

EsAC to Clay: Testing

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CSC 490 – Cognitive Musicology

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Procedure

To test this program, I selected a sample of 12 tunes (see page 10) from the Essen Folksong database and ran them through the converter to produce their Clay equivalents. I then examined these Clay files by hand, comparing them to the EsAC notation of the tune, and checking for inconsistencies. I also ran the program under error conditions, with both a malformed file and a non-existent file, and made sure the program exited gracefully. Also, I ran the program on two systems (jake-laptop, my main laptop, and jake-netbook, my netbook) and for the global tests, used two web servers (moxie.cs.oswego.edu, the Apache-based Computer Science server “Moxie” at SUNY Oswego, and mxm.suspended-chord.info, the Lighttpd-based server I have running from my house) to check for compatibility and stability. Following are the results of my various test runs.

Jake-Laptop: Local/Error/Malformed File

Script started on Tue Apr 20 21:15:10 2010

```
[Tue Apr 20 21:15:10] user@Jake-Laptop:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> file A0020C.clay
Class: EsacClayConverter >> Error: malformed file: A0020C.clay
```

```
[Tue Apr 20 21:15:23] user@Jake-Laptop:~/programming/490/esactoclay
$ exit
exit
```

Script done on Tue Apr 20 21:15:25 2010

Evaluation: The program exits gracefully when the local file is malformed.

Jake-Laptop: Local/Error/File Not Found

```
Script started on Tue Apr 20 21:15:31 2010
[Tue Apr 20 21:15:31] user@Jake-Laptop:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> file FILETHATCANNOTPOSSIBLYEXIST
Class: EsacClayConverter >> Error: exception thrown:
java.io.FileNotFoundException: FILETHATCANNOTPOSSIBLYEXIST (The system
cannot find the file specified)
```

```
[Tue Apr 20 21:15:47] user@Jake-Laptop:~/programming/490/esactoclay
$ exit
exit
```

Script done on Tue Apr 20 21:15:51 2010

Evaluation: The program exits gracefully when the local file cannot be found.

Jake-Laptop: Local/Success

```
Script started on Tue Apr 20 21:14:02 2010
[Tue Apr 20 21:14:11] user@Jake-Laptop:~/programming/490/esactoclay

$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> file A0020C.esac
Incoming EsAC:

ALTDEU
CUT[Tageweis von der Koenigstochter und dem jungen Grafen]
REG[Europa, Mitteleuropa, Deutschland]
KEY[A0020C 04 F 4/2 6/2]
MEL[1_ 3_ 3_ 4_ 4_ 5_ 5_ 0_
    5_ 5_ 3_ 4_ 5_ 3_ 2_ 1_
    1_ 3_ 3_ 4_ 4_ 5_ 5_ 0_
    5_ 5_ 3_ 4_ 5_ 3_ 2_ 1_
    5_ 5_ 4_ 3_ 2_ 1_ 2_ 3_
    5_ 6_ 5_ 5_ 3_ 5_ 4_ 3_ 2_ 3_ 0_
    4_ 5_ 3_ 4_ 3_ 2_ 1_ 0_ //] >>
FCT[Romanze, Ballade, Lied]
CMT[Andere Melodie (1604)]
```

Outgoing Clay:

```
A0020C = F-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6
PHRASE7
PHRASE1 = BAR1 BAR2 BAR3
PHRASE2 = BAR4 BAR5 BAR6
PHRASE3 = BAR7 BAR8 BAR9
PHRASE4 = BAR10 BAR11 BAR12
PHRASE5 = BAR13 BAR14 BAR15
PHRASE6 = BAR16 BAR17 BAR18 BAR19
PHRASE7 = BAR20 BAR21 BAR22
BAR1 = 1X2 P 1S2
BAR2 = 2RP 2X2 P 2S2 2LP 2RP 1X2 P 1S2 2LP 3RP 2X2 P 2S2 3LP 3RP 1X2 P
1S2 3LP
BAR3 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP
BAR4 = 4RP 1X2 P 1S2 4LP
BAR5 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P 1S2 2LP 3RP 2X2 P 2S2 3LP 4RP 1X2 P
1S2 4LP
BAR6 = 2RP 2X2 P 2S2 2LP 1RP 1X2 P 1S2 1LP 2X2 P 2S2
BAR7 = 1X2 P 1S2
BAR8 = 2RP 2X2 P 2S2 2LP 2RP 1X2 P 1S2 2LP 3RP 2X2 P 2S2 3LP 3RP 1X2 P
1S2 3LP
BAR9 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP
BAR10 = 4RP 1X2 P 1S2 4LP
BAR11 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P 1S2 2LP 3RP 2X2 P 2S2 3LP 4RP 1X2 P
1S2 4LP
BAR12 = 2RP 2X2 P 2S2 2LP 1RP 1X2 P 1S2 1LP 2X2 P 2S2
BAR13 = 4RP 1X2 P 1S2 4LP
BAR14 = 4RP 2X2 P 2S2 4LP 3RP 1X2 P 1S2 3LP 2RP 2X2 P 2S2 2LP 1RP 1X2 P
1S2 1LP
```

```

BAR15 = 2X2 P 2S2 1RP 1X2 P 1S2 1LP 2RP 2X2 P 2S2 2LP
BAR16 = 4RP 1X2 P 1S2 4LP
BAR17 = 5RP 1X2 P 1S2 5LP 4RP 1X2 P 1S2 4LP 4RP 1X2 P 1S2 4LP 2RP 1X2 P
1S2 2LP
BAR18 = 4RP 2X2 P 2S2 4LP 3RP 1X2 P 1S2 3LP 2RP P 2LP 1RP P 1LP
BAR19 = 2RP 2X2 P 2S2 2LP 1LP 2X2 R 2S2 1RP
BAR20 = 3RP 2X2 P 2S2 3LP
BAR21 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P 1S2 2LP 3RP 2X2 P 2S2 3LP 2RP 1X2 P
1S2 2LP
BAR22 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2 1LP 1X2 R 1S2 1RP

```

Where would you like this file saved?

> A0020C.clay

File written successfully.

[Tue Apr 20 21:14:38] user@Jake-Laptop:~/programming/490/esactoclay

\$ exit

exit

Script done on Tue Apr 20 21:14:41 2010

Evaluation: The program behaves as expected.

Jake-Laptop: Global/Error/Malformed File

Script started on Tue Apr 20 21:17:54 2010

[Tue Apr 20 21:17:54] user@Jake-Laptop:~/programming/490/esactoclay

\$ java -jar EsacClayConversionApp.jar

Enter the name of your EsAC file in the format <file|web> <filename>.

> web moxie.cs.oswego.edu/~jpeck2/index.html

Class: EsacClayConverter >> Error: malformed file:

http://moxie.cs.oswego.edu/~jpeck2/index.html

[Tue Apr 20 21:18:16] user@Jake-Laptop:~/programming/490/esactoclay

\$ exit

exit

Script done on Tue Apr 20 21:18:18 2010

Evaluation: The program exits gracefully when the global file is malformed.

Jake-Laptop: Global/Error/File Not Found

Script started on Tue Apr 20 21:18:24 2010

[Tue Apr 20 21:18:24] user@Jake-Laptop:~/programming/490/esactoclay

\$ java -jar EsacClayConversionApp.jar

Enter the name of your EsAC file in the format <file|web> <filename>.

> web moxie.cs.oswego.edu/~jpeck2/filethatdoesnthaveahome

Class: EsacClayConverter >> Error: exception thrown:

java.io.FileNotFoundException:

http://moxie.cs.oswego.edu/~jpeck2/filethatdoesnthaveahome

```
[Tue Apr 20 21:18:44] user@Jake-Laptop:~/programming/490/esactoclay
$ exit
exit
```

Script done on Tue Apr 20 21:18:47 2010

Evaluation: The program exits gracefully when the global file doesn't exist.

Jake-Laptop: Global/Success

```
Script started on Tue Apr 20 21:17:03 2010
[Tue Apr 20 21:17:03] user@Jake-Laptop:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> web moxie.cs.oswego.edu/~jpeck2/V0001A.esac
Incoming EsAC:
```

```
VARIANT
CUT[liabi liabi muatar gotis]
REG[Europa, Mitteleuropa, Schweiz, Oberwallis]
KEY[V0001A 08 G FREI]
MEL[111111 1_2_
    1_11112_
    1111-7b-7b 1_0_ 0__
    1111 1_2_
    1111 22_
    11-7b-7b 1_0_ //] >>
FCT[Brauchtum, Beschoerung (Nebel)]
```

Outgoing Clay:

```
V0001A = G-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6
PHRASE1 = BAR1 BAR2
PHRASE2 = BAR3
PHRASE3 = BAR4 BAR5 BAR6
PHRASE4 = BAR7 BAR8
PHRASE5 = BAR9 BAR10
PHRASE6 = BAR11 BAR12
BAR1 = P P P P P P
BAR2 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP
BAR3 = 1X2 P 1S2 P P P P 1RP 1X2 P 1S2 1LP
BAR4 = P P P P 1LP PFLAT 1RP 1LP PFLAT 1RP
BAR5 = 1X2 P 1S2 1LP 1X2 R 1S2 1RP
BAR6 = 1LP 2X2 R 2S2 1RP
BAR7 = P P P P
BAR8 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP
BAR9 = P P P P
BAR10 = 1RP P 1LP 1RP P 1LP
BAR11 = P P 1LP PFLAT 1RP 1LP PFLAT 1RP
BAR12 = 1X2 P 1S2 1LP 1X2 R 1S2 1RP
PFLAT >> CHROMATIC LP P
```

```
Where would you like this file saved?
> V0001A.clay
File written successfully.
```

```
[Tue Apr 20 21:17:47] user@Jake-Laptop:~/programming/490/esactoclay
$ exit
exit
```

Script done on Tue Apr 20 21:17:49 2010

Evaluation: The program acts as expected.

Jake-Netbook: Local/Error/Malformed File

```
Script started on Tue 20 Apr 2010 20:41:14 EDT
[Tue Apr 20 20:41:15] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> file A0001.clay
Class: EsacClayConverter >> Error: malformed file: A0001.clay
[Tue Apr 20 20:41:37] jake@jake-netbook:~/programming/490/esactoclay
$ exit
exit
```

Script done on Tue 20 Apr 2010 20:41:42 EDT

Evaluation: The program exits gracefully when the local file is malformed.

Jake-Netbook: Local/Error/File Not Found

```
Script started on Tue 20 Apr 2010 20:42:41 EDT
[Tue Apr 20 20:42:42] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> file FILETHATDOESNTEXIST
Class: EsacClayConverter >> Error: exception thrown:
java.io.FileNotFoundException: FILETHATDOESNTEXIST (No such file or
directory)
[Tue Apr 20 20:43:05] jake@jake-netbook:/programming/490/esactoclay

$ exit
exit
```

Script done on Tue 20 Apr 2010 20:43:14 EDT

Evaluation: The program exits gracefully when the local file is not found.

Jake-Netbook: Local/Success

```
Script started on Tue 20 Apr 2010 20:42:04 EDT
[Tue Apr 20 20:42:06] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
```

```

> file A0001.esac
Incoming EsAC:
ALTDEU
CUT[Das Hildebrandslied]
REG[Europa, Mitteleuropa, Deutschland]
KEY[A0001 04 G 4/2]
MEL[1_ 3b 3b 4 4_ 5_ 5_
    0_ 5_ 5_ 5_ 6_ 7b 5_ 5_ 0_
    5_ 5_ 6_ 7b 5_ 6b 5_
    0_ 5_ 4_ 3b 5_ 3b 3b_
    0_ 3b 3b 3b_ 4_ 4_ 5_ 5_ 0_
    5_ 4_ 3b 3b 3b_ 2_ 1_
    0_ 5_ 5_ 4_ 3b 0_
    5_ 6b 5_ 5_ 3b_ 4_ 5_
    0_ 4_ 3b 3b 1_ 1_ 6_ 7_ 1_ . //] >>
FCT[Romanze, Ballade, Lied]

```

Outgoing Clay:

```

A0001 = G-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7
PHRASE8 PHRASE9
PHRASE1 = BAR1 BAR2 BAR3
PHRASE2 = BAR4 BAR5 BAR6
PHRASE3 = BAR7 BAR8 BAR9
PHRASE4 = BAR10 BAR11
PHRASE5 = BAR12 BAR13 BAR14
PHRASE6 = BAR15 BAR16 BAR17
PHRASE7 = BAR18 BAR19
PHRASE8 = BAR20 BAR21 BAR22
PHRASE9 = BAR23 BAR24 BAR25
BAR1 = 1X2 P 1S2
BAR2 = 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP 3RP 1X2 P 1S2 3LP
3RP 1X2 P 1S2 3LP
BAR3 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P 2S2 4LP
BAR4 = 1LP 1X2 R 1S2 1RP 4RP 2X2 P 2S2 4LP 4RP 1X2 P 1S2 4LP
BAR5 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P 1S2 5LP 6RP 1X2 PFLAT 1S2 6LP 4RP
1X2 P 1S2 4LP
BAR6 = 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP
BAR7 = 4RP 1X2 P 1S2 4LP
BAR8 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P 1S2 5LP 6RP 1X2 PFLAT 1S2 6LP 4RP
1X2 P 1S2 4LP
BAR9 = 5RP 2X2 PFLAT 2S2 5LP 4RP 2X2 P 2S2 4LP
BAR10 = 1LP 1X2 R 1S2 1RP 4RP 1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP 2RP 1X2
PFLAT 1S2 2LP
BAR11 = 4RP 1X2 P 1S2 4LP 2RP 1X2 PFLAT 1S2 2LP 2RP 2X2 PFLAT 2S2 2LP
BAR12 = 1LP 1X2 R 1S2 1RP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP
2RP 1X2 PFLAT 1S2 2LP
BAR13 = 3RP 1X2 P 1S2 3LP 3RP 1X2 P 1S2 3LP 4RP 2X2 P 2S2 4LP
BAR14 = 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP
BAR15 = 4RP 1X2 P 1S2 4LP
BAR16 = 3RP 1X2 P 1S2 3LP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP
2RP 1X2 PFLAT 1S2 2LP
BAR17 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2
BAR18 = 1LP 1X2 R 1S2 1RP 4RP 1X2 P 1S2 4LP 4RP 1X2 1X2 1X3 P 1S2 1S3
1S2 4LP 3RP P 3LP
BAR19 = 2RP 2X2 PFLAT 2S2 2LP 1LP 1X2 R 1S2 1RP

```

```

BAR20 = 4RP 1X2 P 1S2 4LP
BAR21 = 5RP 1X2 PFLAT 1S2 5LP 4RP 1X2 P 1S2 4LP 4RP 1X2 P 1S2 4LP 2RP
1X2 PFLAT 1S2 2LP
BAR22 = 3RP 2X2 P 2S2 3LP 4RP 2X2 P 2S2 4LP
BAR23 = 1LP 1X2 R 1S2 1RP 3RP 1X2 P 1S2 3LP 2RP PFLAT 2LP 2RP PFLAT 2LP
1X2 P 1S2
BAR24 = 1X2 P 1S2 2LP 1X2 P 1S2 2RP 1LP 2X2 P 2S2 1RP
BAR25 = 2X2 1X2 1X3 P 2S2 1S3 1S2
PFLAT >> CHROMATIC LP P

```

```

Where would you like this file saved?
> A0001.clay
File written successfully.
[Tue Apr 20 20:42:26] jake@jake-netbook:~/programming/490/esactoclay
$ exit
exit

```

Script done on Tue 20 Apr 2010 20:42:34 EDT

Evaluation: The program behaves as expected.

```

Jake-Netbook: Global/Error/Malformed File
Script started on Tue 20 Apr 2010 20:48:07 EDT
[Tue Apr 20 20:48:07] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> web mxm.suspended-chord.info/robots.txt
Class: EsacClayConverter >> Error: malformed file:
http://mxm.suspended-chord.info/robots.txt
[Tue Apr 20 20:48:26] jake@jake-netbook:~/programming/490/esactoclay

$ exit
exit

```

Script done on Tue 20 Apr 2010 20:48:29 EDT

Evaluation: The program exits gracefully when the global file is malformed.

Jake-Netbook: Global/Error/File Not Found

```

Script started on Tue 20 Apr 2010 20:48:37 EDT
[Tue Apr 20 20:48:38] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> web mxm.suspended-chord.info/filethatdoesnotexist
Class: EsacClayConverter >> Error: exception thrown:
java.io.FileNotFoundException: http://mxm.suspended-
chord.info/filethatdoesnotexist
[Tue Apr 20 20:48:57] jake@jake-netbook:~/programming/490/esactoclay
$ exit
exit

```

Script done on Tue 20 Apr 2010 20:49:07 EDT

Evaluation: The program exits gracefully when the global file does not exist.

Jake-Netbook: Global/Success

```
Script started on Tue 20 Apr 2010 20:47:10 EDT
[Tue Apr 20 20:47:11] jake@jake-netbook:~/programming/490/esactoclay
$ java -jar EsacClayConversionApp.jar
Enter the name of your EsAC file in the format <file|web> <filename>.
> web mxm.suspended-chord.info/F0014.esac
Incoming EsAC:
FINK
CUT[ALS ICH AUF MEINER BLEICHE]
REG[Europa, Mitteleuropa, Deutschland]
KEY[F0014 08 A 4/4]
MEL[-5_ 1_3_3_2_ 2_1_1_
    1_ 2_.3421-7 1_0__
    -5_ 1_3_3_2_ 2_1_1_
    1_ 2_.3421-7 1_0__
    3_ 2_5_4#_3_ 3_2_2_
    1_ -7_.321-7-6 -5_0__
    5_ 5_4#_4#_4_ 4_3_3_
    1_ 2_.3421-7 1_0__ //] >>
FCT[erzaehlendes Volks - Lied, Ballade? Gefangenschaft, Flucht]

Outgoing Clay:
F0014 = A-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7
PHRASE8
PHRASE1 = BAR1 BAR2 BAR3
PHRASE2 = BAR4 BAR5 BAR6
PHRASE3 = BAR7 BAR8 BAR9
PHRASE4 = BAR10 BAR11 BAR12
PHRASE5 = BAR13 BAR14 BAR15
PHRASE6 = BAR16 BAR17 BAR18
PHRASE7 = BAR19 BAR20 BAR21
PHRASE8 = BAR22 BAR23 BAR24
BAR1 = 4RP 1X2 P 1S2 4LP
BAR2 = 1X2 P 1S2 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP
BAR3 = 1RP 1X2 P 1S2 1LP 1X2 P 1S2 1X2 P 1S2
BAR4 = 1X2 P 1S2
BAR5 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP
P 1LP P 1RP
BAR6 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP
BAR7 = 4RP 1X2 P 1S2 4LP
BAR8 = 1X2 P 1S2 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP
BAR9 = 1RP 1X2 P 1S2 1LP 1X2 P 1S2 1X2 P 1S2
BAR10 = 1X2 P 1S2
BAR11 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP
P 1LP P 1RP
BAR12 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP
BAR13 = 2RP 1X2 P 1S2 2LP
BAR14 = 1RP 1X2 P 1S2 1LP 4RP 1X2 P 1S2 4LP 3RP 1X2 PSARP 1S2 3LP 2RP
1X2 P 1S2 2LP
BAR15 = 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP 1RP 1X2 P 1S2 1LP
BAR16 = 1X2 P 1S2
```

```

BAR17 = 6RP 1X2 1X2 1X3 P 1S2 1S3 1S2 6LP 2RP P 2LP 1RP P 1LP P 1LP P
1RP 2LP P 2RP
BAR18 = 4RP 1X2 P 1S2 4LP 1LP 2X2 R 2S2 1RP
BAR19 = 4RP 1X2 P 1S2 4LP
BAR20 = 4RP 1X2 P 1S2 4LP 3RP 1X2 PSHARP 1S2 3LP 3RP 1X2 PSHARP 1S2 3LP
3RP 1X2 P 1S2 3LP
BAR21 = 3RP 1X2 P 1S2 3LP 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP
BAR22 = 1X2 P 1S2
BAR23 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP
P 1LP P 1RP
BAR24 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP
PSHARP >> CHROMATIC RP P

```

```

Where would you like this file saved?
> F0014.clay
File written successfully.
[Tue Apr 20 20:47:49] jake@jake-netbook:~/programming/490/esactoclay
$ exit
exit

```

Script done on Tue 20 Apr 2010 20:47:51 EDT

Evaluation: The program behaves as expected.

EsAC Test Suite and Program Output

What follows is the test suite of EsAC tunes (left) side by side with the respective Clay output file (right). The EsAC tunes were chosen from the various collections in a manner so as to be as representative of all of the intricacies of EsAC as possible. The formatting has been warped due to space constraints, but the data has been retained.

```

ALTDEU
CUT[Das Hildebrandslied]
REG[Europa, Mitteleuropa,
Deutschland]
KEY[A0001 04 G 4/2]
MEL[1_ 3b_3b_4_4_ 5__5__
0_5__5__ 5_6_7b_5__ 5__0_
5__ 5_6_7b_5__ 6b__5__
0_5_4_3b__ 5_3b_3b__
0_3b_3b_3b__ 4_4_5__ 5__0_
5__ 4_3b_3b_3b__ 2__1__
0_5_5_.4_ 3b__0_
5__ 6b_5_5_3b__ 4__5__
0_4_3b3b1__ 1_-6_-7__ 1__ . //]
>>
FCT[Romanze, Ballade, Lied]

```

```

A0001 = G-MAJOR PHRASE1 PHRASE2
PHRASE3 PHRASE4 PHRASE5 PHRASE6
PHRASE7 PHRASE8 PHRASE9
PHRASE1 = BAR1 BAR2 BAR3
PHRASE2 = BAR4 BAR5 BAR6
PHRASE3 = BAR7 BAR8 BAR9
PHRASE4 = BAR10 BAR11
PHRASE5 = BAR12 BAR13 BAR14
PHRASE6 = BAR15 BAR16 BAR17
PHRASE7 = BAR18 BAR19
PHRASE8 = BAR20 BAR21 BAR22
PHRASE9 = BAR23 BAR24 BAR25
BAR1 = 1X2 P 1S2
BAR2 = 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2
PFLAT 1S2 2LP 3RP 1X2 P 1S2 3LP 3RP
1X2 P 1S2 3LP
BAR3 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P
2S2 4LP
BAR4 = 1LP 1X2 R 1S2 1RP 4RP 2X2 P
2S2 4LP 4RP 1X2 P 1S2 4LP
BAR5 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P
1S2 5LP 6RP 1X2 PFLAT 1S2 6LP 4RP 1X2

```

	P 1S2 4LP BAR6 = 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP BAR7 = 4RP 1X2 P 1S2 4LP BAR8 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P 1S2 5LP 6RP 1X2 PFLAT 1S2 6LP 4RP 1X2 P 1S2 4LP BAR9 = 5RP 2X2 PFLAT 2S2 5LP 4RP 2X2 P 2S2 4LP BAR10 = 1LP 1X2 R 1S2 1RP 4RP 1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP 2RP 1X2 PFLAT 1S2 2LP BAR11 = 4RP 1X2 P 1S2 4LP 2RP 1X2 PFLAT 1S2 2LP 2RP 2X2 PFLAT 2S2 2LP BAR12 = 1LP 1X2 R 1S2 1RP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP BAR13 = 3RP 1X2 P 1S2 3LP 3RP 1X2 P 1S2 3LP 4RP 2X2 P 2S2 4LP BAR14 = 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP BAR15 = 4RP 1X2 P 1S2 4LP BAR16 = 3RP 1X2 P 1S2 3LP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP 2RP 1X2 PFLAT 1S2 2LP BAR17 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2 BAR18 = 1LP 1X2 R 1S2 1RP 4RP 1X2 P 1S2 4LP 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP BAR19 = 2RP 2X2 PFLAT 2S2 2LP 1LP 1X2 R 1S2 1RP BAR20 = 4RP 1X2 P 1S2 4LP BAR21 = 5RP 1X2 PFLAT 1S2 5LP 4RP 1X2 P 1S2 4LP 4RP 1X2 P 1S2 4LP 2RP 1X2 PFLAT 1S2 2LP BAR22 = 3RP 2X2 P 2S2 3LP 4RP 2X2 P 2S2 4LP BAR23 = 1LP 1X2 R 1S2 1RP 3RP 1X2 P 1S2 3LP 2RP PFLAT 2LP 2RP PFLAT 2LP 1X2 P 1S2 BAR24 = 1X2 P 1S2 2LP 1X2 P 1S2 2RP 1LP 2X2 P 2S2 1RP BAR25 = 2X2 1X2 1X3 P 2S2 1S3 1S2 PFLAT >> CHROMATIC LP P
ALTDEU CUT[Tageweis von der Koenigstochter und dem jungen Grafen] REG[Europa, Mitteleuropa, Deutschland] KEY[A0020C 04 F 4/2 6/2] MEL[1_ 3_ 3_ 4_ 4_ 5_ 5_ 0_ 5_ 5_ 3_ 4_ 5_ 3_ 2_ 1_ 1_ 3_ 3_ 4_ 4_ 5_ 5_ 0_ 5_ 5_ 3_ 4_ 5_ 3_ 2_ 1_ 5_ 5_ 4_ 3_ 2_ 1_ 2_ 3_	A0020C = F-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7 PHRASE1 = BAR1 BAR2 BAR3 PHRASE2 = BAR4 BAR5 BAR6 PHRASE3 = BAR7 BAR8 BAR9 PHRASE4 = BAR10 BAR11 BAR12 PHRASE5 = BAR13 BAR14 BAR15 PHRASE6 = BAR16 BAR17 BAR18 BAR19 PHRASE7 = BAR20 BAR21 BAR22 BAR1 = 1X2 P 1S2

5_ 6_5_5_3_ 5_4_32 3_0_>>
 4_ 5_3_4_3_2_1_0_//]
 FCT[Romanze, Ballade, Lied]
 CMT[Andere Melodie (1604)]

BAR2 = 2RP 2X2 P 2S2 2LP 2RP 1X2 P
 1S2 2LP 3RP 2X2 P 2S2 3LP 3RP 1X2 P
 1S2 3LP
 BAR3 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P
 2S2 4LP 1LP 1X2 R 1S2 1RP
 BAR4 = 4RP 1X2 P 1S2 4LP
 BAR5 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P
 1S2 2LP 3RP 2X2 P 2S2 3LP 4RP 1X2 P
 1S2 4LP
 BAR6 = 2RP 2X2 P 2S2 2LP 1RP 1X2 P
 1S2 1LP 2X2 P 2S2
 BAR7 = 1X2 P 1S2
 BAR8 = 2RP 2X2 P 2S2 2LP 2RP 1X2 P
 1S2 2LP 3RP 2X2 P 2S2 3LP 3RP 1X2 P
 1S2 3LP
 BAR9 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P
 2S2 4LP 1LP 1X2 R 1S2 1RP
 BAR10 = 4RP 1X2 P 1S2 4LP
 BAR11 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P
 1S2 2LP 3RP 2X2 P 2S2 3LP 4RP 1X2 P
 1S2 4LP
 BAR12 = 2RP 2X2 P 2S2 2LP 1RP 1X2 P
 1S2 1LP 2X2 P 2S2
 BAR13 = 4RP 1X2 P 1S2 4LP
 BAR14 = 4RP 2X2 P 2S2 4LP 3RP 1X2 P
 1S2 3LP 2RP 2X2 P 2S2 2LP 1RP 1X2 P
 1S2 1LP
 BAR15 = 2X2 P 2S2 1RP 1X2 P 1S2 1LP
 2RP 2X2 P 2S2 2LP
 BAR16 = 4RP 1X2 P 1S2 4LP
 BAR17 = 5RP 1X2 P 1S2 5LP 4RP 1X2 P
 1S2 4LP 4RP 1X2 P 1S2 4LP 2RP 1X2 P
 1S2 2LP
 BAR18 = 4RP 2X2 P 2S2 4LP 3RP 1X2 P
 1S2 3LP 2RP P 2LP 1RP P 1LP
 BAR19 = 2RP 2X2 P 2S2 2LP 1LP 2X2 R
 2S2 1RP
 BAR20 = 3RP 2X2 P 2S2 3LP
 BAR21 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P
 1S2 2LP 3RP 2X2 P 2S2 3LP 2RP 1X2 P
 1S2 2LP
 BAR22 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2
 1LP 1X2 R 1S2 1RP

CHINA
 STN[00000] ST[00]
 FA[NN]
 CUT[Moli hua]
 CNR[NN]
 REG[China, Jiangsu]
 ETH[Han]

SRC[III, 482]
 KEY[C0328 16 D 2/4]
 MEL[323565+16 535__6_
 +1_+2+3+2+16+1 5__
 535__6_ +1_+2+3+165_ 5_2_3532

C0328 = D-MAJOR PHRASE1 PHRASE2
 PHRASE3 PHRASE4 PHRASE5 PHRASE6
 PHRASE7 PHRASE8 PHRASE9 PHRASE10
 PHRASE1 = BAR1 BAR2 BAR3 BAR4
 PHRASE2 = BAR5 BAR6 BAR7 BAR8
 PHRASE3 = BAR9 BAR10 BAR11 BAR12
 PHRASE4 = BAR13 BAR14
 PHRASE5 = BAR15 BAR16 BAR17 BAR18
 PHRASE6 = BAR19 BAR20 BAR21 BAR22
 PHRASE7 = BAR23 BAR24 BAR25 BAR26
 PHRASE8 = BAR27 BAR28
 PHRASE9 = BAR29 BAR30 BAR31 BAR32

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1-61___.
  321_2_.3  5_6+16_5_  532_3532
12-6__1_
  2_.3121-6  1-6-5___.
  323565+16  535__6_
+1_+2+3+2+16+1  5___
  535__6_  +1_+2+3+165_  5_2_3532
1-61___.
  321_2_.3  5_6+16_5_  532_3532
12-6__1_
  2_.3121-6  1-6-5___.
  321_2_.3  5_6+16_5_  532_3532
12-6__1_
  +2_.+3+1+2+16  56+1+3+2+16+1
5___ //] >>
FCT[xiao diao]
CMT[Jiang nimmt an, es ist das
Original.
  Vorspiel weggelassen.]

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PHRASE10 = BAR33 BAR34 BAR35
BAR1 = 2RP P 2LP 1RP P 1LP 2RP P 2LP
4RP P 4LP 5RP P 5LP 4RP P 4LP 7RP P
7LP 5RP P 5LP
BAR2 = 4RP P 4LP 2RP P 2LP 4RP 2X2 P
2S2 4LP 5RP 1X2 P 1S2 5LP
BAR3 = 1X2 P 1S2 8RP P 8LP 9RP P 9LP
8RP P 8LP 7RP P 7LP 5RP P 5LP 7RP P
7LP
BAR4 = 4RP 3X2 P 3S2 4LP
BAR5 = 4RP P 4LP 2RP P 2LP 4RP 2X2 P
2S2 4LP 5RP 1X2 P 1S2 5LP
BAR6 = 1X2 P 1S2 8RP P 8LP 9RP P 9LP
7RP P 7LP 5RP P 5LP 4RP 1X2 P 1S2 4LP
BAR7 = 4RP 1X2 P 1S2 4LP 1RP 1X2 P
1S2 1LP 2RP P 2LP 4RP P 4LP 2RP P 2LP
1RP P 1LP
BAR8 = P 2LP P 2RP 2X2 1X2 1X3 P 2S2
1S3 1S2
BAR9 = 2RP P 2LP 1RP P 1LP 1X2 P 1S2
1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP
P 2LP
BAR10 = 4RP 1X2 P 1S2 4LP 5RP P 5LP
7RP P 7LP 5RP 1X2 P 1S2 5LP 4RP 1X2 P
1S2 4LP
BAR11 = 4RP P 4LP 2RP P 2LP 1RP 1X2 P
1S2 1LP 2RP P 2LP 4RP P 4LP 2RP P 2LP
1RP P 1LP
BAR12 = P 1RP P 1LP 2LP 2X2 P 2S2 2RP
1X2 P 1S2
BAR13 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2
1LP 2RP P 2LP P 1RP P 1LP P 2LP P 2RP
BAR14 = P 2LP P 2RP 3LP 2X2 1X2 1X3 P
2S2 1S3 1S2 3RP
BAR15 = 2RP P 2LP 1RP P 1LP 2RP P 2LP
4RP P 4LP 5RP P 5LP 4RP P 4LP 7RP P
7LP 5RP P 5LP
BAR16 = 4RP P 4LP 2RP P 2LP 4RP 2X2 P
2S2 4LP 5RP 1X2 P 1S2 5LP
BAR17 = 1X2 P 1S2 8RP P 8LP 9RP P 9LP
8RP P 8LP 7RP P 7LP 5RP P 5LP 7RP P
7LP
BAR18 = 4RP 3X2 P 3S2 4LP
BAR19 = 4RP P 4LP 2RP P 2LP 4RP 2X2 P
2S2 4LP 5RP 1X2 P 1S2 5LP
BAR20 = 1X2 P 1S2 8RP P 8LP 9RP P 9LP
7RP P 7LP 5RP P 5LP 4RP 1X2 P 1S2 4LP
BAR21 = 4RP 1X2 P 1S2 4LP 1RP 1X2 P
1S2 1LP 2RP P 2LP 4RP P 4LP 2RP P 2LP
1RP P 1LP
BAR22 = P 2LP P 2RP 2X2 1X2 1X3 P 2S2
1S3 1S2
BAR23 = 2RP P 2LP 1RP P 1LP 1X2 P 1S2
1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP
P 2LP

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	BAR24 = 4RP 1X2 P 1S2 4LP 5RP P 5LP 7RP P 7LP 5RP 1X2 P 1S2 5LP 4RP 1X2 P 1S2 4LP BAR25 = 4RP P 4LP 2RP P 2LP 1RP 1X2 P 1S2 1LP 2RP P 2LP 4RP P 4LP 2RP P 2LP 1RP P 1LP BAR26 = P 1RP P 1LP 2LP 2X2 P 2S2 2RP 1X2 P 1S2 BAR27 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP P 1RP P 1LP P 2LP P 2RP BAR28 = P 2LP P 2RP 3LP 2X2 1X2 1X3 P 2S2 1S3 1S2 3RP BAR29 = 2RP P 2LP 1RP P 1LP 1X2 P 1S2 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP BAR30 = 4RP 1X2 P 1S2 4LP 5RP P 5LP 7RP P 7LP 5RP 1X2 P 1S2 5LP 4RP 1X2 P 1S2 4LP BAR31 = 4RP P 4LP 2RP P 2LP 1RP 1X2 P 1S2 1LP 2RP P 2LP 4RP P 4LP 2RP P 2LP 1RP P 1LP BAR32 = P 1RP P 1LP 2LP 2X2 P 2S2 2RP 1X2 P 1S2 BAR33 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 9RP P 9LP 7RP P 7LP 8RP P 8LP 7RP P 7LP 5RP P 5LP BAR34 = 4RP P 4LP 5RP P 5LP 7RP P 7LP 9RP P 9LP 8RP P 8LP 7RP P 7LP 5RP P 5LP 7RP P 7LP BAR35 = 4RP 3X2 P 3S2 4LP
DVA CUT[Der Ring Mein Freund hat mir versprochen etwas] REG[Europa, Mitteleuropa, Lothringen, Weiler] KEY[D0016 08 E 2/4] MEL[1 13b21 -7b_-7b_ 3b554 5_0 1 13b21 -7b_-7b_ 3b554 5_ 3b4 5556b 5_43b 4_ 46b 5_12 1_-7b-6b_-7b_ 24 3b_22 1_0 //] >> FCT[Liebes - Lied] CMT[Verzierungen; Inzipit = Transposition zum Lied]	D0016 = E-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE1 = BAR1 BAR2 BAR3 BAR4 BAR5 PHRASE2 = BAR6 BAR7 BAR8 BAR9 BAR10 PHRASE3 = BAR11 BAR12 BAR13 BAR14 PHRASE4 = BAR15 BAR16 BAR17 BAR18 PHRASE5 = BAR19 BAR20 BAR21 BAR1 = P BAR2 = P 2RP PFLAT 2LP 1RP P 1LP P BAR3 = 6RP 1X2 PFLAT 1S2 6LP 1LP 1X2 PFLAT 1S2 1RP BAR4 = 2RP PFLAT 2LP 4RP P 4LP 4RP P 4LP 3RP P 3LP BAR5 = 4RP 1X2 P 1S2 4LP 1LP R 1RP BAR6 = P BAR7 = P 2RP PFLAT 2LP 1RP P 1LP P BAR8 = 6RP 1X2 PFLAT 1S2 6LP 1LP 1X2 PFLAT 1S2 1RP BAR9 = 2RP PFLAT 2LP 4RP P 4LP 4RP P 4LP 3RP P 3LP BAR10 = 4RP 1X2 P 1S2 4LP BAR11 = 2RP PFLAT 2LP 3RP P 3LP BAR12 = 4RP P 4LP 4RP P 4LP 4RP P 4LP 5RP PFLAT 5LP BAR13 = 4RP 1X2 P 1S2 4LP 3RP P 3LP

	2RP PFLAT 2LP BAR14 = 3RP 1X2 P 1S2 3LP BAR15 = 3RP P 3LP 5RP PFLAT 5LP BAR16 = 4RP 1X2 P 1S2 4LP P 1RP P 1LP BAR17 = 1X2 P 1S2 1LP PFLAT 1RP 2LP PFLAT 2RP BAR18 = 6RP 1X2 PFLAT 1S2 6LP BAR19 = 1RP P 1LP 3RP P 3LP BAR20 = 2RP 1X2 PFLAT 1S2 2LP 1RP P 1LP 1RP P 1LP BAR21 = 1X2 P 1S2 1LP R 1RP PFLAT >> CHROMATIC LP P
F[ERK2 CUT[WEINE NUR NICHT] REG[Europa, Mitteleuropa, Deutschland, Gross - Gerau] KEY[E0616 16 C 3/8] MEL[5_3_ +1_5_ 5_5_4_ 3_0_ 2_3_4#_ 5_6_7_ +2_+1_6_ 5_0_ 5_6_7_ +1_3_ 5_5_4_ 4_3_ 2_2_3_4#_ 5_7_7_ +2_+1_6_ 5_-- 55 +3+3+3+3+2+2 +1+1+1+1 3_ 5_.42_ 6_5_ 55 +3+3+3+3+2+2 +1+1+1+1 3_ 5_.42_ 1_0_ //] >> FCT[Liebes - Lied]	E0616 = C-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7 PHRASE8 PHRASE1 = BAR1 BAR2 BAR3 BAR4 PHRASE2 = BAR5 BAR6 BAR7 BAR8 PHRASE3 = BAR9 BAR10 BAR11 BAR12 PHRASE4 = BAR13 BAR14 BAR15 BAR16 BAR17 PHRASE5 = BAR18 BAR19 BAR20 PHRASE6 = BAR21 BAR22 BAR23 PHRASE7 = BAR24 BAR25 BAR26 PHRASE8 = BAR27 BAR28 BAR29 BAR1 = 4RP 2X2 P 2S2 4LP 2RP 1X2 P 1S2 2LP BAR2 = 2X2 P 2S2 4RP 1X2 P 1S2 4LP BAR3 = 4RP 1X2 P 1S2 4LP 4RP 1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP BAR4 = 2RP 2X2 P 2S2 2LP 1LP 1X2 R 1S2 1RP BAR5 = 1RP 1X2 P 1S2 1LP 2RP 1X2 P 1S2 2LP 3RP 1X2 PSHARP 1S2 3LP BAR6 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P 1S2 5LP 6RP 1X2 P 1S2 6LP BAR7 = 1RP 1X2 P 1S2 1LP 7RP 1X2 P 1S2 7LP 5RP 1X2 P 1S2 5LP BAR8 = 4RP 2X2 P 2S2 4LP 1LP 1X2 R 1S2 1RP BAR9 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P 1S2 5LP 6RP 1X2 P 1S2 6LP BAR10 = 2X2 P 2S2 2RP 1X2 P 1S2 2LP BAR11 = 4RP 1X2 P 1S2 4LP 4RP 1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP BAR12 = 3RP 1X2 P 1S2 3LP 2RP 1X2 P 1S2 2LP BAR13 = 1RP 1X2 P 1S2 1LP BAR14 = 1RP 1X2 P 1S2 1LP 2RP 1X2 P 1S2 2LP 3RP 1X2 PSHARP 1S2 3LP BAR15 = 4RP 1X2 P 1S2 4LP 6RP 1X2 P 1S2 6LP 6RP 1X2 P 1S2 6LP BAR16 = 1RP 1X2 P 1S2 1LP 7RP 1X2 P 1S2 7LP 5RP 1X2 P 1S2 5LP BAR17 = 4RP 2X2 P 2S2 4LP BAR18 = 4RP P 4LP 4RP P 4LP

	BAR19 = 2RP P 2LP 9RP P 9LP 9RP P 9LP 9RP P 9LP 8RP P 8LP 8RP P 8LP BAR20 = P 7RP P 7LP 7RP P 7LP 7RP P 7LP BAR21 = 2RP 1X2 P 1S2 2LP BAR22 = 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP 1RP 1X2 P 1S2 1LP BAR23 = 5RP 1X2 P 1S2 5LP 4RP 1X2 P 1S2 4LP BAR24 = 4RP P 4LP 4RP P 4LP BAR25 = 2RP P 2LP 9RP P 9LP 9RP P 9LP 9RP P 9LP 8RP P 8LP 8RP P 8LP BAR26 = P 7RP P 7LP 7RP P 7LP 7RP P 7LP BAR27 = 2RP 1X2 P 1S2 2LP BAR28 = 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP 1RP 1X2 P 1S2 1LP BAR29 = 2X2 P 2S2 1LP 1X2 R 1S2 1RP PSHARP >> CHROMATIC RP P
FINK CUT[ALS ICH AUF MEINER BLEICHE] REG[Europa, Mitteleuropa, Deutschland] KEY[F0014 08 A 4/4] MEL[-5_ 1_3_3_2_ 2_1_1_ 1_ 2_.3421-7 1_0_ -5_ 1_3_3_2_ 2_1_1_ 1_ 2_.3421-7 1_0_ 3_ 2_5_4#_3_ 3_2_2_ 1_ -7_.321-7-6 -5_0_ 5_ 5_4#_4#_4_ 4_3_3_ 1_ 2_.3421-7 1_0_ //] >> FCT[erzaehlendes Volks- Lied, Ballade? Gefangenschaft, Flucht]	F0014 = A-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7 PHRASE8 PHRASE1 = BAR1 BAR2 BAR3 PHRASE2 = BAR4 BAR5 BAR6 PHRASE3 = BAR7 BAR8 BAR9 PHRASE4 = BAR10 BAR11 BAR12 PHRASE5 = BAR13 BAR14 BAR15 PHRASE6 = BAR16 BAR17 BAR18 PHRASE7 = BAR19 BAR20 BAR21 PHRASE8 = BAR22 BAR23 BAR24 BAR1 = 4RP 1X2 P 1S2 4LP BAR2 = 1X2 P 1S2 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP BAR3 = 1RP 1X2 P 1S2 1LP 1X2 P 1S2 1X2 P 1S2 BAR4 = 1X2 P 1S2 BAR5 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP P 1LP P 1RP BAR6 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP BAR7 = 4RP 1X2 P 1S2 4LP BAR8 = 1X2 P 1S2 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP BAR9 = 1RP 1X2 P 1S2 1LP 1X2 P 1S2 1X2 P 1S2 BAR10 = 1X2 P 1S2 BAR11 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP P 1LP P 1RP BAR12 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP BAR13 = 2RP 1X2 P 1S2 2LP BAR14 = 1RP 1X2 P 1S2 1LP 4RP 1X2 P 1S2 4LP 3RP 1X2 PSHARP 1S2 3LP 2RP 1X2 P 1S2 2LP BAR15 = 2RP 1X2 P 1S2 2LP 1RP 1X2 P

	1S2 1LP 1RP 1X2 P 1S2 1LP BAR16 = 1X2 P 1S2 BAR17 = 6RP 1X2 1X2 1X3 P 1S2 1S3 1S2 6LP 2RP P 2LP 1RP P 1LP P 1LP P 1RP 2LP P 2RP BAR18 = 4RP 1X2 P 1S2 4LP 1LP 2X2 R 2S2 1RP BAR19 = 4RP 1X2 P 1S2 4LP BAR20 = 4RP 1X2 P 1S2 4LP 3RP 1X2 PSHARP 1S2 3LP 3RP 1X2 PSHARP 1S2 3LP 3RP 1X2 P 1S2 3LP BAR21 = 3RP 1X2 P 1S2 3LP 2RP 1X2 P 1S2 2LP 2RP 1X2 P 1S2 2LP BAR22 = 1X2 P 1S2 BAR23 = 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP 3RP P 3LP 1RP P 1LP P 1LP P 1RP BAR24 = 1X2 P 1S2 1LP 2X2 R 2S2 1RP PSHARP >> CHROMATIC RP P
KINDER CUT[HEILE HEILE SAEJE] REG[Europa, Mitteleuropa, Deutschland; Frankreich, Unter - Elsass] KEY[K3026 08 G 2/4] MEL[5656 5_3_ 5656 5_3_ 5655 +1_0_ 5654 3_0_//] >> FCT[Kinder - Lied, Heil - Spruch]	K3026 = G-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE1 = BAR1 BAR2 PHRASE2 = BAR3 BAR4 PHRASE3 = BAR5 BAR6 PHRASE4 = BAR7 BAR8 BAR1 = 4RP P 4LP 5RP P 5LP 4RP P 4LP 5RP P 5LP BAR2 = 4RP 1X2 P 1S2 4LP 2RP 1X2 P 1S2 2LP BAR3 = 4RP P 4LP 5RP P 5LP 4RP P 4LP 5RP P 5LP BAR4 = 4RP 1X2 P 1S2 4LP 2RP 1X2 P 1S2 2LP BAR5 = 4RP P 4LP 5RP P 5LP 4RP P 4LP 4RP P 4LP BAR6 = 1X2 P 1S2 1LP 1X2 R 1S2 1RP BAR7 = 4RP P 4LP 5RP P 5LP 4RP P 4LP 3RP P 3LP BAR8 = 2RP 1X2 P 1S2 2LP 1LP 1X2 R 1S2 1RP
F[BALLADE CUT[Ritter und Magd Es spielt' ein Graf mit seiner Magd] CNR[bis an den hellen Morgen,] REG[Osteuropa, UdSSR, Russland, Kreis Leningrad, Kamenka] SRC[3, S. 15 1926 aufgezeichnet] KEY[Q0055G 08 C 2/4] MEL[-5 1-5-3-5 111 3 21-7-6 -6-5-5 1 -4-41-4 -3-51 1 -724-7 211 //] >> FCT[Ballade, Betrug, Schwangerschaft,	Q0055G = C-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE1 = BAR1 BAR2 BAR3 PHRASE2 = BAR4 BAR5 BAR6 PHRASE3 = BAR7 BAR8 BAR9 PHRASE4 = BAR10 BAR11 BAR12 BAR1 = 4RP P 4LP BAR2 = P 3LP P 3RP 5LP P 5RP 3LP P 3RP BAR3 = P P P BAR4 = 2RP P 2LP BAR5 = 1RP P 1LP P 1LP P 1RP 2LP P 2RP BAR6 = 5RP P 5LP 3LP P 3RP 3LP P 3RP BAR7 = P

Tod, Selbstmord, Herr und Magd]
CMT[Grundton in der eingestrichenen
Oktave.]

BAR8 = 3RP P 3LP 4LP P 4RP P 4LP P
4RP
BAR9 = 2RP P 2LP 3LP P 3RP P
BAR10 = P
BAR11 = 6RP P 6LP 1RP P 1LP 3RP P 3LP
1LP P 1RP
BAR12 = 1RP P 1LP P P

F[BALLADE
CUT[Ritter und Magd
Stout ruiter en een mooi fiere
maagd,]
CNR['t was onder den lindeboom dat
zij zaten.]
REG[Mitteleuropa, Niederlande]
SRC[3, S. 3
1900 gedruckt in Gent]
KEY[Q2055B 16 G 3/4 2/4]
MEL[2 (3_3_5_) 3_4_5_.6 5__.
3_(4_4_5_) (6_6_6_)(6_5_6_)
5__3__0
5_(6_5_6_) 5_5__(5_4_3_) 4__
5_.4 (3_2_3_)5_.4 2_1__0_
5_(6_7_+1_) 5_5_.6(5_4_3_) 4__
5_.4 (3_2_3_)5_.4 2_1__0_
//] >>
FCT[Ballade, Betrug, Schwangerschaft,
Tod, Selbstmord, Herr und Magd]
CMT[Chaotische Takteinteilung.
Entsprechend der Originalquelle hier
Taktwechsel kodiert.
Niederlaendische Fassung der
Ballade.]

Q2055B = G-MAJOR PHRASE1 PHRASE2
PHRASE3 PHRASE4 PHRASE5 PHRASE6
PHRASE1 = BAR1 BAR2 BAR3
PHRASE2 = BAR4 BAR5 BAR6 BAR7
PHRASE3 = BAR8 BAR9 BAR10
PHRASE4 = BAR11 BAR12 BAR13 BAR14
PHRASE5 = BAR15 BAR16 BAR17
PHRASE6 = BAR18 BAR19 BAR20 BAR21
BAR1 = 1RP 1X2 P 1S2 1LP 2RP 1X2 P
1S2 2LP 2RP 1X2 P 1S2 2LP 4RP 1X2 P
1S2 4LP
BAR2 = 2RP 2X2 P 2S2 2LP 3RP 2X2 P
2S2 3LP 4RP 1X2 1X3 P 1S2 1S3 1S2
4LP 5RP P 5LP
BAR3 = 4RP 2X2 1X2 1X3 P 2S2 1S3 1S2
4LP
BAR4 = 2RP 1X2 P 1S2 2LP 3RP 1X2 P
1S2 3LP 3RP 1X2 P 1S2 3LP 4RP 1X2 P
1S2 4LP
BAR5 = 5RP 1X2 P 1S2 5LP 5RP 1X2 P
1S2 5LP 5RP 1X2 P 1S2 5LP 5RP 1X2 P
1S2 5LP 4RP 1X2 P 1S2 4LP 5RP 1X2 P
1S2 5LP
BAR6 = 4RP 2X2 P 2S2 4LP 2RP 2X2 P
2S2 2LP
BAR7 = 1LP 1X2 R 1S2 1RP
BAR8 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P
1S2 5LP 4RP 1X2 P 1S2 4LP 5RP 1X2 P
1S2 5LP
BAR9 = 4RP 2X2 P 2S2 4LP 4RP 2X2 P
2S2 4LP 4RP 1X2 P 1S2 4LP 3RP 1X2 P
1S2 3LP 2RP 1X2 P 1S2 2LP
BAR10 = 3RP 2X2 P 2S2 3LP
BAR11 = 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2
4LP 3RP P 3LP
BAR12 = 2RP 1X2 P 1S2 2LP 1RP 1X2 P
1S2 1LP 2RP 1X2 P 1S2 2LP 4RP 1X2 1X2
1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP
BAR13 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2
BAR14 = 1LP 1X2 R 1S2 1RP
BAR15 = 4RP 1X2 P 1S2 4LP 5RP 1X2 P
1S2 5LP 6RP 1X2 P 1S2 6LP 7RP 1X2 P
1S2 7LP
BAR16 = 4RP 2X2 P 2S2 4LP 4RP 1X2 1X2
1X3 P 1S2 1S3 1S2 4LP 5RP P 5LP 4RP
1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP 2RP
1X2 P 1S2 2LP
BAR17 = 3RP 2X2 P 2S2 3LP

	BAR18 = 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP BAR19 = 2RP 1X2 P 1S2 2LP 1RP 1X2 P 1S2 1LP 2RP 1X2 P 1S2 2LP 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 3RP P 3LP BAR20 = 1RP 2X2 P 2S2 1LP 2X2 P 2S2 BAR21 = 1LP 1X2 R 1S2 1RP
TEST CUT[CUCA 2] REG[Amerika, Mittelamerika, Mexiko] KEY[T0008A 08 F 4/4] MEL[0-5-5-5 10_30-5-5-5 10_30__ 01_1-7-7-6-6 -5__ 0-5-5-5 -70_20-5-5-5 -70_20__ 05_65432 3_.10__ 0-5_-51133 5_.3__^ 05_65435 4_.2__^ 0-5_-5-7-722 4_.2__^ 05_65432 3_.1__^//]	T0008A = F-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE7 PHRASE8 PHRASE1 = BAR1 BAR2 BAR3 PHRASE2 = BAR4 BAR5 PHRASE3 = BAR6 BAR7 BAR8 PHRASE4 = BAR9 BAR10 PHRASE5 = BAR11 BAR12 PHRASE6 = BAR13 BAR14 PHRASE7 = BAR15 BAR16 PHRASE8 = BAR17 BAR18 BAR1 = 1LP R 1RP 3LP P 3RP 3LP P 3RP 3LP P 3RP BAR2 = P 1LP 1X2 R 1S2 1RP 2RP P 2LP 1LP R 1RP 3LP P 3RP 3LP P 3RP 3LP P 3RP BAR3 = P 1LP 1X2 R 1S2 1RP 2RP P 2LP 1LP 2X2 R 2S2 1RP BAR4 = 1LP R 1RP 1X2 P 1S2 P 1LP P 1RP 1LP P 1RP 2LP P 2RP 2LP P 2RP BAR5 = 4RP 2X2 P 2S2 4LP BAR6 = 1LP R 1RP 3LP P 3RP 3LP P 3RP 3LP P 3RP BAR7 = 6RP P 6LP 1LP 1X2 R 1S2 1RP 1RP P 1LP 1LP R 1RP 3LP P 3RP 3LP P 3RP 3LP P 3RP BAR8 = 6RP P 6LP 1LP 1X2 R 1S2 1RP 1RP P 1LP 1LP 2X2 R 2S2 1RP BAR9 = 1LP R 1RP 4RP 1X2 P 1S2 4LP 5RP P 5LP 4RP P 4LP 3RP P 3LP 2RP P 2LP 1RP P 1LP BAR10 = 2RP 1X2 1X2 1X3 P 1S2 1S3 1S2 2LP P 1LP 2X2 R 2S2 1RP BAR11 = 1LP R 1RP 3LP 1X2 P 1S2 3RP 3LP P 3RP P P 2RP P 2LP 2RP P 2LP BAR12 = 4RP 1X2 1X2 1X3 P 1S2 1S3 1S2 4LP 2RP 2X2 P 2S2 2LP BAR13 = 1LP R 1RP 4RP 1X2 P 1S2 4LP 5RP P 5LP 4RP P 4LP 3RP P 3LP 2RP P 2LP 4RP P 4LP BAR14 = 3RP 1X2 1X2 1X3 P 1S2 1S3 1S2 3LP 1RP 2X2 P 2S2 1LP BAR15 = 1LP R 1RP 3LP 1X2 P 1S2 3RP 3LP P 3RP 1LP P 1RP 1LP P 1RP 1RP P 1LP 1RP P 1LP BAR16 = 3RP 1X2 1X2 1X3 P 1S2 1S3 1S2 3LP 1RP 2X2 P 2S2 1LP BAR17 = 1LP R 1RP 4RP 1X2 P 1S2 4LP

	5RP P 5LP 4RP P 4LP 3RP P 3LP 2RP P 2LP 1RP P 1LP BAR18 = 2RP 1X2 1X2 1X3 P 1S2 1S3 1S2 2LP 1X2 P 1S2
VARIANT CUT[liabi liabi muatar gotis] REG[Europa, Mitteleuropa, Schweiz, Oberwallis] KEY[V0001A 08 G FREI] MEL[111111 1_2_ 1_11112_ 1111-7b-7b 1_0_ 0__ 1111 1_2_ 1111 22_ 11-7b-7b 1_0_ //] >> FCT[Brauchtum, Beschwoerung (Nebel)]	V0001A = G-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE6 PHRASE1 = BAR1 BAR2 PHRASE2 = BAR3 PHRASE3 = BAR4 BAR5 BAR6 PHRASE4 = BAR7 BAR8 PHRASE5 = BAR9 BAR10 PHRASE6 = BAR11 BAR12 BAR1 = P P P P P P BAR2 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP BAR3 = 1X2 P 1S2 P P P P 1RP 1X2 P 1S2 1LP BAR4 = P P P P 1LP PFLAT 1RP 1LP PFLAT 1RP BAR5 = 1X2 P 1S2 1LP 1X2 R 1S2 1RP BAR6 = 1LP 2X2 R 2S2 1RP BAR7 = P P P P BAR8 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP BAR9 = P P P P BAR10 = 1RP P 1LP 1RP P 1LP BAR11 = P P 1LP PFLAT 1RP 1LP PFLAT 1RP BAR12 = 1X2 P 1S2 1LP 1X2 R 1S2 1RP PFLAT >> CHROMATIC LP P
ZUCCAL CUT[ZU STRASBURG AUF DER SCHANZ] REG[Europa, Mitteleuropa, Deutschland, Westfalen] KEY[Z0005 16 G 4/4] MEL[-5_ 1_.1_-5_.-5_ 1__0_ 1_2_ 3_.3_5_4_2_-7_ 1__0_ 1_2_ 3_.33_.33_2_.3_ 4__2__0_ -7_1_ 2_2_.22_1_.3_ 3__1__0_ 5_4_ 3_2_3_4_ 5__5_4_3_2_ 1__0__ //] >> FCT[Sagen - Lied, Romanze] CMT[Zweistimmigkeit, Terzparallelen]	Z0005 = G-MAJOR PHRASE1 PHRASE2 PHRASE3 PHRASE4 PHRASE5 PHRASE1 = BAR1 BAR2 BAR3 PHRASE2 = BAR4 BAR5 BAR6 PHRASE3 = BAR7 BAR8 BAR9 PHRASE4 = BAR10 BAR11 BAR12 PHRASE5 = BAR13 BAR14 BAR15 BAR16 BAR1 = 4RP 2X2 P 2S2 4LP BAR2 = 2X2 1X2 1X3 P 2S2 1S3 1S2 1X2 P 1S2 3LP 2X2 1X2 1X3 P 2S2 1S3 1S2 3RP 3LP 1X2 P 1S2 3RP BAR3 = 3X2 P 3S2 1LP 2X2 R 2S2 1RP BAR4 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP BAR5 = 2RP 2X2 1X2 1X3 P 2S2 1S3 1S2 2LP 2RP 1X2 P 1S2 2LP 4RP 1X2 P 1S2 4LP 3RP 1X2 P 1S2 3LP 1RP 1X2 P 1S2 1LP 1LP 1X2 P 1S2 1RP BAR6 = 3X2 P 3S2 1LP 2X2 R 2S2 1RP BAR7 = 1X2 P 1S2 1RP 1X2 P 1S2 1LP BAR8 = 2RP 1X2 1X2 1X3 P 1S2 1S3 1S2 2LP 2RP P 2LP 2RP 1X2 1X2 1X3 P 1S2 1S3 1S2 2LP 2RP P 2LP 2RP 2X2 P 2S2 2LP 1RP 1X2 1X2 1X3 P 1S2 1S3 1S2 1LP 2RP P 2LP BAR9 = 3RP 2X2 P 2S2 3LP 1RP 2X2 P 2S2 1LP 1LP 2X2 R 2S2 1RP BAR10 = 6RP 1X2 P 1S2 6LP 1X2 P 1S2

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BAR11 = 1RP 2X2 P 2S2 1LP 1RP 1X2 1X2
1X3 P 1S2 1S3 1S2 1LP 1RP P 1LP 1RP
2X2 P 2S2 1LP 1X2 1X2 1X3 P 1S2 1S3
1S2 2RP P 2LP
BAR12 = 2RP 2X2 P 2S2 2LP 2X2 P 2S2
1LP 2X2 R 2S2 1RP
BAR13 = 4RP 1X2 P 1S2 4LP 3RP 1X2 P
1S2 3LP
BAR14 = 2RP 2X2 P 2S2 2LP 1RP 2X2 P
2S2 1LP 2RP 2X2 P 2S2 2LP 3RP 2X2 P
2S2 3LP
BAR15 = 4RP 2X2 P 2S2 4LP 4RP 1X2 P
1S2 4LP 3RP 1X2 P 1S2 3LP 2RP 2X2 P
2S2 2LP 1RP 2X2 P 2S2 1LP
BAR16 = 3X2 P 3S2 1LP 2X2 R 2S2 1RP

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Conclusion

This program works as expected for the entire test suite, and also performs gracefully under error conditions. This was a challenge to develop and test, though very worthwhile for the experience.