Open Data Kit Goes Semantic –
A Contribution to the Interpretability and Interoperability of Citizen Science Data

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Mobile data collection is playing an increasingly important role in Citizen Science projects. In Order to Be (Re-)Usable and analyzable, Citizen Science Data Need to Be …

… (1) easily and automatically processable on a computer, (2) need to be interpretable by humans and (3) interoperable with other data.

We’ve developed a methodology and implemented it as a software extension to the mobile data collection framework Open Data Kit 1 (ODK)¹. Our solution contributes to the interoperability and interpretability of Citizen Science data by …

(1) Enabling Interpretability by Enriching CS Data with Metadata at Design Time

(2) Enabling Interoperability by Offering Flexible Template-Based Data Export …

… to customized data formats and models including XML-, CSV- and RDF-based (Linked Open Data) formats.

Separation of Concerns & Transparency …

… ensures that data managers are only bothered with form design and the collected data, knowledge engineers are only concerned with the data model and format, and citizens data collectors just interact with the mobile application.

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