Launching a new article type in Fennia: Data descriptions

The journals of the Geographical Society of Finland are launching a new article type: *Data descriptions* (*Datankuvauksia* in Finnish, *Beskrivningar av data* in Swedish). The autumn issue of Terra (3/2014) pioneers the new article type. With this announcement we welcome manuscripts of this kind also to Fennia.

Openness, transparency, and reproducibility are hallmarks of scientific methods as they enable the peer-evaluation of the quality and accuracy of research. In practice, however, most research carried out today cannot be reproduced or replicated by others and thus evaluated in detail. This is due to limitations in access to original data, vague or insufficient method descriptions or simply difficulties in accessing the publications that describe the research work.

During the recent years, these issues have been gaining increasing attention. The so called Open Science movement has gained popularity among individual scientists, research groups and research fields, physics being one of the leaders. Simply put, the open science movement aims at making scientific publications, research data and methods openly available for others to evaluate and develop further. In addition, research administration has also been interested in advancing and supporting these developments. For example, the Ministry of Education and Culture in Finland aims at creating "top conditions for research in Finland" through the Open Science and Research initiative (http://openscience. fi/).

For an individual researcher, the benefits of open access publishing are clear as it may broaden the audience and readership of the results. Sharing research data may, however, feel like sharing researcher's valuable capital on the research market. This is particularly the case as the reward mechanisms for opening up research data – in comparison to publishing an article – are still immature or non-existing.

To support individual researchers in opening up their research data, some international scientific publishers have established journals for data descriptions. *Geoscience data journal* by Wiley and *Scientific Data* by Nature Publishing Group are examples of such endeavors that have

taken place recently. Instead of traditional primary research articles presenting novel research results, these journals publish articles that describe scientifically valuable datasets and their production history. In other words, data publications help readers to understand "the when, how and why data was collected and what the dataproduct is". The principle is that the description and the data are being peer-evaluated, which establishes the robustness of the data production line.

The journals of the Geographic Society of Finland have been following carefully the recent trends in scientific publishing as well as in the open science movement. Fennia took the first step already in 2010 when it became an open access journal. Now both Fennia and Terra are continuing the same evolution by launching a new article type called Data descriptions (Datankuvauksia in Finnish, Beskrivningar av data in Swedish). The first article of this type, presenting an openly available spatial data set on the multimodal travel times in the Helsinki region has been published in the most recent issue of Terra (Toivonen et al. Terra 3/2014). The publishingprocess followed the normal peer-review steps, which considerably improved both manuscript and the data. In this case, the data had been made available through Helsinki Region Infoshare (http://www.hri.fi/en).

From this issue onwards, also Fennia welcomes manuscripts describing openly available, scientifically valuable datasets and their production process as Data description articles. Datasets may be either quantitative or qualitative in nature and the descriptions aim at providing understanding on how the data has been produced and what it can and cannot be used for. Fennia follows the common practice of data journals meaning that at the time of manuscript submission, the data should be made available to the peer-reviewers and later to everyone through a suitable data repository (such as those provided in Finland by CSC - IT Center for Science or Finnish Social Science Data Archive) and a suitable license (such as CC-BY). When appropriate, we also encourage researchers to openly share their data processing implementation - for example code or configuration files – using collaborative platforms, such as GitHub (https://github.com/).

With this new article type, Fennia hopes to help researchers in sharing their datasets and being merited accordingly through publications and increased visibility. More broadly, we wish to encourage everyone to participate in the transition to a new and more open research culture in geography.

Tuuli Toivonen will be acting as a guest editor for this new article type.

Tuuli Toivonen, Department of Geosciences and Geography, University of Helsinki. E-mail: tuuli.toivonen@helsinki.fi

Paola Minoia, Department of Geosciences and Geography, University of Helsinki. E-mail: editor.fennia@geography.fi