How to write a popular article

This article summarises contributions from Gavin Maneveldt, Rob Moore, Jenny Day and John Reid

writing a popular article is harder than one might imagine. Your one consolation though, is that it will certainly prepare you for the world of thesis and scientific writing. While the writing style of the article prepared for the popular audience is somewhat airy in comparison to a scientific paper, even this article required considerable thought and planning. With a few helpful hints, however, even the least experienced writer can produce an arrangement of thought-provoking imagery.

For the amateur writer, particularly those interested in the natural sciences, writing of a popular article starts as they enter the research arena. This is the time when you are awakened to a world of observation, change and manipulation. For many of us, it is also the time when we are ‘forced’ to view the world in its entirety, guided by critical thinking and probing questions.

While this document provides some criteria for the development of a popular article, the following statements should be seen as a guide and not as absolutes in your formulation of a popular article. Originality will be your most effective tool!

GUIDELINES TO GETTING YOU STARTED

1. The research project
Irrespective of your research level, presumably you are doing what interests you. This is critical to the successful delivery of a popular article pertaining to your research field. Choose a subject you feel confident with. To write a ‘popular’ article you need to know much more than you’re going to put across, in order to set the right context. Don’t write about a topic that you’re struggling to understand yourself.

2. Observe
If you are truly passionate about your research, you will start encountering, noticing and discovering new things. These may relate directly to your research, or to an aspect involving your research e.g. encountering something exciting en-route to your research study site at a pit-stop, for example.

3. Record
As you start observing things, record what captures your interest or imagination. The keen observer always carries along with him/her
- a notebook, and if at all possible
- a camera.
Start your own collection of photographs, slides, drawings and notes of your encounters; in all likelihood, you may never relive the same experience again, and, even if you’ve recorded something once before, do it again the next time round. You are bound to have a different experience.

FROM FORMULATION TO PUBLICATION

4. Draft (your article)
Your first draft is often comprised of no more than a few key sentences, probably highlighting what in essence may become your topic sentences for the article. If you are able to write a substantial draft with a number of complete paragraphs, then good-for-you. This is, however, not essential as with time and practice, you will find that it becomes easier to write whole, or even complete articles straight off.

For those of us less articulate, the second draft is usually preceded by a search of the literature / Internet / an authority etc, on information directly pertaining to your encounter. Don’t worry too much about the style, grammar, etc.; the first few attempts should be focused on the encounter and not necessarily the means to express it.

5. Going through the paces
This is where you start paying attention to the style and format of your article and will usually entail many drafts before you are happy with the article. There are very few people who are able to produce articles from but one or two drafts.

6. Publication
Read over the final result and make sure that the style and approach is right for your target publication. Decide which publication you would like to send it to:
- General newsletters (e.g. PET, On-Campus, etc)
- Specialist newsletter (e.g. Societal such as SANCOR, etc)
- Newspaper articles
- Specialist scientific magazines (e.g. Veld n Flora, SA Wildlife, etc)
- General scientific magazines (e.g. Quest)
- Scientific Papers (Primary research publications)
A MATTER OF STYLE

The languages of 'popular' and 'serious' science

The following is an example of language typically used in an article in a scientific journal.

“Cladocerans obtained were identified, counted and measured to the nearest 0.07mm using a calibrated eyepiece micrometer. The numbers of individuals in each of the following categories were determined at weekly intervals for all species present: juveniles, adult females, adult males with eggs, ephippial females, males, and total numbers.

Temperature at the mud surface and percentage organic matter, chlorophyll a and phaeopigments in the substratum were determined weekly. Monthly plankton samples were taken just above the substrate to monitor the occurrence of chydorids in the plankton and occasional samples of young fish and Tanytopodinae (Chironomidae) were taken and their gut contents analysed.”

(Robertson 1990, source unknown)

Some typical features of this kind of language are:

• use of the passive voice (eg "samples of young fish and Tanytopodinae were taken...") rather than the active voice (eg "biologists took samples of young fish...")

• avoidance of the use of the first person (I/we) (note that both of these features seem to remove the person from the process, in an effort to give the activity an air of 'objectivity')

• use of scientific terminology without further explanation (eg "Tanytopodinae"), assuming that the reader is familiar with these terms

• formal language.

The style in which one normally writes 'popular' scientific articles and books is rather different. Look through the paragraphs below and note features of the language that are different from the features of 'scientific' English: less use of the passive voice; more use of the first person; use of common names of species; more informal language; explanation of jargon.

“...The butterfly is the mountain pride (Meneris tulbaghia), an unusual member of the family Satyridae, or 'browns' as they are known among collectors...”

(Steven Johnson, 1992)

Coherence

Most of the articles in a magazine like African Wildlife are chosen because they tell a story that catches the reader's attention and encourage him or her to read further. How is this achieved? Look for devices that authors use:

• the first paragraph has an element of surprise and interest

• the concluding paragraph asks a question or raises a concern

• the paragraphs link to each other in interesting ways

• the writer builds a story around an animal or an ecosystem, for instance.

We can call these ways of setting up a "coherence framework" for a piece of writing. A good author of popular science will ensure that the article has a beginning, a middle and an end, all satisfactorily related to each other, and that the piece is logically constructed, interesting and easy to read.

You should of course examine some examples of popular articles to get a 'feel' for what is good and what is not.

Tips on submitting to editors

1. Editors usually prefer you not to cite references in the text of a popular article (unless you are quoting directly, in which case, anti-plagiarism rules apply). Instead, provide a list of 3-4 four sources of ‘Further Reading’.

2. You should provide a clean unformatted copy (i.e. no special fonts, no columns, etc.) because Editors always have particular formatting preferences for their journals. Place the figures and captions separately at the end of the article, not embedded in the manuscript.

Further guidelines on writing popular articles can be obtained on http://www.abdn.ac.uk/physics/guide/article.html

References


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<tr>
<th>STEP</th>
<th>ACTIVITY</th>
<th>OUTCOME</th>
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<tbody>
<tr>
<td>1</td>
<td>In two minutes, describe your project. Ask yourself: What am I attempting to research? Of what relevance is my research to society?</td>
<td>Identification of a subject upon which to base a potential topic.</td>
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<td>2</td>
<td>Reflect on your encounters during your research outings, trips, etc. and try to remember what struck you most and why. What exciting information have you discovered that others may not have seen or encountered before?</td>
<td>Identification of a topic.</td>
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<td>3</td>
<td>Compile a collection of images, photos, slides, drawings, etc. pertaining to your research. Remembering what you observed, take the next 2 minutes to record what captured your interest, imagination, etc. Construct a 2/3-sentence paragraph that summarizes your encounter. Construct a flow diagram of your encounter.</td>
<td>Construction of your opening paragraph. Creation of a flow diagram (using only keywords) of your potential article.</td>
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<td>4</td>
<td>Using your flow diagram, create a rough draft of your article. Formulate a title that in itself captures the readers’ attention. Write an 800-1200 word essay of your observation or encounter. Keep in mind that the writing style of a popular article is a lot more casual than that of a scientific paper.</td>
<td>Formulation of a title for your article.</td>
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<td>5</td>
<td>Two stages: a) Ask someone to comment on the encounter(s) (e.g. the scientific merit). b) Ask someone to comment on the language style, grammar, etc. Read latest draft aloud and style comments by participants.</td>
<td>Formulation of final stages to a well-written popular article</td>
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<td>6</td>
<td>Decide which medium to send the article to.</td>
<td>PUBLICATION OF THE ARTICLE</td>
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