Summary Guidelines for the Preparation of Scientific Research Papers

This summary is intended as an orientation aid for those who are already familiar with the detailed guidelines. It is not a substitute for the detailed version which should be consulted in cases where this summary version may be incomplete or unclear.

A paper reporting the scientific investigation of a subject in the field of translation and interpretation should parallel the structure of the scientific analysis conducted. The acronym

PRO-DA-IN-FORM-AD

is suggested as an aide-mémoire for use in planning and checking the research report structure.

1. The report structure should be organized (parallel with the underlying scientific analysis) according to the following sequence:

PRO *states the **PRO**blem or question which the researcher intends to examine.* This must also include a review of the existing literature on the topic with particular attention to any prior or similar solutions to the problem and the rationale for the researcher's own endeavors (i.e. legitimization).

DA *contains the **DA**ta available on the stated problem.* These data may be collected

- either directly from the phenomena area (e.g. from a text corpus)
- or as the result of carrying out an appropriately designed and executed experimental plan.

The details of the data collection method are specified and discussed in this section along with the data-specific analysis; this action also serves to organize the data for the subsequent model building. Providing examples of data is not sufficient since doing so fails to specify which aspects of the example are generally representative and which apply only to the example. The range of variation within the data or, as a minimum, the type of possible variation must be specified; conversely, what is not variable must also be specified.

IN *delineates the **IN**tuitive, **In**formal solution of the scientific problem* put forth by the researcher. This should include the factors and/or aspects which the researcher believes represent the essential characteristics of the data or explain any variations in the data. The central line of reasoning of the model which is to be formulated in the **FORM** section should be perfectly clear to the reader. For more complex theories ('theory' is used here synonymously with 'model'), the aspects which make up the core of the theory must be made explicitly clear.

This section of the paper should also include any reflections about the scientific theories which form the foundation of the model developed in the **FORM** section. This helps to insure descriptive consistency and to avoid flaws in logic and errors in presentation.

FORM *elucidates the* ***FORM****al (i.e. algorithmically formulated) model or theory*. This does not mean the model or theory has be stated in formal mathematical or logic symbols but that it must at least be presented in an orderly theoretical language which the expert reader can understand and follow and, if desired, utilize and further develop. Also included in this section is the introduction and explanation of definitions and terminology and the formulation of the model in the proposed theses.

AD *represents the final verification of the* ***AD****equacy of the model and/or theory* with reference to the questionings and the data: i.e. in which parts the research questions were satisfactorily answered and which data was appropriately described by the model. It must also be stated how the theoretical theses (and thereby the included terminology) are to be applied to the data. However, before this step is carried out it must be clearly demonstrated to the reader that the proposed theoretical solution is in fact a model of the proposed solution.

The ideal situation and ultimate goal of every scientific investigation is always to describe all data with a theory and thereby completely answer all questions. The ideal, however, cannot be the only criterion for an acceptable answer. A partial answer, which explicitly establishes which data were described by the theory and which not also represents an increase in the state of scientific knowledge in the researched field.

Further, indications of contradictions, complications and other problems which emerge from the proposed solution are also relevant since they pose new problems to be researched and thereby continue the upward spiral of development which advances science to the next level.

2. The preparation of the research report can best be accomplished by applying the PRODAINFORMAD in the following phases:
   - *Precondition for a scientific research paper:* The absolute prerequisite for report production is the completion of the scientific analysis.
   - *Preparation phase:* In this phase the factual information gathered is assigned to the PRODAINFORMAD phases.
   - *Text formulation planning phase:* Texts should be planned with the intended type of recipient in mind and factual information formulated according to their level of scientific expertise in the field.
   - *Text set-up phase:* The formulated text plan is transformed into a text appropriate for the intended recipients.
   - *Control phase:* The general structure of the text composition is checked against the PROADINFORMAD and the text coherence controlled.

So far as possible, straightforward and theoretically clear language should be used in all segments of the scientific treatment.

- Stylistic variations, the use of synonyms for terms and flowery metaphors as well as complicated language should be avoided.

- Comparisons, analogies, examples and anecdotal case studies are not substitutes for well modeled statements but may be added to improve understanding. (Even if not all of the English-language scientific community subscribes to this position.)

3. Every section of the PRO-DA-IN-FORM-AD should clearly state:
   - the partial task to be dealt with and/or the purpose and objectives of this part of the paper
   - how the objectives are achieved, i.e. methods, data, linguistic means (terminology, algorithms, etc.) as well as the lines of reasoning
   - which conclusions can be determined from each section.

4. When tables and figures are used, all characters shown in the graphics (symbols, and abbreviations, etc.) must be clearly defined. It is also important to insure the relationship between every graphic and the text is transparent. (When a graphic contains more information than explained in the text, it is unclear whether the text or the graphic is the basis of description.)

5. Reflections on the principles of scientific theoretical thinking and how adhering to these principles influences information structuring and helps to avoid logical errors are offered in the detailed guidelines.

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(English version by Alfred Arbogast)