

End-to-end loading of new music libraries to F-Tempo via IIIF

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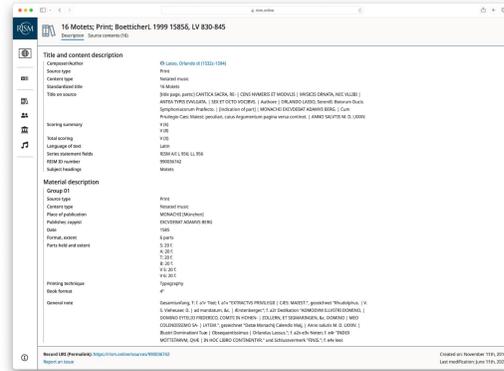
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We have a new end-to-end system to automatically load metadata and musical content into F-Tempo, our early music search tool, and process it so that it can be searched in our web interface.

Read more about F-Tempo at <https://f-tempo.org>
Crawford, Tim; Badkobe, Golnaz and Lewis, David. 2018. 'Searching Page-Images of Early Music Scanned with OMR: A Scalable Solution Using Minimal Absent Words'. Proceedings of the 19th International Society for Music Information Retrieval Conference, 2018.

Data ingest

```
...
  "sequences": [
    {
      "id": "https://api.digital.samlingen.de/iiif/presentation/v2/bab8889491/sequence/normal",
      "type": "TextSequence",
      "canvases": [
        {
          "id": "https://api.digital.samlingen.de/iiif/presentation/v2/bab8889491/canvas/1",
          "type": "TextCanvas",
          "label": "(0001)",
          "services": [
            {
              "contentType": "application/javascript",
              "profile": "https://iiif.io/api/annex/services/iiif.js",
              "physicalSize": {
                "x": 0,
                "y": 0,
                "width": 1000,
                "height": 1000
              }
            }
          ]
        }
      ]
    }
  ]
}
```



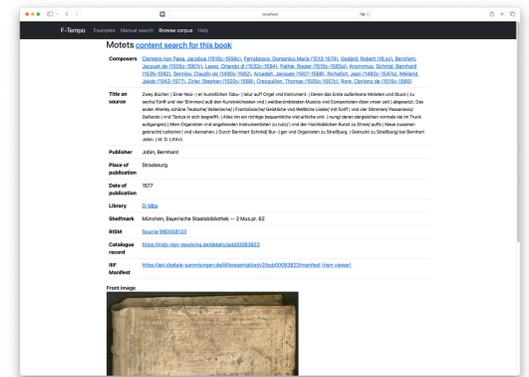
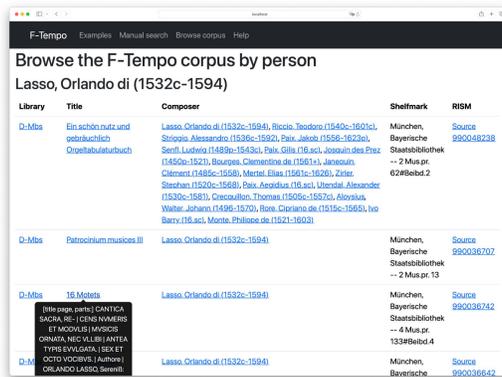
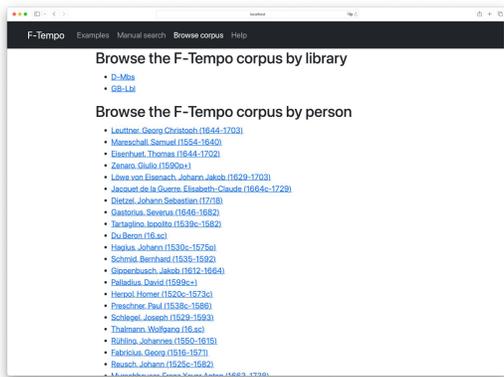
We automatically process items starting from the IIIF Manifest

1. Download manifest and linked images
2. Download metadata from RISM Online and the library
3. Using Araspix, perform OMR on the images to obtain a symbolic representation
4. Post-process the resulting MEI to extract Minimal Absent Words for efficient search
5. Build search index in Solr with combined textual metadata and musical content

We start with IIIF manifests of source books which we want to add to F-Tempo, provided by libraries.

We worked with RISM Digital Center to link IIIF Manifests from our source libraries to items in RISM Online (GB-Lbl: 326 books, D-Mbs: 1300 books). For items which could not be mapped, we download metadata from the source libraries.

Metadata search

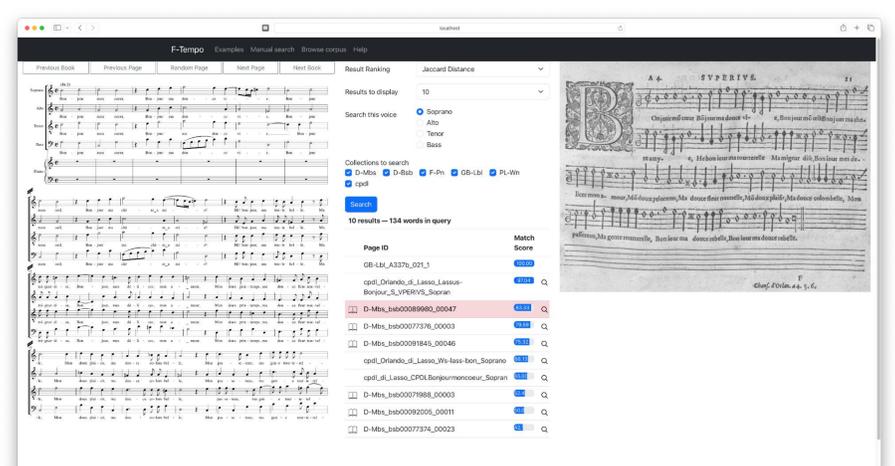
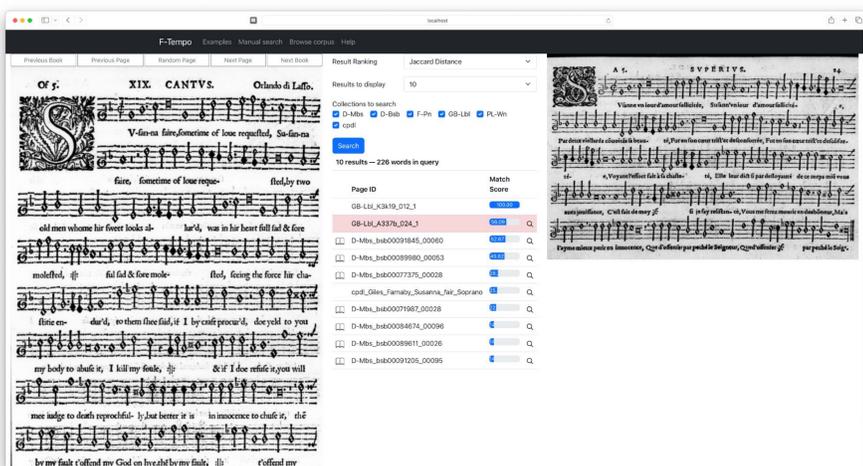


A new feature in F-Tempo is the ability to navigate the corpus based on metadata from RISM Online. We can see an overview of the content in the corpus.

We can view all items in a library, or all items linked to a person. We can perform text search on any of the metadata that we have loaded including names, titles, shelfmarks, and other text.

We can view metadata for a specific book and switch to F-Tempo's content-based search.

Content search



We have rewritten the F-Tempo frontend (React+Next.js) allowing us to more easily add new features.

For example, we can now show symbolic scores in the F-Tempo frontend. In this example we have loaded scores from CPDL and searched for matches in our corpus.

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Use it yourself at our DLfM demo: <https://dev.f-tempo.org>