

Interactive comment on “The Flat Earth satire, using science theatre to debunk absurd theories” by George Sand França et al.

Juliana Garrido Damaceno (Referee)

juliana.damaceno@ingv.it

Received and published: 15 June 2020

The paper titled ‘The Flat Earth satire, using science theatre to debunk absurd theories’ presents relevant scientific information about a concrete initiative in communicating science by disseminating the knowledge by art performances to the scientific and general public. A questionnaire was presented as a way to evaluate the engagement of the public in the topics addressed. The paper in fact brings novel ideas in spread the scientific knowledge outside the academia, however in a ludic way, giving opportunity for whole families to think more about topics so essential in the development of scientific thinking. The authors gave appropriate credits to related works but I suggest a more deep investigation in the theme. The paper should return to the authors and pass by a better writing review. The authors are dealing with an important topic and should put

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more effort into passing on the information in an appropriate way so that more good initiatives like this can emerge. If the paper return by the authors in the best written form, I recommend it to be published. Specific comments: The work won the DF 2019 Theater Award Category: Local Circulation Show and this information should be present in the introduction, the results and conclusion should be elaborated highlighting the fact that part of the public lack basic knowledge of scientific information, and not that great part of the public knows the shape of the Earth. This is important to highlight the need for initiatives in bring the science close to the general public. Please add more information about the public that filled the form (age, level of education, nationality, etc); I appreciated the conclusions but I also expected to know more about the next steps in developing this project.

• I suggest to remove the phrase ‘Sciences have no actions or initiatives.’; • I suggest to rewrite more clearly the paragraph that starts in line 52: ‘Searching for this connection between science and art is certainly complicated, due to the exhaustive scientific activity of researchers, which most of the time there is no way to present themselves in the art form, however we can unite with educating artists and assist or boost our art science.’; • I suggest to rewrite more clearly the paragraph that starts in line 59: ‘. That seeks this link through the clowning between science and art and in this work the whole process of creation will be shown in a summarized form and also the results obtained from the audience through the google form for the public that attended.’; • I suggest to rewrite more clearly the paragraph that starts in line 74: ‘Our work enters the area of earth science and art, where it is still very little explored and we use the same tools used by previous works (what tools?) The information was collected on this subject using the social networks that defended this false theory and through scientific dissemination that refute the theme, scenes for spectacle were simultaneously created.’ • I suggest to rewrite more clearly the paragraph that starts in line 79: ‘. The show’s introduction scenes were selected, in which we used two “mamulengos” to present the show.’ Please could you explain what ‘mamulengos’ are? • I suggest to rewrite more clearly the paragraph that starts in line 81: ‘After the presenta-

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tion, a short lecture that will be disturbed and at least three slides. For the next scene, we break the text of the big bang theory, adapted from Oliveira 2018, in which we use of body as language. Given continuity, music inspired by the opening of the series The Big Bang Theory, by Thomazoni W. (2013) was used and adapted for the show. In addition, scenes from França et al. 2019 (Figure 1) featured Newton's scene and gravity (please we need more explanation about) in the EGU session. Finally, the remaining three (or two?) scenes were: the story of the planets with balloons and a Pilates ball; based on the film "the great dictator" by Charlie Chaplin; and finally the Earth is Flat sermon.'

• I suggest to rewrite more clearly the paragraph that starts in line 96: 'With everything ready, leaving only the scenario we chose in a scenario that facilitated mobility'

• The reference lines disappeared in page 4

• I suggest to rewrite more clearly: 'we used the audience that watched through a google form, that was made available. This form had 9 questions and an optional comment Of the 316 people who have watched the show so far, 11% of the public have answered the questionnaire'

• I suggest to rewrite more clearly: '. This division shows that we had a well distributed response and there was a mix of the audience from the academy and also an audience, since the presentation in Natal'

• Add parentheses (Figure 3a) in: 'certainly the title makes the public more aware of the subject Figure 3a.'

• I suggest to rewrite more clearly: 'This result brings us to believe that we have an audience with excellent knowledge and that apparently can lead us to greater understanding with laughter.'

• What is the purpose of the play since the audience already has the knowledge of the topic?

• Authors should be more careful with punctuation and double spacing;

• I suggest to rewrite more clearly: 'The second part is about on scientific dissemination, first question is one word was asked to represent the show, figure 4 shows a word cloud with emphasis on didactic, interesting, fun, playful, genius. This shows that we had a general acceptance of the public. If the show is science dissemination with a score of 1 to 5, 83% gave a score of 4 and 5 and 17% gave a score of 3, again it shows the importance of this play with a link in a space that is at least used in Federal Capital in Brazil'

• I suggest to rewrite more clearly: 'The show regarding classifica-

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tion and recommendation to another person obtained results similar to that of scientific dissemination, with another 80% with a score between 4 and 5. What we can conclude was that it was well accepted by the public (Figure 7).'

• I suggest to rewrite more clearly: 'As for the comments, the highlight is that the show is not ready yet, although all this result, especially the end of the show and why we use of the "mamulengos". That it was necessary in order to highlight the training of the actor in terms of qualification in science. The need to further highlight the issue of the flat Earth. Performance problem, p.e. physical preparation was also highlighted. With these comments, we are updating the play to seek the best show'

• 'An importance in the dissemination of sciences through Art, not only opens a space for science, but also presents to an audience that is not frequent in any theater or theater.' what is not present in the theater is science, the audience is always present.

• I suggest to rewrite more clearly: 'When you get stronger and do an artistic work based on the experiment to further guarantee the quality of scientific dissemination.'

• I suggest to rewrite more clearly: 'Scientific dissemination should be one of the main functions for researchers, who normally participate as collaborators in most dissemination activities.'

• The references should be more carefully organized conform the rules of the journal (https://www.geoscience-communication.net/for_authors/manuscript_preparation.html): doi numbering, comma and year. Also when referring to a webpage (example: Copernicus Publications: <https://publications.copernicus.org/>, last access: 25 October 2018.)

• I was not able to access the link presented in the last reference as a 4shared document (Thomazoni W. 2013. A historia do universo – lyrics available (In Portuguese) <http://www.4shared.com/mp3/Sv8mQnik> . 2013). I suggested to use the one from youtube (<https://www.youtube.com/watch?v=chvzmXTOBGs>)

Interactive comment on Geosci. Commun. Discuss., <https://doi.org/10.5194/gc-2020-19>, 2020.

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