



Frictionless Data

Making Byzantine Computational Musicology FAIR - a working example

Katerina Drakoulaki and Polykarpos Polykarpidis
National and Kapodistrian University of Athens

Music Notation - similar to issues with manuscripts in DH

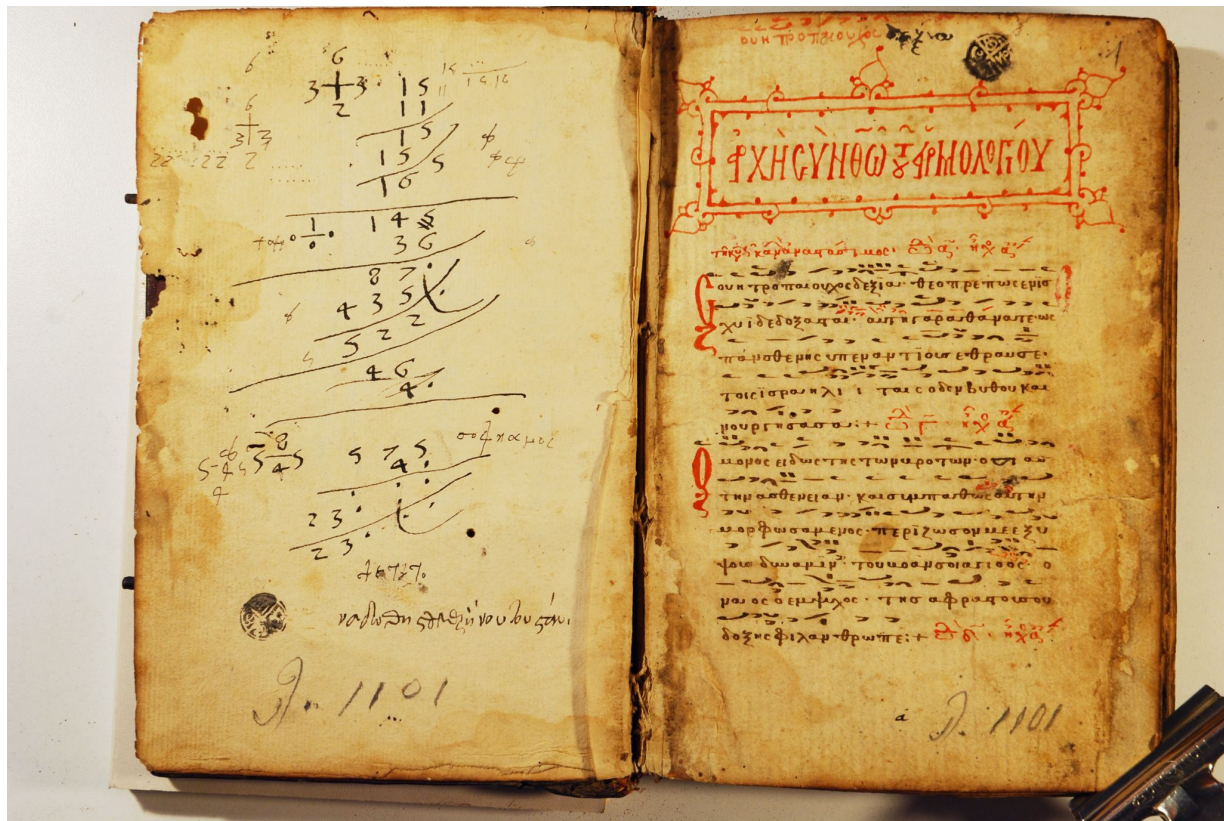
Iveron 1101 (Mount
Athos), folio 1r

Byzantine Music from (middle)
16th century

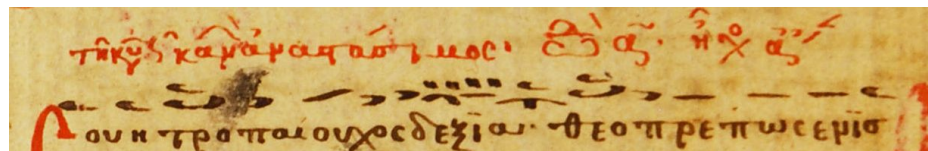
Information it contains:

- Text (chant music)
- Symbols on top which indicate melodic movement

[Sounds like this](#)



How information looks now



	id	m/v	pitches	voiced_unit	intervals	syl	syl_is_accented	syl_is_continue	is_last_syl_word	Voiceless	Voiceless_continue	is_last_syllable_phrase
1	0	martyria	a									True
3	1	phrase_line	a	0	0	σου	False	False	True			False
4	2	phrase_line	a	0	0	η	False	False	False			False
5	3	phrase_line	a	p0	0	τρο	False	False	False			False
6	4	phrase_line	G	a	-1	ποι	False	False	False			False
7	5	phrase_line	a	oo	1	ού	True	False	False			False
8	6	phrase_line	G	a	-1	χος	False	False	True			False
9	7	phrase_line	E	a2	-2	δε	False	True	False			False
10	8	phrase_line	F	kk	1	-	False	False	False			False
11	9	phrase_line	G,a	okk	1,1	ξι	False	False	False			False
12	10	phrase_line	a	0	0	α	True	False	True	ap		True
13	11	phrase_line	a	p0	0	θε	False	False	False			False

Describe & Validate

Add title and description to the package

```
package = frictionless.describe('dataset/*.csv')
package.title = 'MBn FAIR dataset'
package.description = 'This is the Making Byzantine Computational Musicology FAIR dataset. It contains the resources (datasets), package schema, and other metadata.'
```

Edit information about the “pitches” value → check the constraint

```
schema = frictionless.describe_schema("dataset/"+my_list[0])
```

```
schema.get_field("pitches").title = "comma separated string of pitches"
schema.get_field("pitches").description = "this field contains a list of pitches, not always one pitch for each cell"
schema.get_field("pitches").constraints["required"] = True
```

Validation report

```
validation_report_schema = frictionless.validate('MBn_dataset.schema.yaml')
validation_report_package =
frictionless.validate('MBn_dataset.package.yaml')
```

Dataset and code available on Zenodo

Toy dataset: 8 files

Sample of a larger corpus

The screenshot shows the Zenodo repository page for 'CompBMus_FAIR'. The header is blue with the Zenodo logo, a search bar, and links for 'Upload' and 'Communities'. The user 'katerina.drakoulaki@gmail.com' is logged in. The page date is 'March 26, 2022'. The repository title is 'CompBMus_FAIR' by Katerina Drakoulaki and Polykarpos Polykarpidis. It is described as 'Making Byzantine Computational Musicology FAIR - a working example'. The page shows 21 views and 4 downloads. It is indexed in OpenAIRE. The publication date is March 26, 2022, with DOI 10.5281/zenodo.6386552. Keywords include 'Data encoding and canonicalization', 'Data exchange', 'Data cleaning', 'Sound and music computing', and 'FAIR data'. The meeting is the 9th International Conference on Digital Libraries for Musicology (DLfM), Prague, 28 July 2022. The license is Creative Commons Attribution 4.0 International. A file preview window shows the contents of 'CompBMus_FAIR.zip', including a 'dataset' folder with 14 CSV files and two Python files ('main.py' and 'main.py.bak'). A versions table shows Version 0.1 from March 26, 2022.

zenodo

Search

Upload Communities

katerina.drakoulaki@gmail.com

March 26, 2022

Dataset Open Access

CompBMus_FAIR

Katerina Drakoulaki, Polykarpos Polykarpidis

Making Byzantine Computational Musicology FAIR - a working example

This is the repository for the **Making Byzantine Computational Musicology FAIR - a working example** project.

We have submitted a short paper for this.

In this repository, there is a folder with the dataset, the data package schemas in YAML file, as well as the python code (main.py) for describing and validating the data.

Upon acceptance of the paper, the accepted draft will also be uploaded.

Preview

CompBMus_FAIR.zip

- CompBMus_FAIR
 - MBn_dataset.package.yaml 2.6 kB
 - MBn_dataset.schema.yaml 2.1 kB
 - README.md 510 Bytes
 - dataset
 - gr_iviron1101_1r_2.csv 4.2 kB
 - gr_iviron1101_1v_1.csv 3.7 kB
 - gr_iviron1101_1v_2.csv 3.8 kB
 - gr_iviron1101_1v_3.csv 3.5 kB
 - gr_iviron1167_1r_1.csv 3.7 kB
 - gr_iviron1167_1r_2.csv 4.2 kB
 - gr_iviron1167_1v_1.csv 4.1 kB
 - gr_iviron1167_2r_1.csv 3.7 kB
 - invalid_file.csv 1.2 kB
 - main.py 4.5 kB
 - main.py.bak 4.5 kB

Files (14.7 kB)

21 views 4 downloads

See more details...

Indexed in

OpenAIRE

Publication date: March 26, 2022

DOI: 10.5281/zenodo.6386552

Keyword(s): Data encoding and canonicalization, Data exchange, Data cleaning, Sound and music computing, FAIR data

Meeting: 9th International Conference on Digital Libraries for Musicology (DLfM), Prague, 28 July 2022

License (for files): Creative Commons Attribution 4.0 International

Versions

Version 0.1 Mar 26, 2022 10.5281/zenodo.6386552

Thank you!

More information

DOI: 10.5281/zenodo.6386552



@KDrakoulaki
@PolykarposBM