Computer Aided Solutions in Folksong Analysis[1]

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1. Purpose[2]

Why to split up folksongs? Folksongs are subdivided in smaller, plausible elements, the so-called 'phrases', to make comprehension of melodic courses und structures better and easier understood. The classification of theses phrases can be done independently from other structural and formal constituents of a whole folksong, for example, the form of the song, ending tones, number of phrases, etc.

In other words, the classification of a complete folksong always needs the consideration of all these components, but the selection of too many criteria can lead to confusion. The only exception: In regions like Hungaria, which is very rich in folksongs, all structural and formal criteria can be considered, and these can lead to comprehensible and meaningful results, as shown by Bartok and Kodaly.

2. Preliminary Remarks

2.1 How to segment folksongs[3]

In accordance with formal principles in classical music theory the following folksong is divided in two equal parts, front part/last part (Vordersatz/Nachsatz)..

Figure 1

On the other hand, following the guidelines of modern ethnomusicology would partition this song into the four smallest possible logical segments.[4]

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[1] SAGRILLO, Damien: Melodiegestalten im luxemburgischen Volkslied. Zur Anwendung computergestützter Verfahren im luxemburgischen Volkslied, in EthnoMusiCologne by Rüdiger Schumacher, Publisher- Holos, Bonn 1999, 2 vols., 350, 579 pages.
[2] Sagrillo, volume 1, p. 114-115
[3] Sagrillo, volume 1, p. 125-131
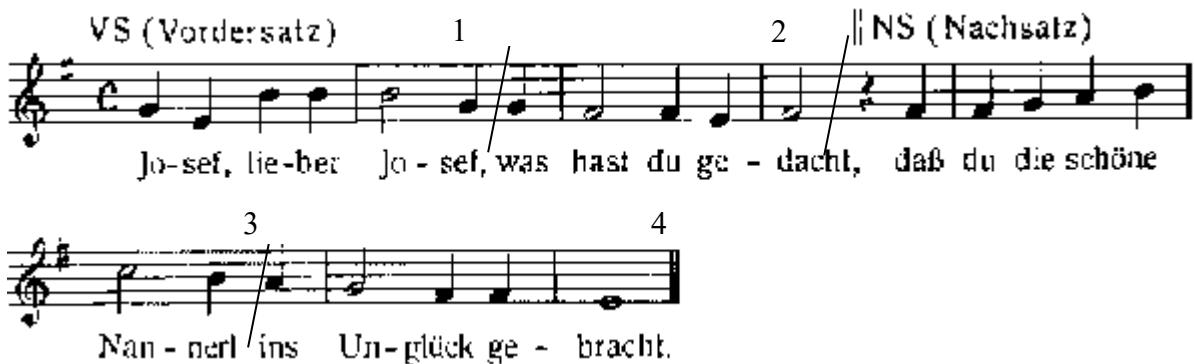
Figure 2

Exact rules for dividing a folksong into phrases of course do not exist. The folksongs codified in ESAC can be recorded by MIDI-keyboard or simply transformed manually in ASCII-format. In both cases dividing the entire folksong into phrases is obligatory. In case of doubt the textual structure could exceptionally be considered. The coded phrases are represented and manipulated with KEdit, which is an ASCII-compatible editor, with powerful sorting possibilities.

3. Methods of classifying folksong phrases using three steps

3.1 Preparation, using the catalogue of the phrases of Luxemburgish folksongs

Volume 2 of the referenced work is the so-called catalogue of phrases of Luxemburgish folksongs. It is assembled manually, so that similar phrases are sorted together and groups of variants are formed. It exists in two forms as follows;

3.1.1 The encoded form in ESAC/ASCII with the complete statistical and musical data[5].

```
KEY[Nr2671 08  G 4/4 ] MEL[554  3_.34432  6_5_0 //
CUT[K1170  ²07] AM[05] ²(2,6) K[05] KK[0501424]  AK[346_]
TR[55433443265//] TN[54343265 ] \
```

KEY[	The identity of the phrase, with rhythm and key indications
MEL[	The melody of the phrase
CUT[	The identity of the entire folksong
AM[	The range and the lowest and highest tone
K[	The last tone
KK[	The contour code
AK[	The stressed tones
TR[	The melody tones, repeated, but without rhythmical digits
TN[	The melody tones, not repeated and without rhythmical digits

Figure 3

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[4] STIEF, Wiegand (edit. et al.):Melodietypen des Deutschen Volksgesanges, Tutzing 1976-83, 4 vols, volume 2, page 7.

[5] Sagrillo, volume 1, p. 132-133

3.1.2 Refer to the catalogue, volume 2 of the reference books, for presentation in note form.

3.2 Draft Version using ESAC[6]

The Structure of the draft version, the phrases of the folksongs, the folksongs in their numerical order before sorting by KEdit.

```
Lied T0479   KEY[Nr2346 16  G 3/4 ] MEL[-5_.1  1__-7__-6_.-6  -6_-5_-5__  //
             KEY[Nr2347 16  G 3/4 ] MEL[-5_.3  3__2__-6_-7_  2_1_1__ //
             KEY[Nr2348 16  G 3/4 ] MEL[-5_.1  1_-7_-7__-7_.-7  -6_-5_-5__  //
             KEY[Nr2349 16  G 3/4 ] MEL[-5_3_  3_2_2__-6_-7_  1__0__ //
             KEY[Nr2350 16  G 3/4 ] MEL[-5_.1  1_-7_-7__-6_.-6  -6_-5_-5__  //
             KEY[Nr2351 16  G 3/4 ] MEL[-5_.3  3_2_2__-6_-7_  1__0__ //
             KEY[Nr2352 16  G 3/4 ] MEL[-5_.1  1_-7_-7__-6_.-6  -6_-5_-5__  //
             KEY[Nr2353 16  G 3/4 ] MEL[-5_.3  3_2_2__-6_-7_  1__0__ //
Lied T0489   KEY[Nr2354 08  G 3/4 ] MEL[5_  +1__+1_  7b65_6_  7b__+1_  5__0_ //
             KEY[Nr2355 08  G 3/4 ] MEL[7b_  7b_  +1_.55_  6b_5_4_  3b__ //
             KEY[Nr2356 08  G 3/4 ] MEL[3b_  4_5_  6b54_3b_  2_1_ //
Lied T0490   KEY[Nr2357 08  G 3/4 ] MEL[3b_  3b21_.-7b  3b45_0 //
             KEY[Nr2358 08  G 3/4 ] MEL[4  6b54_.2  3b21_0 //
             KEY[Nr2359 08  G 3/4 ] MEL[3b_  3b21_.-7b  3b45_0 //
             KEY[Nr2360 08  G 3/4 ] MEL[4  6b54_.2  3b21_0 //
Lied K0083   KEY[Nr2361 08  G 4/4 ] MEL[-5  1_1_1_1_  1_3_2_1_  2__0_ //
             KEY[Nr2362 08  G 4/4 ] MEL[-5-7  2_2_2_2_  2_4_3_2_  3___0_ //
             KEY[Nr2363 08  G 4/4 ] MEL[5_  5_3_3_3_  3_5_5_ //
             KEY[Nr2364 08  G 4/4 ] MEL[43  2_222_2_  2_665_ //
             KEY[Nr2365 08  G 4/4 ] MEL[3  1_5_5_4_  3_0_. //
Lied K0086   KEY[Nr2366 16  G 4/4 ] MEL[-5_1_3_  5__.6_5_.25_2_  3___0_ //
             KEY[Nr2367 16  G 4/4 ] MEL[3_4_3_  2__.2_2_2_3_2_  1___0_ //
             KEY[Nr2368 16  G 4/4 ] MEL[-5_1_3_  5__.6_5_.25_2_  3___0_ //
             KEY[Nr2369 16  G 4/4 ] MEL[3_4_3_  2__.2_2_4_3_2_  1___0_ //
             KEY[Nr2370 16  G 4/4 ] MEL[3_3_3_  3__.3_3_3_4_-7_  1___0_ //
             KEY[Nr2371 16  G 4/4 ] MEL[1_1_6_  6__.6_5_.25_2_  3___0_ //
             KEY[Nr2372 16  G 4/4 ] MEL[3_4_3_  2__.2_2_3_4_5_  6___0_ //
             KEY[Nr2373 16  G 4/4 ] MEL[6_5_4_  3_5_5_0_5_4#_5_  7__.6_ //
             KEY[Nr2374 16  G 4/4 ] MEL[5_.64_.5  3__.0_ //
             KEY[Nr2375 16  G 4/4 ] MEL[1_2_(3_4_5_)  6__.5_5__0__ //
             KEY[Nr2376 16  G 4/4 ] MEL[1__.3_3_3_  1__.0__ //
Lied K0087   KEY[Nr2377 08  G 4/4 ] MEL[-512  3_.1-5432  3_1_0 //
             KEY[Nr2378 08  G 4/4 ] MEL[351  2_.354-6-7  1_0_. //
             KEY[Nr2379 08  G 4/4 ] MEL[-512  3_.1-5432  3_1_0 //
             KEY[Nr2380 08  G 4/4 ] MEL[351  2_.354-6-7  1_0_. //
             KEY[Nr2381 08  G 4/4 ] MEL[654#  5_.31654#  5_3_0 //
             KEY[Nr2382 08  G 4/4 ] MEL[351  2_.354-6-7  1_0_. //
             KEY[Nr2383 08  G 4/4 ] MEL[654#  5_.31654#  5_3_0 //
             KEY[Nr2384 08  G 4/4 ] MEL[351  2_.354-6-7  1_0_. //
             KEY[Nr2385 08  G 4/4 ] MEL[54#5  7_.6554-7  1_0_. //
```

KEY[Nr – the numerical order of the phrase in the draft version

Figure 4

3.3 Computer-Aided, Numerical Sorting[7]

Folksong phrases are sorted by Kedit using the criteria of,
    1. the range (AM = Ambitus)

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[6] Sagrillo, volume 1, p. 133-134
[7] Sagrillo, volume 1, p. 134-135

2. the last tone (K = Kadenzton)
3. the contour code (KK = Konturkode), a code describing the melodic course of the phrase
4. the melody of the phrase (MEL)

```
1.  MEL[+2___.+1_7_7_6_6_5__0__//]      AM[05](5,+2)  K[05]  KK[0122100]
2.  MEL[(567)+1_.+1+2+17_6_//           AM[05](5,+2)  K[06]  KK[0211112]
3.  MEL[5_6__55+1_+1_+1_+1_+2_+1_7_//   AM[05](5,+2)  K[07]  KK[0411314]
4.  MEL[5__6__5__4__3__2___0__//]       AM[05](6,+1)  K[02]  KK[0222212]
5.  MEL[5_.43__1_.11__//               AM[05](6,+2)  K[01]  KK[0122100]
6.  MEL[6_7_7_+3_+2_+1__0_//]           AM[05](6,+3)  K[+1]  KK[0211112]
7.  MEL[6_7_7_+3_+2_+1__0_//]           AM[05](6,+3)  K[+1]  KK[0211112]
8.  MEL[+1_+3_+2_+1_6_77+1__0_//]       AM[05](6,+3)  K[+1]  KK[0302212]
1.  MEL[+2+17_+3+267+1__//              AM[05](6,+3)  K[+1]  KK[0422313]
2.  MEL[+2+17_+3+267+1__//              AM[05](6,+3)  K[+1]  KK[0422313]
3.  MEL[6_7_7_+1_+2_+3__0_//]           AM[05](6,+3)  K[+3]  KK[0111100]
4.  MEL[543333432_665_5_4_3_0___//      AM[05](7,+2)  K[03]  KK[0521415]
5.  MEL[5__6__5__4_4_4_4_1__//          AM[06](+1,+3) K[01]  KK[0222212]
6.  MEL[5__6__5__4_4_4_4_1__//          AM[06](+1,+3) K[01]  KK[0222212]
7.  MEL[-6_-3_-4_-4_-5_-5_-1__//]       AM[06](-1,-6) K[-1]  KK[0322313]
8.  MEL[111_.12_1_-6__-4_//             AM[06](-4,2)  K[-4]  KK[0222212]
9.  MEL[3_3_3_3__.2_1_-7_-6_-5_1___0_// AM[06](-5,2)  K[01]  KK[0222122]
10. MEL[1-712-7-5_01133_2_0//           AM[06](-5,2)  K[02]  KK[0511434]
11. MEL[3__2__1_-7-6_-5//]              AM[06](-5,3)  K[-5]  KK[0122100]
12. MEL[3__2__1_-7-6-5_//]              AM[06](-5,3)  K[-5]  KK[0122100]
13. MEL[3__2__1_-7-6-5_//               AM[06](-5,3)  K[-5]  KK[0122100]
14. MEL[3__2__1_-7-6-5_//               AM[06](-5,3)  K[-5]  KK[0122100]
15. MEL[3__2_1_-7_-6-6-5__//]           AM[06](-5,3)  K[-5]  KK[0122100]
16. MEL[-5_1_1_1_131_-5_-5_//           AM[06](-5,3)  K[-5]  KK[0200212]
17. MEL[-5_33332_2_1_-5_-5_0_//]        AM[06](-5,3)  K[-5]  KK[0200212]
18. MEL[-5_3_2_2_1_-5_//               AM[06](-5,3)  K[-5]  KK[0200212]
19. MEL[-5_1_111_3_1_.-5-5_//           AM[06](-5,3)  K[-5]  KK[0200212]
20. MEL[-5_1_1__1__3_1_-5__-5__//       AM[06](-5,3)  K[-5]  KK[0200212]
21. MEL[-5_1_1_1_3_1_.-5-5_//]          AM[06](-5,3)  K[-5]  KK[0200212]
22. MEL[-5-51_1_1_2__3_1__.-5__//       AM[06](-5,3)  K[-5]  KK[0200212]
23. MEL[-5_3__2_1__-6_-6_-5_0__.//      AM[06](-5,3)  K[-5]  KK[0200212]
24. MEL[-5_3__2_1__-6_-6_-5_0__.//      AM[06](-5,3)  K[-5]  KK[0200212]
25. MEL[222_3_2__.1_-7__.-6_-6__-5__0_// AM[06](-5,3) K[-5]  KK[0222212]
26. MEL[2___.3_2_1_-7_-6_-5__0__//]     AM[06](-5,3)  K[-5]  KK[0222212]
27. MEL[2_321-6-5_//]                   AM[06](-5,3)  K[-5]  KK[0222212]
28. MEL[2222_.2321-6-5__0//             AM[06](-5,3)  K[-5]  KK[0222212]
29. MEL[2222__.2321-6-5__0//            AM[06](-5,3)  K[-5]  KK[0222212]
30. MEL[1_111_1_1_113_11-5___//]        AM[06](-5,3)  K[-5]  KK[0222212]
31. MEL[1_.11_3_1__.-6-5_0_//]          AM[06](-5,3)  K[-5]  KK[0222212]
32. MEL[332_22-6_1_-7_-6_-5_0//]        AM[06](-5,3)  K[-5]  KK[0320213]
33. MEL[3_2_1_-7_2_-5__//]              AM[06](-5,3)  K[-5]  KK[0322313]
34. MEL[3_2_1_21-7-6-5_0___//           AM[06](-5,3)  K[-5]  KK[0322313]
35. MEL[32321-7-6-5//]                  AM[06](-5,3)  K[-5]  KK[0322313]
36. MEL[32321-7-6-5//]                  AM[06](-5,3)  K[-5]  KK[0322313]
37. MEL[2_1231-5_//]                    AM[06](-5,3)  K[-5]  KK[0322313]
38. MEL[-53321_-5-6_-5-5_//             AM[06](-5,3)  K[-5]  KK[0400212]
39. MEL[-5_3_2_1_1_2_3_2___-5_-5__//    AM[06](-5,3)  K[-5]  KK[0400214]
```

Figure 5.

4 Results. Interpretation of classified folksong phrases

In the section 4.1 the structure of a catalogue of classified folksong phrases is presented. In the section 4.2 the results of this classification are illuminated. The section 4.3 briefly mentions a second study from the referenced work about formal and statistical aspects in Luxemburgish folksongs.

4.1 The Catalogue of Folksong Phrases

4.1.1 After sorting by Kedit, the first example shows the normal case, many non-similar phrases. Except for the first three lines most KEY[Rf columns are not successively numbered or random.

```
1.   KEY[Rf0120 08  G 2/4 ] MEL[-5222  123_ //]
2.   KEY[Rf0121 16  G 2/4 ] MEL[-5_.22_2_  1_2_3__ //]
3.   KEY[Rf0122 08  G 2/4 ] MEL[-5_  -5_2_  2_2_  2212  3_ //]
4.   KEY[Rf0084 08  G 6/8 ] MEL[-5  2222-52  3_.0_ //ßßß
5.   KEY[Rf0108 16  G 2/4 ] MEL[-5_  1_.-51_2_  3__. //]
6.   KEY[Rf0118 16  G 4/4 ] MEL[-5-5-5_-5_  1__1__2_  -5__  3__. //ßß
7.   KEY[Rf0130 16  G 4/4 ] MEL[-5__  1_112_221_-6-6-5__  1__2__3__0_ //
8.   KEY[Rf0131 16  G 2/4 ] MEL[-5__  1_1_112_  1-7-6_-5__  1__2__  3__0_ //]
9.   KEY[Rf1995 16  G 2/4 ] MEL[-5_  1_1_1_1_  -7_1_2_-5_  2_2_1_2_  3__0_ //]ßß
10.  KEY[Rf0227 08  G 4/4 ] MEL[-5  111_.232  1_0 //
11.  KEY[Rf0278 08  G 4/4 ] MEL[-5_  -5_1_1_3_  3_212_ //
12.  KEY[Rf2623 08  G 4/4 ] MEL[11  6_6_6_6_  55553_ //
13.  KEY[Rf2691 08  G 4/4 ] MEL[1  55555_35  5_565_0_ //
14.  KEY[Rf2347 16  G 4/4 ] MEL[-5_.-5  -5_  3_.33_2_3_  2__1_-6_-5__ //
15.  KEY[Rf2629 08  G 4/4 ] MEL[1_  1_6_6_66  6_543_ //
16.  KEY[Rf0179 08  G 4/4 ] MEL[-5_  3_3_2_2_  1111-5_ //ßß
17.  KEY[Rf2340 08  G 4/4 ] MEL[-5_  3__1_-5-5  -6__-5_ //
18.  KEY[Rf2208 16  G 2/4 ] MEL[3b_3b_4_4_  3b_  -6b_0_  3b_3b_4_4_  3b__1_0_ //]
19.  KEY[Rf3304 08  G 2/4 ] MEL[3b_14  3b-7b-6b4  3b2b1_ //]
20.  KEY[Rf3058 16  G 4/4 ] MEL[5__  6__5__4_4_4_4_  1__0___ //
21.  KEY[Rf3132 08  G 4/4 ] MEL[13  5_.65_4_  3_.21_ //ßß
22.  KEY[Rf1455 08  G 4/4 ] MEL[-7b_  1_2_3b212_  3b_5_4_3b_  2___  1_0__. //
23.  KEY[Rf1442 16  G 2/4 ] MEL[5__  1_2_3b_2_  1_-7b_1__ //]ßß
```

KEY[Rf – the sequence of the phrase in the definitive catalogue

Figure 6: Examples of numerical sorting[8]

4.1.2 Figure 7 shows the result of numerical sorting illustrating that the numerical sorting and the definitive form of the catalogue are rather close.

```
1.   KEY[Rf2636 08  G 2/4 ] MEL[1355  5_6_  5_44  4_ //]
2.   KEY[Rf2643 16  G 2/4 ] MEL[1_3_  5__5_5_  5__6__  5_.44_4_  4__ //]
3.   KEY[Rf2644 16  G 2/4 ] MEL[1_3_  5__5__  5__6_5_  5_.44_4_  4__ //]
4.   KEY[Rf2645 08  G 4/4 ] MEL[13  5_5_5_65  5_4_4_ //
5.   KEY[Rf2647 08  G 4/4 ] MEL[134  5_.55565  5_4_0 //
6.   KEY[Rf2649 16  G 6/8 ] MEL[13  5_.55_5_.65_  5_.44_4_0_ //
7.   KEY[Rf2650 16  G 6/8 ] MEL[13  5_.55_5_6_5_  5_4_4_4__ //
8.   KEY[Rf2615 16  G 2/4 ] MEL[1_3_  5__5_6_  5__5__  5_4_4_3_  4__ //]
9.   KEY[Rf2648 08  G 4/4 ] MEL[13  5_5_5_65  54434_ //
10.  KEY[Rf2652 08  G 3/4 ] MEL[32  1_.365  5_4_ //
11.  KEY[Rf2651 08  G 3/4 ] MEL[1  135_5_  65544_  65544_ //
12.  KEY[Rf2655 16  G 3/4 ] MEL[1_3_  5__.3_6_5_  5__4__ //
13.  KEY[Rf2656 16  G 3/4 ] MEL[1_3_  5__.3_6_5_  5__4__ //
```

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[8] Sagrillo, volume 1, p. 138

```
14. KEY[Rf2637 16  G 4/4 ] MEL[1_2_   3_.33_3_3_1_6_.5   5_4_4__0__  //ßß
15. KEY[Rf2638 16  G 4/4 ] MEL[1_2_   3_.33_3_3_1_6_.5   5_4_4__0__  //ßß
16. KEY[Rf2667 08  G 3/4 ] MEL[11  6__6_   655_  //
17. KEY[Rf2668 16  G 3/8 ] MEL[1__1_   1_1_6   6_5_5_   5__.  //
18. KEY[Rf2669 08  G 3/4 ] MEL[11  6_6_66   6_6_6_   5__.  ^_0__  //
19. KEY[Rf2670 08  G 3/4 ] MEL[11  6_.66_   655_  //
20. KEY[Rf2671 08  G 3/4 ] MEL[11  6_.66_   655_  //
21. KEY[Rf2672 08  G 3/4 ] MEL[11  6_.66_   655_  //
22. KEY[Rf2675 16  G 6/8 ] MEL[1_   6_6_666_6_6_   6_5_5_5__  //
23. KEY[Rf2687 16  G 2/4 ] MEL[1_   5_5_6_6_   5__0_  //]
24. KEY[Rf2688 16  G 2/4 ] MEL[1_   5_5_6_6_   5__0_  //]
25. KEY[Rf2696 08  G 2/4 ] MEL[13  5566_  55 //]
26. KEY[Rf2697 08  G 2/4 ] MEL[1355  6655 //]
27. KEY[Rf2698 16  G 3/4 ] MEL[1_.3   5__5_5_6_6_   5__0__  //
28. KEY[Rf2699 08  G 3/4 ] MEL[13  5_5_66  5_5_  //
29. KEY[Rf2700 16  G 3/4 ] MEL[1_.3   5_.55_.56_.6   5__5__  //
30. KEY[Rf2705 08  G 6/8 ] MEL[111333  5565_0 //
31. KEY[Rf2715 08  G 6/8 ] MEL[111333  5565_0 //
32. KEY[Rf2716 08  G 6/8 ] MEL[111333  5_65_0 //
33. KEY[Rf2719 08  G 3/4 ] MEL[1_1_12   3_3_3_   5__6_   5__  //
34. KEY[Rf2722 16  G 4/4 ] MEL[1__   1__.2_3__4_4_   5__.6_5__  //
35. KEY[Rf2727 16  G 2/4 ] MEL[1_123_45   6_6_5_0_  //]
36. KEY[Rf2729 16  G 3/8 ] MEL[12  3__33   3_4_5_   6_5_  //
37. KEY[Rf2730 16  G 2/4 ] MEL[1_12_34_   6_6_5__  //]
38. KEY[Rf2731 08  G 4/4 ] MEL[12   3__0_46  5__0_  //
```

Figure 7[9]

4.1.3 Figure 8 shows a situation, where sorting by KEdit leads to a definitive extract of the catalogue. No further manual classifying needs to be made. This can be seen by the successive KEY[Rf numbers.

```
KEY[Rf2282 08  G 6/8 ] MEL[1   1_11_-5   3_11_  //
KEY[Rf2283 08  G 6/8 ] MEL[1   1_11_-5   3_11_  //
KEY[Rf2284 08  G 3/4 ] MEL[1_   1_-5_33   3_1_  //
KEY[Rf2285 08  G 3/4 ] MEL[1_   1_-5_3_   3_1_  //
KEY[Rf2286 08  G 3/4 ] MEL[1_   1_-5_3_   3_1_0_  //
KEY[Rf2287 08  G 3/4 ] MEL[1_   1_-5_3_   3_1_  //
KEY[Rf2288 16  G 3/4 ] MEL[1_.1   1__-5__3_.3   3__1__  //
KEY[Rf2289 16  G 4/4 ] MEL[1_1_   1__-5__.3_3_3_   3_1_1__.0_  //
KEY[Rf2290 08  G 3/4 ] MEL[1_   1_-5_3__   3_1__  //
KEY[Rf2291 16  G 3/4 ] MEL[1_1_   1_-5_-5__1_2_   3_1_1__  //
KEY[Rf2292 08  G 2/4 ] MEL[1_11   1_-53   3_33   3_1_ //]
```

Figure 8[10]

4.2 Interpretation of the Catalogue

The following explanation of the melodic course in Luxemburgish folksongs can of course not be exhaustive. Nevertheless the main characteristics will be explained.

4.2.1 phrases with an ending character[11]

4.2.1.1 at the end of a song

---

[9] Sagrillo, volume 1, p. 137
[10] Sagrillo, volume 1, p. 136
[11] 148-155

The most typical phrase with the leading tone before the tonic at the end of a song.

Figure 9

4.2.1.2 inside a song

A phrase with ending character at the end of the third phrase of a four phrase song

Figure 10

4.2.2 the leading tone (seventh degree) and its significance[12]

4.2.2.1 the leading tone inside the phrase

It exists in different forms:
the leading tone alternating with the tonic: 1-71
extension of the formula 1-71: 21-7-6-71
the leading tone rotating with the sixth degree: -6-71-6
the leading tone as seventh degree without leading function: 6765
the leading tone inside a ascending melodic line: -5-6-7123

The leading tone is accentuated in the third and the last phrase of the following song as the highest tone in the melodic course. The high tonic at the end of the third phrase has no effect on the melodic progression.

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[12] 156-175

K1089   Einst lebt ich so glücklich! (1-41), S. 106

Einst – lebt ich so glück – lich, einst – lebt ich so froh!

In – ei– ner klei– nen Hüt – te,

Ge – dek – ket mit Stroh,

In – ei– ner klei– nen Hüt – te,

Ge – dek – ket mit Stroh.

Figure 11

4.2.2.2 the leading tone at the end of the phrase

The leading tone as last tone of a phrase

Rf 3235   T0208   02

Figure 12

and even as ending tone of an complete song

T0202   Die Erscheinung auf dem Kirchhof (57),

Zür– net nicht, ihr nächt– lich to– ten Hai – ne,

Schrek– ket nicht, ihr mor– schen To– ten– bei – ne,

Wenn ich euch –, wenn ich euch –, wenn ich euch –, wenn ich euch –,

Figure 13

4.2.3 triad phrases[13]

Triad phrases form a very important and large part of the catalogue. Most songs make use of the main triad (135) their appearance is very varied, suborder triads are not often used. The following song is constructed largely using triads.

Figure 14

Three different triad figures are predominant:

Triads at the beginning of the phrase are numerous and various. They mostly commence without an upbeat.

Figure 15

Frequent types of triads at the beginning of phrases with upbeat: they often begin with the lower fifth degree.

Figure 16

Triads also occur inside phrases. In this case they begin and end with one or more non-triad tones. Triads at the end of phrases consequently are preceded by one or more non-triad tones.

4.2.4 The phrase type 12345/67+165[14] is a characteristic for the folksongs of Luxembourg. It can exist together as one long phrase or as two separated, but immediately following short phrases, with or without the lower fifth degree as an upbeat.

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[13] 176-204
[14] Sagrillo, volume 1, p. 205-221

Figure 17

Well-known examples; the German folksongs: *Fuchs, du hast die Gans gestohlen* or *Alle meine Entchen* or the following Luxembourg folksong from a traditional procession.

Figure 18

The short phrase 12345 often exists alone without 67+165, this one being logically anticipated by 12345. This subsequent phrase can never be found at the beginning of a song, but sometimes it can be preceded by a different opening.

Figure 19

The sequence 1234565 with the sixth degree as culminating tone is a further intermediate variant.

Figure 20

4.2.5 About 10% of the phrases have limited ranges[15], i.e. ranges of a major third or less. The question to be answered is, whether phrases of this kind are autonomous or if they are elements of a larger melodious correlation.

4.2.5.1 The next song starts with a phrase of limited range. It is independent – it ends with the tonic – but can be considered as the starting point of the melodic progression.

Figure 21

4.2.5.2 In contrast to this the final phrase of the following song is to be considered as a brief concluding annex.

Figure 22

4.2.6 The melodic rotation 565[16]

Figure 23

This melodic sequence 565 is called a rotation, because in most cases the melody turns within these limits of tone, and the average range of the phrases does not exceed a sixth.

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[15] Sagrillo, volume 1, p. 222-228
[16] Sagrillo, volume 1, p. 229-246

The next chart illustrates that the melodic rotation 5-65 is most important in comparison with other possibilities of tone sequences ?-65.

Sequence	Occurrence
165	126
265	40
365	58
465	148
565	420
765	327

Figure 24

4.2.6.1 In the folksongs of Luxembourg four types of the melodic rotation 565 can be found, the melodic rotation standing alone in the phrase.

Song T0372, first phrase
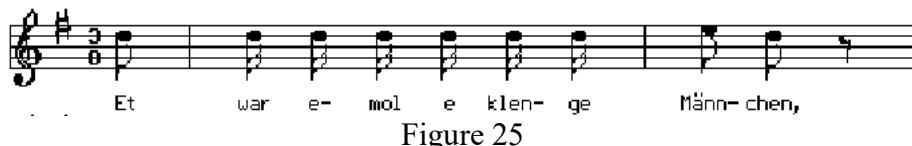
Figure 25

the melodic rotation as upbeat or at the beginning of the phrase.

Song T0203, first phrase

Figure 26

the melodic rotation 565 inside the phrase

Song K1130, second and third phrase

Figure 27

and the melodic phrase at the end of the phrase
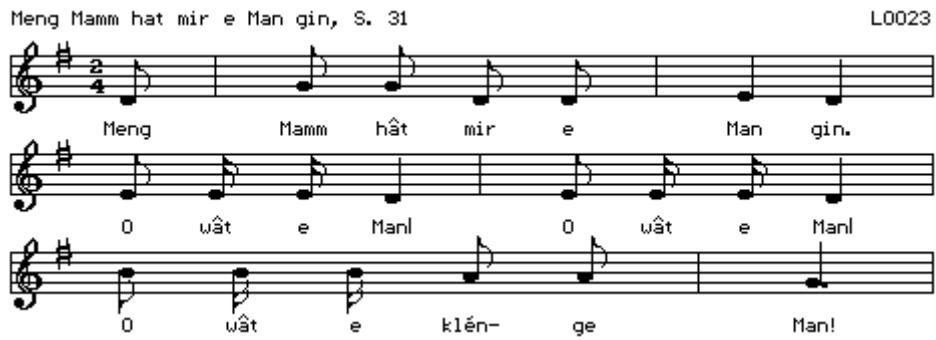
Figure 28

4.2.6.2 There exist multiple prolongations of the tone sequence 565. The next chart proves that tone connections with the sequence 5-65, i.e. beginning with the fifth degree are the most significant.

Tone Sequences	Occurrence
56543	103
6543	147
total	**250**
5653	67
653	95
total	**162**
56542	37
6542	39
total	**76**
56532	7
6532	2
total	**9**

Figure 29

4.3 Interpretation of the Formal Structures of Luxemburgish Folksongs

In the interpretation of the melodic courses formal aspects were deliberately disregarded. In a further chapter from the reference books[17], the relationship between phrases, i.e. the formal aspect, is taken into account. The form features FOT (form of pitch) and FOR (form of rhythm) of ESAC are used separately. For that reason the statements about form refer either to rhythmical or to pitch characteristics. Statements about a general form, combining rhythmical and pitch aspects cannot be assumed, because ESAC software does not support this alternative. Normally the determination of musical form depends on subjective evaluation. Attempts of interpretation with objective, rational or even mathematical computer programmes mostly lead in a blind alley.

In contrast to this, the statistical results oft the studies analysing intervals, tone degrees, rhythms and ending tones furnished by the software package of ESAC[18] are precise and satisfying.

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[17] Sagrillo, volume 1, p. 247-283
[18] Sagrillo, volume 1, p. 284-297

5 Future

The reference books work on classifying folksong phrases of one region – Luxemburg – and give a broad knowledge about the individuality of Luxemburgish melodies. It would be very instructive to compare the musical language of folksongs of further regions among themselves in order to find out idiomatic particularites. Requirements: the folksongs must be comparable, and the data have to be prepared uniformally.[19]

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[19] Sagrillo, volume 1, p. 315-317.