Indian economics and Indian scholarly publishing: is there room for *Current Science*?

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Multidisciplinary science journals include a few papers in economics. However, very few papers in economics appear in Current Science, itself a multidisciplinary journal. This article reports the results obtained from our analysis of the possible reasons for this situation. A study of almost 6500 articles from the journal's archives led us to the conclusion that the proportion of the journal's papers in the field of economics is very small, less than 0.5%. Thus we conducted an e-mail survey with 43 Indian authors publishing in Indian economics journals, asking them whether or not they had submitted any manuscript to Current Science and what were the reasons for this decision. Then, following a quantitative analysis, we constructed a model that represented the different argumentation strategies used by our sample of authors. Our main conclusion is that it is a lack of communication between economics researchers and the journal itself that creates disciplinary gaps in the multidisciplinary nature of Current Science.

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MULTIDISCIPLINARY journals serve the following positive functions in scholarly publishing[1]: stimulating new ideas, disseminating information to a broader audience, providing an outlet for unusual papers, and providing cohesion within disciplines.

Multidisciplinary journals are thus important in the dissemination of scientific results, a fact confirmed by the journals like *Science* and *Nature*. Single-discipline journals obviously serve a different role by disseminating scientific results among researchers and practitioners in a particular discipline. This is perhaps the reason why so many authors think that publishing in a single-discipline journal is a more efficient way of disseminating scientific results.

We do not wish to enter any discussion here on how one should understand 'national' versus 'international' interdisciplinary journals[2]. What is important for the present article is that we treat *Current Science*, an Indian journal, as an international journal that is recognizable worldwide. Suffice it to look at numbers: in 2000–2005, 4622 articles (of any type) were published by the journal, of which 3885 (84%) were affiliated to an Indian institution (including co-authorships with foreign partners). These 4622 articles had 22,508 citations in the *Web of Science*, of which 11,638 (52%) were in papers not affiliated with any Indian institution. Thus, while most of the journal authors are from India, slightly more than half of those who cite *Current Science* are from abroad.

In India, research papers in *SCI* journals have been established as one of the criteria for obtaining grants by Council of Scientific and Industrial Research, New Delhi[3]. Personally, we do not think that impact factors (IFs) are the *sine qua non* of the quality of journals and that journals with IFs are the only ones worth publishing in. However, even opponents of IFs will agree that science journals indexed in the *Journal Citation Reports* (*JCR*) are the main players in today's scientific discourse[4]. Indeed, there are numerous journals indexed in *JCR Social Sciences* (*JCRSS*) *Edition* in the category economics: 209 in the 2008 *JCRSS Edition* (10.5% of all journals in the *JCRSS Edition*), 247 in 2009 (10.9%), 305 in 2010 (11.1%), 321 in 2011 (10.8%) and 333 in 2012 *JCRSS Edition* (10.9%).

These data show that over 10% of the journals listed in the *JCRSS Edition* are in the field of economics – suggesting that this is an important category of the edition. Against this background, with Indian journals (with one exception) excluded from the *JCRSS Edition*, the publishing realm of Indian economics seems to have only a national and regional character. This, in turn, suggests that Indian research in economics has a smaller chance of being internationally acknowledged, unless Indian researchers in economics prefer to publish in international journals.

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Nonetheless, they do not. Authors affiliated to Indian institutions publish a similar number of papers in journals indexed in the *JCRSS Edition* in the category economics as authors affiliated to Polish institutions, although Poland is a much smaller country (Table 1). Is it risky then to claim that, for the good of Indian economics, this situation needs to be changed? In this article we consider the field of economics in an Indian context. Most prominent Indian economics journals are not indexed in *JCR* (Thomson Reuters). One exception is *Science Technology and Society*, which has been included in the *JCRSS Edition* since 2009 (in the category management), with an IF of 0.312 in 2012. This means that Indian researchers in economics have to publish either in international journals indexed in *JCR* or in national journals (which are not indexed), with the exception of *Science Technology and Society*.

Economic papers in *Current Science* – a multidisciplinary journal – are rather rare. Why is this? Is it because the journal editors do not like them? Is it because Indian economists do not consider *Current Science* a good outlet for their research? Is it because economics, as a social science, should not be considered a part of the sciences? Is it because of the multidisciplinary nature of the journal, which can be both an advantage and a disadvantage for authors?

The aim of this article is to attempt answering these questions in order to shed light on the more general context of scholarly publishing in the field of economics in India.

Methods

First, we analysed the journal's instructions to authors to see if there was any information that might encourage or discourage possible authors in the field of economics to submit their papers to *Current Science*.

Second, we studied the titles and abstracts, and the full text if needed, of all of the papers published in the journal from 2005 to volume 105, issue 7 in 2013. This allowed us to estimate the share of economics papers in *Current Science*. Editorials, News and Book Reviews were not considered. Altogether we examined 6258 articles and tagged them as being from the field of economics or not.

Table 1. The number of papers published in journals indexed in *JCR Social Science Edition* in the category economics by authors (at least one) affiliated to Indian and Polish institutions

Year	India	Poland
2007	176	131
2008	225	206
2009	240	268
2010	252	237
2011	290	277
2012	275	288

Third, we conducted a questionnaire survey among Indian researchers in the field of economics. Five well-known and respected Indian journals from the field of economics were chosen, namely *Economic and Political Weekly*, *Journal of Quantitative Economics*, *Indian Journal of Industrial Relations*, *Margin: Journal of Applied Economic Research* and *Indian Journal of Economics*.

The names and e-mail addresses of all of the authors affiliated to Indian institutions were assembled from the articles published in these journals; 279 such contact details were completed. These authors were sent an e-mail that provided basic information on the purpose of the research, the team that was conducting the research, and the reasons for carrying it out (along with statistics on the number of economics papers in *Current Science*). The e-mail ended with two items: (i) 'Have you ever submitted any economics papers to *Current Science*?' and (ii) 'Please explain reasons for the above answer'.

All of the e-mails were sent on 16 September 2013, and after one week we analysed the results. Then, based on a qualitative analysis of the responses[5], we constructed a model using Atlas.ti software to represent the different argumentation strategies used by our respondents. Qualitative codes were assigned to the answers or parts of them. Fifteen codes sufficed to describe 80 different fragments of the answers; an additional code represented the answer: 'not ready to publish in *Current Science*'.

Results and discussion

In the instructions to authors we could find nothing against economic papers; instead, we read about 'interdisciplinary topics', 'general interest to scientists', 'science and scientific activity'. Thus, there was no information in the journal's web page to discourage or encourage the submission of economics papers.

Next, depending on how (and especially, on how widely) one defines economics, we estimated that around 20–30 out of the 6519 papers published in *Current Science* from 2005 up to 2013 (**105**(7)), i.e. less than 0.5%, could be considered as economic papers. Examples of strictly economics papers were those by Prathap[6], Gopal *et al.*[7] and Mrinal[8]. Furthermore, seven articles published in 2012 (**103**(6)), in the special feature 'Mathematical finance and game theory', were worth noting as they focused on economics. Certainly, *Current Science* is not only a multidisciplinary journal, but it is also an interdisciplinary journal, and a number of other interdisciplinary papers have been published with some economics content. Nonetheless, this does not change our conclusion that *Current Science* only occasionally publishes economics papers.

Our final analysis was based on the questionnaire survey of Indian researchers in the field of economics. Out

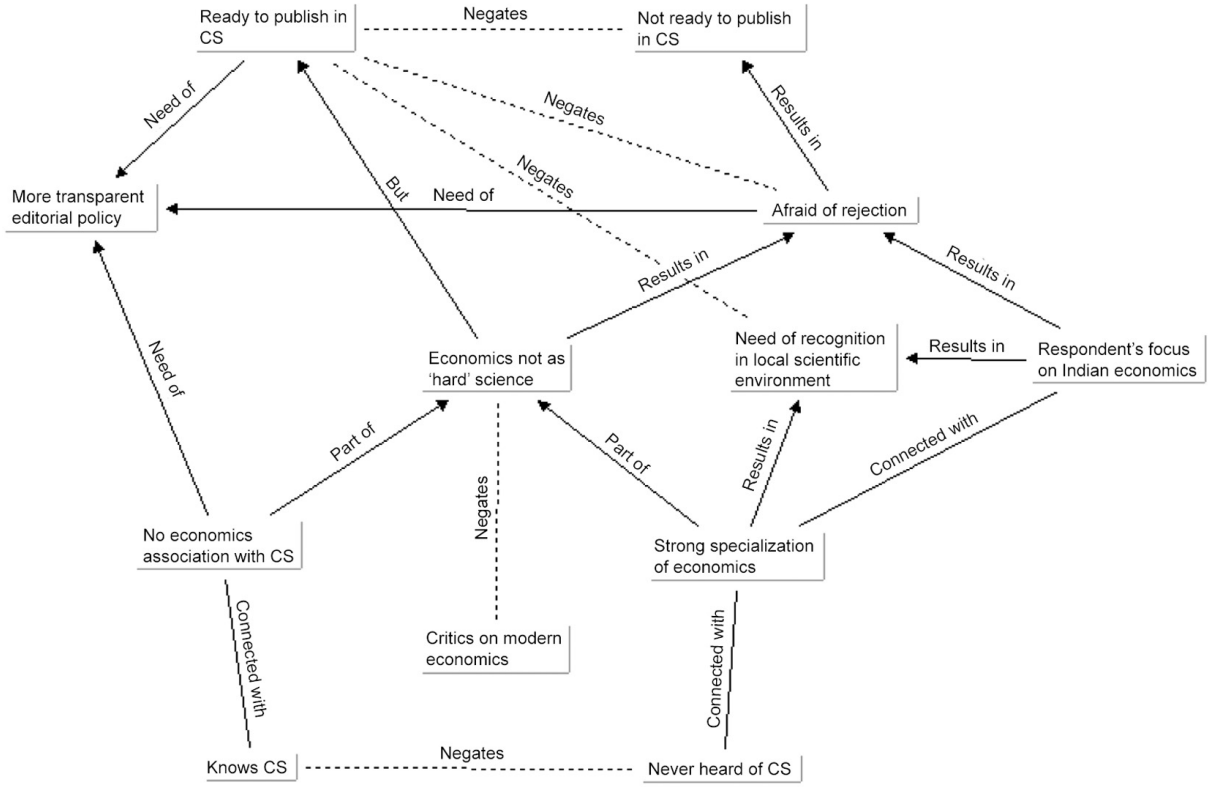

Figure 1. Visualization of the final model representing different argumentation strategies used by the respondents (Indian economics authors) concerning their opinion about *Current Science* (*CS*) as a possible outlet to publish economics papers. (This chart should be read from the bottom.)

of 279 e-mails sent, 29 (10%) were rejected by the server and 43 (15%) responses were received, which gives a response rate of 15%. Out of 43 respondents, only 2 had ever submitted papers (one being a book review) to *Current Science*. Among those who had never submitted to *Current Science*, 17 had not heard of the journal.

Turning to the questionnaire, most 'grounded' codes (that is, those assigned to the highest number of quotations) were 'no economics association with *CS*' (13 quotations; *CS* stands for *Current Science*), 'knows *CS*' (12), 'strong specialization of economics' (11), 'never heard of *CS*' (10) and 'economics not as "hard" science' (10).

The final model that we derived (Figure 1) represents the network of these codes (treated as nodes) and connections between them (links), constructed on the basis of the relations within the structure of the arguments. Statements can (i) 'negate', (ii) be 'a part of', (iii) be 'connected with', and (iv) 'result in' other statements. There are also two additional links: 'but' and 'need of', not directly driven from the answers' contexts, but crucial for the whole model.

The network has its own 'density', which is equal to the number of links between particular nodes. The code 'economics not as "hard" science' is in the centre of the model because it has links with as many as five other codes. Codes 'strong specialization of economics', 'ready to publish in *CS*' and 'afraid of rejection' have four links. The other codes are less important.

Starting from the bottom of the chart in Figure 1, there are two main 'paths' across the model: the first for those respondents who knew *Current Science* and the second for those who did not. The former claimed that they had not published in *Current Science* mainly because, in their opinion, this journal was not related to economics. The respondents who did not know the journal stressed their specialization in economics, thereby indirectly suggesting that had *Current Science* been an economics journal, they would have been aware of its existence. Both of these arguments contribute to the view that economics is not a 'hard' scientific discipline, being instead a part of the social sciences. The title of the journal – *Current Science* – was strongly perceived as related to the sciences but not to the social sciences. Despite this, some of the respondents who knew the journal before completing the survey were willing to publish in *Current Science*, should the journal's editorial policy be more transparent about also accepting papers from the social science disciplines.

The respondents who did not know *Current Science* before the survey used a much more complex argumentation

strategy about their willingness to publish in the journal. Their main argument – that economics is a strongly specialized discipline of the social sciences – was connected with the local (that is, Indian) character of the topics in economics that they studied. They did not consider publishing in an international multidisciplinary journal to be a way of achieving scientific recognition in an Indian environment.

Some respondents were afraid of rejection from *Current Science* but also, more generally, from journals with international reputations. This anxiety strengthened their conviction that it was not worth trying to publish articles in international journals, *Current Science* included.

Conclusion

One might expect that a truly multidisciplinary scientific journal would be one which publishes papers in any discipline of science, whether in the natural sciences or the social sciences. These two widely understood branches of science are frequently intermingled today, especially when it comes to methodological issues concerned with sociological or economic studies.

These days, in the second decade of the 21st century, when science is conducted mainly by teams rather than single researchers, it seems appropriate to be interdisciplinary and to be international rather than regional. Thus the need for mixing various ideas from different sources seems inevitable. Let us take India, for example. As a rule, Indian economists do not publish in *Current Science*; many of them do not even know of the journal, even though it is one of the best known Indian scientific journals. Those who do know about it claim this journal does not seem to publish economic papers. But, on the other hand, the journal does publish contributions in various aspects of the social sciences, mainly those related to education, and also – occasionally – to economics. Mega journals such as *Science* and *Nature* also publish articles in social sciences discipline (for example, psychology, archaeology, anthropology), but it is also clear that here too, economics or sociology are not their mainstream.

We do not claim that *Current Science* and other multidisciplinary journals should publish economics papers. But we do think that these days there is a need for journals that combine various scientific disciplines. Why should Indian economists not use *Current Science* to make their research more visible to India and the whole world? *Current Science* could publish more economic papers, which would make it truly multidisciplinary. This would also support Indian economics in being more recognizable for an international audience. Our supposition is that the main reason why there is so small a number of economics papers in *Current Science* is a lack of communication between economics researchers and the journal.

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