-diverse people in communities that may follow a strictly binary dogma.

These guidelines are useful for the HCI community beyond participant surveys. For example, ACM recently updated its forms to follow these guidelines. The impact can be wide-ranging, since gender categories, as reified on surveys, make their way into the physical world in tangible ways that further marginalize people who are already vulnerable. For example, in an attempt to display gender pronouns on conference name badges (a laudable effort), CHI 2018 badges displayed *other* for attendees who opted out of sharing their pronouns when filling out a survey to register for the conference—thus othering and potentially outing gender minorities at the conference [5].

HCI researchers have a responsibility to consider the complexity of their research participants’ gender identities. Inquiring into gender requires humility in attempting to get it right. We (the second and third coauthors of this article) did not get it right the first time, despite careful thought and consideration. By constantly striving to do better, researchers learn how to encounter participants and their identities with respect and, we believe, also end up with more meaningful insights.

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ENDNOTES

1. Bowker, G.C. and Star, S.L. *Sorting Things Out: Classification and Its Consequences*. MIT Press, 2000.
2. Jaroszewski, S., Lottridge, D., Haimson, O.L., and Quehl, K. "Genderfluid" or "attack helicopter": Responsible HCI research practice with nonbinary gender variation in online communities. *Proc. of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, New York, 2018, Paper 307; <https://doi.org/10.1145/3173574.3173881>
3. Bauer, G.R., Braimoh J., Scheim, A.I., and Dharma, C. Transgender-inclusive measures of sex/gender for population surveys: Mixed-methods evaluation and recommendations. *PLOS ONE* 12, 5 (2017), e0178043; <https://doi.org/10.1371/journal.pone.0178043>
4. Dervin, F. Discourses of othering. In *The International Encyclopedia of Language and Social Interaction*. K. Tracy, T. Sandel, and C. Ilie, eds. 2015; DOI:10.1002/9781118611463.wbielsi027
5. Danae, M. CHI needs to be more gender inclusive: Especially of nonbinary gender identities. Medium. Apr. 23, 2018; <https://medium.com/@metaxa/chi-needs-to-be-more-gender-inclusive-cb0eb40f9b91>

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