Representation of Women in *Cognition*

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Upon reading the recent *Cognition* special issue, titled "The Changing Face of Cognition " (February 2015), the authors of this discussion felt a collective sense of dismay. Perusing the table of contents, we were struck by the fact that among the 19 authors listed for the 12 articles, only one female author was present. While the substantive content of the issue may persuade us that the face of cognition is changing, it appears that changes in gender distribution are not to be expected. The face of cognitive science will remain unequivocally male.

According to recent statistics (NSF, 2013), more than 50% of doctorates awarded in cognitive psychology and psycholinguistics were to women, and the same holds for neuropsychology and experimental psychology. A clear implication is that women scientists should play a significant role in the future of cognitive science and cognitive neuroscience. (We say "should" with some caution, in the face of compelling evidence that pressures in preparation for academic careers and practices of academic institutions continue to systematically favor men; e.g., Ceci & Williams, 2011; Clauset et al., 2015.) We ask, then, why would the journal present an image of our science's future as envisioned largely by male scientists?

We do not advocate, of course, that the gender diversity in any publication should be precisely hewn to match the current percentages of males and females in the discipline, and the numbers of recent Ph.D.s should not be taken as estimates of current percentages, due to the expected timeline from obtaining an advanced degree to authoring an article in a special issue. But is the lack of gender diversity in this special issue, then, pure chance? However one calculates the gender ratio of scientists who merit an authorship invitation, the 5% proportion of females in the special issue on the Changing Face of Cognition seems likely to be under-representative.

An examination of other most recent special issues of the journal further suggests that the gender ratio is not accidental. The table below shows the breakdown for editors and authors in the four most recent special issues of *Cognition*. Only one shows a near-equal distribution of male and female authors, and that is the sole special issue (2011) where a woman was co-editor. One might infer that females are more likely to be gender-inclusive when it comes to seeking authors, but it is also possible that gender balance in a special issue reflects the make-up of the field that is being highlighted. Again, the prevalence of male authors in the most recent issue seems unlikely to be explained on that basis.

Year	Special Issue Topic (# articles)	Editor gender	Prop. male authors	Prop. male first author
2015	Changing Face of Cognition (12)	male	0.95	0.92

2011	Probabilistic models of cognitive development (10)	1 male, 1 female	0.52	0.40
2009	Reinforcement learning (6)	2 male	0.85	1.00
2009	Objects and Attention (7)	male	0.76	0.86

We do not mean to take *Cognition* to task unfairly. The gender distribution among associate editors is near parity (three of eight are women), although there appears to be room for balance in the journal's editorial board. It is particularly unfortunate that the representation of women has failed to penetrate the authorship rosters of just those issues that are meant to shape the field, with the result that a new generation of women scientists will fail to recognize themselves in the vision of the future that they offer. We hope that calling attention to this matter will increase sensitivity to the contributions of female scientists, not only in *Cognition* but in other major journals in psychological science, as well.

References

Ceci, S. J., & Williams, W. M. (2011). Understanding current causes of women's underrepresentation in science. *Proceedings of the National Academy of Sciences of the USA, 108,* 3157–3162.

Clauset, A., Arbesman, S., & Larremore, D. B. (2015). Systematic inequality and hierarchy in faculty hiring networks. Science Advances 01 Feb 2015, 1(1), e1400005 DOI: 10.1126/sciadv.1400005.

NSF (2013). http://www.nsf.gov/statistics/sed/2013/data-tables.cfm, Table 16.