

NEW EDITORIAL POLICY

(MAY 24, 2000)

In the fall of 1999, the journal subcommittee of the Cognitive Science Society developed a new policy for its journal, *Cognitive Science*, with the committee members being Larry Barsalou (chair), Jeff Elman, Ken Forbus, Dedre Gentner, and Doug Medin. The full board of the Cognitive Science voted unanimously in January 2000 to adopt this policy, which follows.

GOALS

Cognitive Science aims to publish interdisciplinary research on cognition that is of the highest significance and quality. Published work must be interdisciplinary in at least one of two senses: It combines methods from multiple cognitive science disciplines, or it presents results from a single discipline that are of theoretical significance to multiple disciplines. Relevant disciplines include, but are not limited to, anthropology, computer science, education, human factors, linguistics, neuroscience, philosophy, and psychology. Appropriate articles must reach original conclusions using a rigorous methodology.

TYPES OF ARTICLES

Cognitive Science publishes articles in four formats. Most typically, it publishes **REGULAR ARTICLES**, namely, articles having a target length of 12,000 words of primary text (about 30 published pages total, including figures, tables, references, and other end matter). Note that 12,000 words is a target, not a strict limit. Ultimately, it is up to editorial discretion how far regular articles may depart from the target.

Because some articles require more space to make their case, *Cognitive Science* publishes **EXTENDED ARTICLES** that have a target length of 18,000 words (about 45 published pages total). Depending on editorial discretion, however, extended articles may be longer in exceptional cases. Because of their greater length, extended articles should be of greater interest to the field, and should therefore be evaluated according to higher standards than regular articles.

Because some articles require relatively little space to make a significant contribution, *Cognitive Science* will also publish **BRIEF REPORTS** that have a target length of 4,000 words (about 10 published pages total). In general, brief reports should typically introduce important new findings that are timely and of broad interest to the cognitive science community. They should not simply reiterate findings reported in the Proceedings of Cognitive Science Meetings. Instead, they must report novel findings not published elsewhere, as is also the case for regular and extended articles. Any type of article may include findings from a Proceedings article, as long as the new article goes significantly further (as judged by the editorial staff), and the relation between the two articles is acknowledged appropriately.

Besides reporting on original research, extended, regular, and brief articles may also review a literature of current interest to the cognitive science community, as long as the review makes an original contribution. Also, the Journal will continue to occasionally publish sets of thematically related articles. Depending on the format appropriate for a topic, the articles in a set could be regular or brief.

Finally, each issue of the Journal will contain a fourth section entitled "LETTERS TO THE EDITOR." Pieces published in this section include commentaries on published articles, responses to commentaries, letters from action editors that bring out a paper's relevance for other disciplines, and so forth. Letters to the editor should have a target length of 1000 words (i.e., 2.5 published pages). The editor and members of the editorial board have the authority to accept or publish a Letter without review, although he or she may solicit reviews if so desired.

In each issue, the table of contents first lists extended articles, then lists regular articles, and then brief reports. Letters to the editor are listed in a final fourth section, unless a particular letter is relevant to an article in the current issue, in which case it follows it immediately. Each group is preceded by a heading for the type of article (i.e., "Extended Articles," "Regular Articles," "Brief Reports," "Letters to the Editor"). If an issue contains a thematically-related set of articles, their heading describes the theme.

Currently, Elsevier allots 160 pages per issue. Under the new model, if an issue contains 4 regular articles (4 articles X 30 pages = 120 pages total) and 4 brief reports (4 articles X 10 pages = 40 pages total), it would contain 160 pages. Or if an issue contained 1 extended article (45 pages), 3 regular articles (3 X 30 pages), and 3 brief reports (3 X 10 pages), it would be just a little over 160 pages (i.e., 165 pages). The composition of individual issues may change, depending on future arrangements with Elsevier regarding the number of issues and pages published per year.

REVIEWING

Manuscripts should be reviewed by experts from multiple disciplines, not from a single discipline. The editor is the final arbiter on the best set of reviewers for a given manuscript, within the context of the following guidelines.

- (a) When an article reports work that utilizes two or more methodologies, at least one expert for each methodology should typically review the paper.
- (b) When an article reports work that utilizes only one methodology but is of interest to multiple disciplines, the reviewers should typically include one specialist on the methodology, and one person from each of the other disciplines potentially impacted theoretically.
- (c) Extended articles should typically have four reviewers, regular articles three, and brief reports two. Because extended articles are expected to make more of a contribution than regular articles, more reviewers should evaluate them. Conversely, because brief reports make less of a contribution and must be processed quickly, two reviewers should typically suffice. Again, though, the editor should be the final arbiter of reviewer composition.

It is essential that reviewers appreciate the interdisciplinary nature of the Journal, and that they not adopt the narrow methodological perspectives that they might take when reviewing non-interdisciplinary work. Each editorial staff, together with the journal subcommittee, should draft a policy statement to be sent out with each manuscript reviewed. At this time, we recommend that the policy statement contain the following points:

- (a) Besides assessing standard aspects of scientific rigor and impact, reviewers should assess the interdisciplinary significance of manuscripts. Papers that are only of interest to a single discipline are not appropriate for Cognitive Science.
- (b) Reviewers should assess whether the interdisciplinary significance of a paper is deep versus superficial. A paper that has interdisciplinary depth is one that addresses the theoretical constructs of multiple fields, whereas a paper that is superficial simply utilizes interdisciplinary methods without having much impact on constructs across disciplines.
- (c) Although timeliness is important in reviewing, providing substantive feedback to authors is of paramount performance. Reviewers should view their tasks as scientific communication and as helping authors improve the quality of their work in a constructive manner. Reviewers

should not just view their task as playing the role of a gate keeper but also as helping researchers improve the quality of their work (without micromanaging it).

The Journal will maintain a computerized data base of reviewers. One purpose of this data base is to facilitate the process of identifying appropriate reviewers for a submission. A second purpose is to track the timeliness and quality of particular reviewers' responses, so that we can avoid reviewers who chronically prevent timely action on manuscripts, and/or who tend to provide poor reviews. To achieve these goals, the entry for each reviewer contains the following information:

- (a) Key words that describe the reviewer's areas of expertise.
- (b) A list of the articles that the reviewer has reviewed, and the details of each review (how long it took to get the review, how many prompts were necessary, the reviewer's ratings and recommendations, etc.).
- (c) Comments from action editors on the quality, usefulness, and appropriateness of the reviewer's responses.
- (d) Summary statistics on each reviewer that come up as part of his/her profile.

Finally, when authors submit an article, they must provide 5 to 10 key words that can be used to search the data base for possible reviewers. The key words would also be used to construct the year-end index for the Journal.

The editorial staff should strive to achieve the following target times when handling manuscripts. From submission to action, regular articles should typically be handled in 3 months, brief reports in 6 weeks, and extended articles in 4 months. Reviewers should be instructed to send in their reviews two weeks before the target deadline, thereby giving action editors time to process the reviews and write an action letter. To facilitate meeting target dates, Elsevier is purchasing a tracking system that monitors the status of each submission and ensures that its processing adheres to the expected turn-around time. The tracking system is web-based and is thus accessible to all members of the editorial staff from their distributed sites. At the end of each year, the editor will compile statistics, not only on submissions and actions, but also on the average number of reviewers per article, average turn-around times for individual action editors, etc.

EDITORIAL STAFF

The editorial staff of Cognitive Science will consist of one editor, an editorial board of 12 to 15 action editors, and no senior editors. Because Cognitive Science covers diverse areas that range from machine learning to cognitive linguistics to developmental psychology to cognitive neuroscience, it is essential to have a large set of action editors that is equally diverse. By judiciously choosing board members who cover research areas, we can do a good job of optimizing the fit between action editors and manuscripts. Whenever possible, a submitted manuscript should be handled by someone with expertise in the respective area. To the extent that authors believe that an expert is likely to handle their paper, they may be more inclined to submit it to Cognitive Science. The editor may also want to appoint board members who are likely to attract papers from research areas that we would like to see represented in the Journal.

A potential problem that could arise with a large and diverse editorial board is that its members accept relatively narrow articles in their respective disciplines. To avoid this problem, the following criteria should be applied to selecting and renewing members of the editorial board:

- (a) Individuals should only be appointed to the editorial board who have a proven record of appreciating the importance of interdisciplinary work, and who will be committed to publishing it.
- (b) Each new editor will work together with the journal subcommittee to write a policy

statement for the action editors. This statement should stress that published articles make interdisciplinary contributions, and that standard disciplinary pieces are not appropriate. (c) Members of the editorial board who do not consistently publish interdisciplinary articles should be replaced when members of the board are reviewed.

Because the composition of the editorial board is central to the success of the Journal, the following process will be used to establish the editorial board each time a new editor of the Journal is appointed. The governing board of the Society will maintain and revise a list of areas central to cognitive science. These areas will reflect both traditional areas of research, as well as new cutting edge areas. When a new editor is appointed, the governing board will review and reassess these areas before providing a list to the new editor. In addition, the governing board will provide names of researchers in these areas who might be good candidates for the editorial board. These areas and individuals are by no means binding. The new editor should simply view them as suggestions, and should feel free to suggest alternative areas and individuals. The governing board does not wish to dictate the composition of the editorial board. The purpose of this procedure is only to ensure that important areas of research are represented by capable individuals, who will attract papers to the Journal and do a good job of acting on them. Ultimately, the new editor should propose an editorial board to the governing board for formal approval. Although the governing board has the ability to veto a proposed editorial board, the likelihood of such vetoes is unlikely. The governing board's intention is for the editor to take the lead in defining it. The governing board primarily sees its role in this process as suggesting initial areas and names for consideration, which will probably evolve as the new editor formulates an editorial board that will best serve him/her and the cognitive science community.

Another potential problem with a diverse set of action editors is that it may be difficult to keep a large number of action editors on schedule. This problem can probably be minimized with strong editorial management, a good tracking system, and a consistent system of reminders. To further minimize this problem, the editor will review members of the editorial board every two years. Should a board member consistently fail to turn around manuscripts in a timely manner, s/he should be replaced. The editor may also want to change the composition of the editorial board periodically in order to target research areas of evolving interest. Finally, when a member of the editorial board handles a manuscript, s/he works with the editor to select reviewers. Using key words submitted with the manuscript, the editor selects a potential set of reviewers from the Journal's data base (and further includes any other potential reviewers who come to mind). The editor then sends this preliminary set to the action editor, who makes additional suggestions and plays a central role in establishing the final set in collaboration with the editor.

EDITORIAL ASSISTANT

The position of editorial assistant includes the following responsibilities:

- (a) Receive and prepare manuscripts for review.
- (b) Mail manuscripts out to reviewers.
- (c) Track manuscripts with respect to target deadlines.
- (d) Send out reminders to the editor, editorial board, and reviewers.
- (e) Collect reviews.
- (f) Mail action letters.
- (g) Enter data about manuscripts and reviewers into the computerized data base.
- (h) Handle the mechanics of publication with the publisher.

Typically, the editorial assistant is an existing employee at the editor's institution, who takes on Journal matters for about 5 hours a week. Either the Journal pays for the employee to work overtime, or the Journal pays part of the employee's regular salary. Should 5 hours a

week be insufficient, the amount can be adjusted through discussion with the journal subcommittee.

A central part of the editorial assistant's job is to help action editors and reviewers turn around manuscripts in a timely manner. Thus, the editorial assistant is responsible for reminding reviewers and action editors about pending target dates, for periodically sending out reminders once target dates have passed, and for notifying the editor when excessive time has elapsed since a target date.

BUDGET

The following yearly budget is currently recommended for the Journal, although it is open to negotiation with each new editorial staff:

1. funds for the editor performing editorial functions
2. funds for the editorial assistant
3. funds for the editor and editorial board acting on papers
4. funds for postage, copying, supplies

The editor is responsible for running the Journal, handling high-level relations with the publisher, and acting on a subset of submitted manuscripts. Because a small number of manuscripts are obviously not publishable for a variety of reasons, the editor may wish to reject these outright without review. The number of reviewable papers that the editor handles is a free parameter. Ideally, though, the editor should handle roughly the same number of reviewable papers as a board member. The rationale is that anyone acting on a paper should be an expert in the area, at least as often as is possible. Again, the goal is to optimize the fit between action editors and manuscripts, as discussed earlier. Thus, papers falling into the editor's area of expertise should occur about as often as papers falling into a board member's area of expertise. Should the editor wish to handle a higher proportion of the manuscripts, this possibility could be discussed with the governing board at the time of the editor's appointment.

Given that the Journal currently receives about 60 submissions a year, this means that the editor and each of 12-15 action editors handles about 4-5 manuscripts per year. The funds for acting on papers are to be divided proportionally over the action editors as a function of the number of manuscripts that each one handles. Those action editors who handle many manuscripts will be paid more than those who handle a few. At this time, we anticipate that the average pay for handling a manuscript will be \$100 per manuscript. We very much hope to see the number of submissions to the Journal increase markedly once we adopt the new model. Should this occur, we may need to adjust the budget to reflect the additional work that the editorial staff performs.

BIMONTHLY PUBLICATION

In the next year or so, Cognitive Science will increase the number of issues published per year from four to six. We believe that increasing the number of issues will increase the vitality of the Journal, as will the other changes suggested earlier. Thus, we expect to see submissions increase significantly. To ensure that the Journal can fill six issues, however, the following strategies may be pursued during the first year or two of the new model:

- (a) The editorial staff solicits one or two special issues per year.
- (b) The editorial staff actively solicits papers from researchers performing interdisciplinary research of interest to the Journal's readership.
- (c) The editorial staff identifies outstanding Proceedings articles that could be expanded into effective Journal articles and recruits such articles.
- (d) Action editors provide target deadlines to authors for submitting revisions, accompanied

by estimated publication dates, thereby speeding the publication process, and increasing the number of manuscripts available for publication.

(e) The Society and Elsevier aggressively advertise the new format for the Journal, making it clear that we will be speeding the publication process and publishing more articles. Specific forms of advertising include:

- * mailings to members of the Cognitive Science Society
- * editorials in the Journal
- * articles in association newspapers (e.g., APA Monitor, APS Observer)
- * Elsevier advertisements in journals throughout the cognitive sciences
- * free issues mailed to non-members who would be good contributors

Moving to bimonthly publication will require an increase in subscription rates. As we discussed at the 1999 board meeting, the Society has not raised membership rates for years. Thus, doing so now is reasonable, especially if members receive additional issues per year and have more opportunity to publish.