Aristotle on natural motion of simple bodies

A Data Management Plan created using DMPonline.be

Creator: Li Chen

Affiliation: KU Leuven (KUL)

Funder: Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO)

Template: FWO DMP (Flemish Standard DMP)

Grant number / URL: 11PJW24N

ID: 206598

Start date: 01-11-2023

End date: 31-10-2027

Project abstract:

For Aristotle, having nature as an internal principle for change is the key feature that distinguishes natural bodies from unnatural ones. Accordingly, Aristotle argues that all natural bodies have certain natural changes. The proposed project studies Aristotle's discussions on the primary natural change of simple bodies – the natural locomotion of the elements – in *Physics, De Caelo*, and other relevant passages. The project will answer what common and special characteristics these motions have, how Aristotle explains them in different contexts, and whether his discussions in different works constitute a coherent theory of natural elemental motion. While certain problems involved in this issue have been long-discussed by scholars, the existing studies are insufficient in offering a comprehensive picture of the theory. The project mainly consists of three parts. The first part constructs Aristotle's general theory of natural motion by analyzing a set of central principles and clarifying the key notions he uses for the discussion. The second and third parts study the natural motions of the terrestrial and celestial elements. The project will examine the interpretations from ancient commentators (such as Simplicius and Philoponus) and will take the new developments in this field in the last decades into account.

Last modified: 27-04-2024

Aristotle on natural motion of simple bodies FWO DMP (Flemish Standard DMP)

1. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data.

						Only for	Only for physical data
Dataset Name	Description	new or	_	Data	Data	Digital data volume (MB/GB/TB)	Physical volume
Digitalized primary texts	Editable primary texts from online databases	Reuse existing data	Digital	Textual	.docx	<100MB	n/a
existing	commentaries, and secondary literature (monographs, journal	Reuse existing data	Digital	Textual	.pdf	<2GB	n/a
Translations		Generate new data	Digital	Textual	.docx, .pdf	<100MB	n/a
Notes	Notes on, summary of primary and secondary texts	Generate new data	Digital	Textual	.docx, .pdf	<100MB	n/a

If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type:

All data in "Digitalized primary texts" are compiled from the online database "Thesaurus Linguae Graecae." Data in "Texts from existing literature" are either (1) digitized publications that are accessible through Limo, or (2) scanned copies of printed publications that are available in research libraries.

KU Leuven libraries provide its users access to these existing data.

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? Describe these issues in the comment section. Please refer to specific datasets or data types when appropriate.

• No

Will you process personal data? If so, briefly describe the kind of personal data you will use in the comment section. Please refer to specific datasets or data types when appropriate.

• No

Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, ...)? If so, please comment per dataset or data type where appropriate.

• No

Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements/ research collaboration agreements)? If so, please explain in the comment section to what data they relate and what restrictions are in place.

No

Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain in the comment section to what data they relate and which restrictions will be asserted.

Yes

Due to copyright restrictions, the existing data that is reused in the research will not be made accessible to external users during and after the research.

2. Documentation and Metadata

Clearly describe what approach will be followed to capture the accompanying information necessary to keep data understandable and usable, for yourself and others, now and in the future (e.g., in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded).

For translations and notes, documentation will always be included in the data file itself. ReadMe file(s) will be created when needed. Data from published primary and secondary literature will documented using Zotero, which will store all relevant bibliographic metadata.

Will a metadata standard be used to make it easier to find and reuse the data? If so, please specify (where appropriate per dataset or data type) which metadata standard will be used. If not, please specify (where appropriate per dataset or data type) which metadata will be created to make the data easier to find and reuse.

• Yes

For new data, DataCite Metadata Schema 4.5 will be used.

For existing data from published primary and secondary literature, all relevant bibliographic metadata will be saved by Zotero (which can export files that comply with different standards).

3. Data storage & back-up during the research project

Where will the data be stored?

Data will be stored in OneDrive (KU Leuven) and on the researcher's laptop.

How will the data be backed up?

Standard back-up will be provided by KU Leuven ICTS for my storage solution.

I will also use person backups: all the research data will be backed up on the researcher's laptop.

Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.

• Yes

The total amount of data used in the project will not exceed 5 GB under broad estimation. KU Leuven offers OneDrive storage of 2TB. The laptop that the researcher uses has far more storage space than 5GB for backups. The storage capacity is sufficient to preserve all research data.

How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

KU Leuven OneDrive is secured by multi-factor authentication (password and KU Leuven Authenticator app). The personal laptop the researcher uses has password protection.

What are the expected costs for data storage and backup during the research project? How will these costs be covered?

No cost is expected

4. Data preservation after the end of the research project

Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...).

All data will be preserved for 10 years according to KU Leuven RDM policy.

Where will these data be archived (stored and curated for the long-term)?

KU Leuven RDR or an open repository e.g., Zenodo

What are the expected costs for data preservation during the expected retention period? How will these costs be covered?

No cost is expected.

5. Data sharing and reuse

Will the data (or part of the data) be made available for reuse after/during the project? In the comment section please explain per dataset or data type which data will be made available.

• Other, please specify:

Data generated in the project will be made available in an Open Access repository.

The existing data reused in the research will not be made available during and after the research.

If access is restricted, please specify who will be able to access the data and under what conditions.

Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, leg	gal
restrictions)? Please explain in the comment section per dataset or data type where appropriate.	

• Yes, Intellectual Property Rights

Due to copyright restrictions, the existing data reused in the research will not be made available during and after the research.

Where will the data be made available? If already known, please provide a repository per dataset or data type.

KU Leuven RDR or an open repository e.g., Zenodo

When will the data be made available?

Upon publication of research results or at the end of the research project.

Which data usage licenses are you going to provide? If none, please explain why.

CC-BY 4.0

Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, you have the option to provide it in the comment section.

• Yes

What are the expected costs for data sharing? How will these costs be covered?

No cost is expected.

6. Responsibilities

Who will manage data documentation and metadata during the research project?

The researcher

Who will manage data storage and backup during the research project?

The researcher

Who will manage data preservation and sharing?

The researcher and the supervisor

Who will update and implement this DMP?

The researcher