A Proposal for a *Review of Artificial Societies and Social Simulation*

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Motivation

Critique, argument and debate have always been at the core of the Western academic tradition.[1] At extended temporal scales there is debate as expressed between academic articles or books, but this is often too slow to achieve maximum effectiveness, as each contribution or response has to go through the normal publication process, including reviews and revisions. At the other end of the spectrum are spoken exchanges at conferences and other meetings, which are usually not preserved,[2] and very rapid comment, as on Twitter or in blogs. However, this information is not curated and thus accessible as a coherent whole. Alos these are not necessarily preserved for others to read and refer to. A key part of the academic process of citation is that information should be available for checking and where this is not possible (whether because sources are inaccessible or fundamentally impermanent) damaging quality problems can arise (Treadway and McCloskey 1987).

In addition, much in the academic world seems to proceed by tacit assumptions, for example that citation is a true measure of academic value (rather than being conflated with academic fashion, practical accessibility, and other such factors) and that the reviewing process is adequately effective (so that it will seldom be a matter of scholarly importance to correct, retract or thoroughly debunk research that has already passed peer review). Such assumptions do not seem to be well supported and the consequences can sometimes be serious for the scientific endeavour (Chattoe-Brown 2011, Chattoe-Brown 2015).

Finally, assumptions that may have held good in previous decades (when academia was smaller and pressure to publish was less) may no longer hold so that effective and innovative solutions (perhaps taking advantage of new technologies) may be needed (Edmonds 2000).[3]

Thus we are of the opinion that our field[4] would benefit for an outlet that better promotes and preserves rapid debate - somewhere between a blog and an online journal. Such an outlet would:
- facilitate comment, critique, and debate by supporting shorter academic texts,
- have a relatively fast turnaround in publication terms,
- include a light-touch review for sanity, relevance, and legality, but otherwise be fairly inclusive and open ended as to what may be published,
- enable individual items to be curated and citable in perpetuity.

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[1] This includes the Islamic world, Jewish culture etc.
[2] There are exceptions when, for example, conference sessions are recorded.
[3] There is also some evidence that social practice does not keep up with technological change. For example, is there still a logic to having volume numbers on electronic journals?
[4] We think that similar outlets might help other research areas, but they are not within our competence and responsibility. However, we hope that a well worked exemplar would prove readily portable.

This approach is also intended to deal with another potential problem with existing modes of publication where apparently purely administrative decisions ("this journal doesn't publish short comments") can have distorting effects on academic quality. If what is needed is a short correction then not publishing it at all or insisting it be published in an arbitrary format does not really address the problem effectively and can discourage both academics wishing to make such contributions and readers wanting to be able to keep abreast of them.

The proposal

We therefore propose a new online entity - the "*Review of Artificial Societies and Social Simulation*" (ROASSS) - that publishes so-called "micro-items" to meet this need. This would be independent of the Journal for Artificial Societies and Social Simulation (JASSS) and European Social Simulation Association (ESSA), but have a considerable overlap in terms of the people involved and the subjects covered. While this will ensure the initial credibility of the institution, the intention is that (like JASSS but unlike ESSA) it should be a worldwide resource - not just focussed on Europe.

Each published "micro-item" is currently envisaged as being:[5]
- An original item relevant to social simulation. This could be, among others:
  - A suggestion for future study.
  - An academic stand-alone point that is too small for a journal article.
  - A question that the author wants answering.[6]
  - A suggested target for comment with reasons why it is important.
  - A summary of or pointer to recent developments in a related field (such as empirical human or environmental sciences, modelling techniques and technology, artificial intelligence, social robotics or serious games).
  - An interview.
  - A short summary or analysis of an important publication not in English.
- A comment upon:
  - Another item published on ROASSS.
  - A permanent relevant item on the web, for example: a news item, a journal article, a paper on a public journal archive or a model in a public archive like OpenABM. The criterion here will be the likely durability of the object to which the comment refers.

The broad test of relevance for such items would either be that they improve the quality of *past* contributions to the field (correcting errors, drawing attention to good quality articles that have been neglected, recognising potential limitations of widely cited and approved research) or focus and clarify the nature of possible *future* contributions (apparent gaps in data, previously neglected areas for research, "implicit styles of thought" in existing research that could be questioned). We intend that new kinds of items attempting to meet those criteria should easily find a place in ROASSS as it develops.

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[5] Though part of the point is to achieve a flexible format that allows for the value of new kinds of micro-items not yet envisaged.
[6] Some of these features can be found in the useful but apparently little known (and print based) resource "Notes and Queries" <https://en.wikipedia.org/wiki/Notes_and_Queries>.

Items that have an established home elsewhere (conference announcements, full papers, book reviews, forum pieces, models) should be published on the appropriate site or list, although any academic commentary on these items could be on ROASSS. Each item on ROASSS would have a suggested citation for public use and a permenant URL.

Similar Sites

There have been a number of experiments with post-publication peer review, including journals where commentary is published along with a 'target' article (e.g. Behavioral Brain Sciences), where continual commentary can be published in the journal (e.g. Psycholoqy (Harnad 2000)) and where commentary features bolted on to existing journals (e.g. PubMed Commons). Some have not been successful, such as the experiment at Nature (Gibson 2007).

The most similar and successful site is in the field of cell biology, called 'PubPeer'[7] (Tounsend 2013). This was set up by a group of young academics, who missed having an online equiquvalent of a 'journal club'. This has resulted in a number of significant defects in existing publications being brought to light (Swoger 2014), but also some controversy (Bohannon 2013; Neuroskeptic 2013; Faulkes 2014). Neuroskeptic (2013) reports that:

> *"Some evidence indicates that postpublication review not only brings new research to the attention of a wider audience, including fellow scientists (Allen et al., 2013), it may increase later citations (Shema et al., 2014)."*

ROASSS would learn from these antecedents, in particular the need for some editorial control, a set of standards, the need for anonymity for some commenters and for a basic level of filtering of published comments[8].

How it will work

The Review would have an editor and an editorial board to facilitate fast assessment. This assessment would be a check for sanity, relevance, politeness, and legality only. The quality of comments would be moderated by readers' comments in response rather than a standard academic review process.

The assessment process would take place as follows:
1. The review would accept submissions via a web-form with the following information: title, author, e-mail (for administrative purposes), type of submission, suggested keywords, the URL/DOI of what it comments on, and the actual content.
2. The editor would desk-reject anything abusive, illegal or redundant (e.g. plagiarised), and send anything else to a relevant member of the editorial board for assessment.
3. The editorial board member would either simply accept the item or reply with a reason for rejection based on the ROASSS guidelines. (Unlike peer review, assessment is not intended to license disagreements about matters of emphasis or

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[7] http://pubpeer.com
[8] See for example the discussion at PubPeer at: https://pubpeer.com/publications/F2A7891E 2259B6AAD71E7F5BDA1849

interpretation, but only to decide matters of compatibility with the mission of ROASSS and the broader aim of scientific improvement.[9])

4. If rejected, reasons for rejection at stages 2 or 3 would be communicated to the submitter.
5. Suitable meta-data would be added to accepted items to track the type, keywords, discussion chain, and author.
6. The elements of the item would undergo minimal formatting, including the addition of a suggested citation.
7. The item would be published on the site with output to RSS feeds and tweets to a Twitter feed.
8. Once published, a micro-item would not be withdrawn or corrected, but an author could comment upon their own items to make any such corrections (with a particular tag to make these self-corrections more noticeable). The point is that the process of debate, correction, and so on should be transparent - all mistakes and arguments are visible and the editor and editorial board do not have a covert role in setting the tone of subjects for debate (as is possible in other publication outlets).

The author may request that their comment is published anonymously if there is good reason for this[10], but published entries edited not to be libelous (e.g. comments about the actions or intentions of others changed to statements or arguments about the published paper.

Get involved!

We would like people in the field to join in. There are several ways of doing this.
1. Contribute comments and items to ROASSS.
2. Volunteer to be on editor board and review submissions.
3. Help to format submissions for publication
4. Help the programming/formatting of the website.
5. Discuss ROASSS on ROASSS.

Check the ROASSS website (http://roasss.org) and please email Bruce Edmonds <bruce@edmonds.name> if you might do one of these.

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[9] It is important to be clear that the guidelines are not intended to limit new "styles" of contribution, but only to maintain standards for content. No content may be abusive and a contribution will not be rejected for introducing a new kind of "micro-element" with obvious scientific value.

[10] This appears to be important for a debate to flourish (Neuroskeptic 2013).

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