PNAS Plus: Refining a successful experiment

On January 1, 2011, PNAS began an experiment to publish long research articles exclusively online in a new section called PNAS Plus. The draw was to increase the regular research article page limit from 6 to 10 pages and to eliminate charges for online color images. In its first year, 1,353 papers were submitted to PNAS Plus, and we have published more than 380 PNAS Plus papers to date. The trend for 2012 suggests continued popularity of PNAS Plus as a route of submission for all authors.

As part of a gradual evolution from print to online, PNAS Plus authors were asked to contribute a one- to two-page summary of their work, including a figure or table, written at a level that would appeal to the broad readers of the journal. These Author Summaries were published in print and online. Unfortunately, Author Summaries proved a burden for authors and editors. Some authors hit the mark precisely, but more frequently, the summary did not convey the salient features of the paper for a nonexpert. Freelance editors assisted with the editing of all summaries, which quickly proved costly and time-consuming for authors and editors alike.

To return to the original intent of PNAS Plus—to help readers from diverse fields of science understand why a paper is important and why they should read it—starting in mid-October 2012, we will replace the Author Summary with a 100-word statement of significance of the work, which will appear online on the first page of the article PDF and in print at the front of the journal as a collection of Significance Statements from PNAS Plus papers.

Sample Significance Statement

This study changes our understanding of how the Harappan civilization evolved and collapsed. Aridity affected Egypt and Mesopotamia 4,200 y ago with dire consequences; during that drought, Harappan society reached its urban peak. Later, as neighboring civilizations rebuilt, Harappan society collapsed. We show that Harappan settlements concentrated in regions with regular floods along the Indus and its Himalayan tributaries. Farther east, settlements clustered near monsoon-fed rivers. Using landscape analyses of the Harappan homeland and absolute chronologies for fluvial sedimentation we suggest that the decline in monsoon-enhanced floods and drying of monsoon-fed rivers contributed to the collapse of the Harappan civilization.

The Significance Statement should provide enough context for the paper's implications to be clear to readers. The statement should not contain references and should avoid numbers, measurements, and acronyms unless necessary. The Significance Statement is distinct in purpose from the abstract and will be considered for appropriateness by the paper's reviewers as part of the editorial process. Additional details about the Significance Statements can be found in the Information for Authors and on the PNAS Plus Frequently Asked Questions page.

At left is a sample to be used as a guide for PNAS Plus. The paper is by Liviu Giosan et al., (2012) Fluvial landscapes of the Harappan civilization. *Proc Natl Acad Sci USA* 109(26):E1688–E1694; first published May 29, 2012.

The goal of PNAS continues to be publishing the highest quality research across all fields of science. I hope you will participate in the PNAS Plus experiment and I welcome your feedback on the change.

Inder M. Verma, *Editor-in-Chief*