Humdrum data / data input

craigsapp@stanford.edu

17 April 2013

KernScores

http://kern.humdrum.org

- List of more substantial data collections:
  http://kern.humdrum.org/help/data

- List of location shortcuts:
  http://kern.humdrum.org/cgi-bin/kscuts

- Browse data collections:
  http://kern.humdrum.org/browse

Downloading from KernScores

(1) Individual Humdrum files from "H" button on browse pages
(2) Individual Humdrum files form work-info pages
(3) Multiple files from a browse page by clicking on "Z" button near top of page.
(4) Recursive page download for multiple pages: "Z" higher up on some pages.

(5) Download with Humdrum Extras programs.
(6) All Humdrum Extras programs can download from the command line:

```
humcat h://chopin/preludes/prelude28-01.krn | less
humcat h://chopin/preludes/prelude28-01.krn | census –k
transpose –k G h://chopin/preludes/prelude28-01.krn | census –k
```

(7) All files at a location can be downloaded at the same time:

```
humcat –s h://chopin/preludes | census –k
```

"-s" option is needed with humcat when downloading multiple files
since it will otherwise try to stitch them into a single segment.

Downloading (2)

- humsplit program can split out files from a multi-segement stream. Here is an efficient method for downloading Well-Tempered Clavier Book I:

  humcat –s h://wtc1 | humsplit
  ls

  wtc1f01.krn wtc1f13.krn wtc1p01.krn wtc1p13.krn
  wtc1f02.krn wtc1f14.krn wtc1p02.krn wtc1p14.krn
  wtc1f03.krn wtc1f15.krn wtc1p03.krn wtc1p15.krn
  wtc1f04.krn wtc1f16.krn wtc1p04.krn wtc1p16.krn
  wtc1f05.krn wtc1f17.krn wtc1p05.krn wtc1p17.krn
  wtc1f06.krn wtc1f18.krn wtc1p06.krn wtc1p18.krn
  wtc1f07.krn wtc1f19.krn wtc1p07.krn wtc1p19.krn
  wtc1f08.krn wtc1f20.krn wtc1p08.krn wtc1p20.krn
  wtc1f09.krn wtc1f21.krn wtc1p09.krn wtc1p21.krn
  wtc1f10.krn wtc1f22.krn wtc1p10.krn wtc1p22.krn
  wtc1f11.krn wtc1f23.krn wtc1p11.krn wtc1p23.krn
  wtc1f12.krn wtc1f24.krn wtc1p12.krn wtc1p24.krn

Downloading (3)

- Mulitple works can be saved in a single file rather than split from multi-segment stream:

    humcat –s h://wtc1f > wtc1fugues.krns
    census –k wtc1fugues.krns

    humcat –s h://wtc1p > wtc1preludes.krns
    census –k wtc1preludes.krns

- It is wise to save a repertory locally as shown above in order to speed up processing multiple times as well as avoid lack of data if web server is down or other network problems.

Some repertories

humcat –s h://beethoven/sonatas > beethoven-piano-sonatas.krns
humcat –s h://haydn/sonatas > haydn-piano-sonatas.krns
humcat –s h://mozart/sonatas > mozart-piano-sonatas.krns
humcat –s h://scarlatti/sonatas > scarlatti-piano-sonatas.krns
humcat –s h://mozart/quartets > mozart-string-quartets.krns
humcat –s h://beethoven/quartets > beethoven-string-quartets.krns
humcat –s h://haydn/quartets > haydn-string-quartets.krns
humcat –s h://chopin/preludes > chopin-preludes.krns
humcat –s h://hummel/preludes > hummel-preludes.krns
humcat –s h://chopin/mazurkas > chopin-mazurkas.krns
humcat –s h://liederschatz > liederschatz.krns
humcat –s h://joplin > joplin-rags.krns
humcat –s h://chorales > jsbach-370chorales.krns
humcat –s h://brandenburg > jsbach-brandenburg-concertos.krns
humcat –s h://folk/china > chinese-folksongs.krns
humcat –s h://folk/germany > german-folksongs.krns
humcat –s h://inventions > jsbach-inventions.krns
humcat –s h://haydn/sym > haydn-symphonies.krns
humcat –s h://wtc > jsbach-wtc.krns
humcat –s h://tonerow > tonerows.krns

census –k *.krns
Number of notes: 2310595

Josquin Research Project

http://jrp.ccarh.org

- Downloading individual files, titles and file extension are optional:

  humcat jrp://Jos2721

  - Downloading by composer:

    humcat –s h://jrp/Jos

    humcat –s h://jrp/Ock

    - Downloading by genre (all composers):

      humcat –s h://jrp/Zma   (masses)

      humcat –s h://jrp/Zmo   (motets)

      humcat –s h://jrp/Zso   (secular songs)

Scanning / Notation Editor

- Sharpeye → MusicXML → Humdrum

SharpEye:

    http://www.visiv.co.uk   (windows only; 30-day free trial)

    http://wiki.ccarh.org/wiki/Epson_GT-15000_Scanner
    http://wiki.ccarh.org/wiki/Sharpeye
    http://extras.humdrum.org/man/hum2xml

- MuseScore, Noteflight, Finale, Sibelius all have MusicXML output.
    - Duration of every part has to be identical
    - Under/Overfilled measures not allowed

MIDI input

- Most generalized method: load MIDI file into Finale/Sibelius and then export as MusicXML and convert with xml2hum.

- Basic tool for converting from MIDI directly into Humdrum:
  mid2hum
    if that does not work, then use method above.