

## FIFTH-TRANSPOSITION IN NORWEGIAN FIDDLE MUSIC

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The purpose of this paper is to discuss some main aspects of my dissertation for the M.A. degree at the University of Copenhagen, "Transcription and Investigation of a Group of Setesdal-Slått". The word "slått" is a generic term for many different types of pieces of dance music, played on the harding fiddle in Norway. The playing of slått represents a cultivation of particularly one aspect of violin technique – the double stopping-technique – which has been developed to a very high level.

In my dissertation the investigation has been concentrated on a special group of slått from Setesdal, a valley in Southern Norway. The ordinary tuning of the harding fiddle is: a – d' – a' – e" but for this group of slått the tuning g – d' – a' – e" is used, called "lause bas", i.e. loose bass. These slått form a central element in the folk music tradition of Setesdal valley.

The condition for regarding these slått as a coherent group is an impression of tonal and motivic common features. The group contains about 20 slått, but realizing that one slått is found in as many varied forms as the number of fiddlers who are playing it, it has been necessary to make a selection. The purpose of the dissertation has been to establish a basis for investigating the whole group. Based on the selection of slått, I have tried to develop some principles of investigation which can be applied to as many slått as possible among those not directly included in the investigation.



From this position I intend to discuss some essential aspects of the investigation. This is done by analysing one slått – "Hovstaden", played by the fiddler Vidar Lande –, using the principles which have been developed in my dissertation.

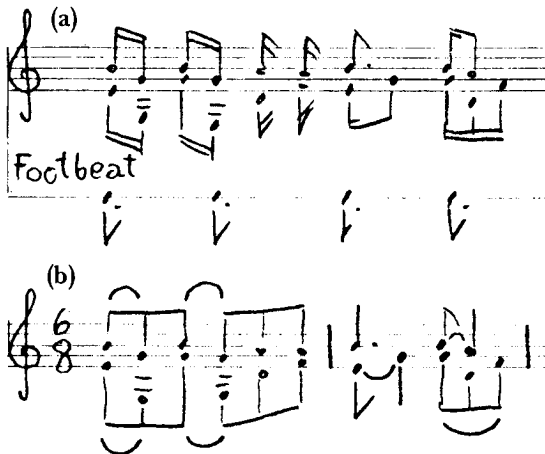
### *Transcription*

The slått have existed through the past independently of any kind of notation and they still exist in this way. A direct transfer to western principles of notation is therefore not without problems: The slått display melodic and rhythmic features which cannot be transferred directly to traditional notation<sup>1</sup>).

The practice of transcription applied has first been developed and used by Morten Levy<sup>2</sup>).

The following points will show a new approach:

- 1) The bowing practise has not been indicated by slurs. In order to point out the segmentation into stroke groups (the groups of notes to be taken in the same bow) slurs have been replaced by  and separate bow by .
- 2) The rhythm of the foot-beat is shown on a separate line under the five-lined system. The slåtts constitute primarily two different rhythmical patterns: the even beat of the foot and the more uneven rhythmical pattern made by the stroke of the fiddle-bow.



(a)

Footbeat

(b)

Ex. 1.

1a is a segment from "Hovstaden" (beat 9-12). In b the same segment has been notated according to traditional principles.

- 3) Barlines have not been used. A segmentation into bars represents an interpretation of the rhythmical succession. In ex. 1b the chosen segmentation into bars shows the footbeat succession as *superior* to the bowing.

The complete transcription of the slått Hovstaden is presented in example 2a. In the investigation, the two-part transcription of the slått is not handy. In the following example (2b) the principal voice has been extracted<sup>3</sup>). This operational melody forms the basis for the following analyses.

TN <sup>o</sup>	OTN <sup>o</sup>	CTN <sup>o</sup>	BEM.	COLL <sup>or</sup>
Name	Hovstaden		TRAD <sup>or</sup>	Vidar Lande , Løvudal
				COLL <sup>or</sup> TØ $\frac{5}{6}$ 1976

Foot beat

5 10 15 20 25 30 35 40 45 50

Coda

Ex. 2a.

TN <sup>o</sup>	OTN <sup>o</sup>	CTN <sup>o</sup>	BEM.
NAVN	Hovstaden		TRAD <sup>or</sup> Vidar Lande
			COLL <sup>or</sup> TØ 5/6 1976

(Principal voice extracted)

①

FOOT

②

③

④

⑤

⑥

⑦ Coda.

Ex. 2b.

### Rhythmical Organization

In my opinion, in each slått the bowing practise has been developed to a very firm tradition from which the fiddlers rarely deviate; naturally there are individual differences, but the bowing is an important part of the learning process.

Consequently, the relation between foot beat and bowing has been determining for my structuring of the rhythmical succession of the slåtts.

The whole slått can be regarded as a succession of short or long periods of interference<sup>4)</sup> between two rhythmical patterns of the foot beat and of the bowing. A *group of interference* is defined as a segment counted from one coincidence between up- or down-bowing and foot beat to the next.

Ex. 3.

v = up-bow      π = down-bow

In this segment from Hovstaden we find three groups of interference: the first group (a) of two foot beats, the two following groups, (b) and (c), each representing one foot beat. This can be expressed by numbers:

Ex. 4.

The figures show the number of tones in each up- or down-bowing. In the first group of interference (a) polyrhythm is found in relation to the foot beat, whereas (b) and (c) have the same rhythm. On this basis the names *co-group* and *counter-group* can be defined as follows: *co-group* means a

group of interference of one foot-beat only. *Counter-group* means a group of interference longer than one foot-beat. Accordingly, a co-group always consists of three semi-quavers – a limited number of rhythmical variations (♩, ♪, ♪♩, ♪♩♩, ♩, ♪, ♪♩, ♪♩), whereas the number of possible executions of counter-groups in principle is infinite.

As a result of applying my structuring of co- and counter-groups to the whole slått, the following series of numbers emerges:

2211 2211 2211 2211 2211 33 2211 21 2232

21 2232 21 2232 21 222 3 21 222 3 21 2232

Ex. 5      21 2232 21 222 3 21 222 3 21 21 2211 2211 3 3

How can this series of numbers be organized in a meaningful way? There is a clear tendency to a changing relationship between co- and counter-groups. There are two types of counter-groups: 222 (or 2211) and 2232. In order to give an answer to this question it is necessary to compare the rhythmical organisation to the melodic sequence of the slått. The main part of the slått can be organized into motivic units of four foot beats. A few units are exact repetitions of preceding units (5–8 of 1–4 and 19–22 of 15–18), but in most units we find some small variation. From this point of view the rhythmical pattern of co- and counter-groups will be:

beat			
1		2211	
3		2211	
5		2211	
7		2211	
9		2211	
11			33
13		2211	
15	21	2232	
19	21	2232	
23	21	222	3
27	21	222	3
31	21	2232	
35	21	2232	
39	21	222	3
43	21	222	3
47	2121		
coda		2211	
		2211	33

Ex. 6

The series of numbers should be read from left to right, and each horizontal line corresponds to one motivic unit, in the following called *vensel*<sup>5</sup>). The column of counter-groups in the middle forms a rhythmical backbone through the slått.

The two types of counter-groups (2232 and 222) are combined with two different melodic variations at the end of vensels which in other respects are identical (cf. 39 and 43).

The presentation of the vensels and the corresponding rhythmical organization should now form the background for a more detailed investigation of particular vensel segments. The vensel 47-48 appear separated from the relations in which it is found in the rest of the slått. This indicates the existence of segments shorter than the vensels. In order to demonstrate the factors which determine the variations within the vensels, it is necessary to examine them in as much detail as possible.

In the following the designations *main-vensel* and *contrast-vensel* will be used. A detailed explanation presupposes a total view of the slåtts. This will here be omitted, but some lines of direction are given on page 277. In Hovstaden the section 1-14 consists of main-vensels, while the rest of the slått only consists of contrast-vensels.

### *Fifth-transposition*

The fiddlers exclusively play in the first position. Consequently, any segment of a slått has only one possible corresponding fingering. This implicates that a transposition of the segment one or – rarely – two fifths up or down can be played with the same fingering as the first segment.

Ex. 7. The tonal range of the slått.

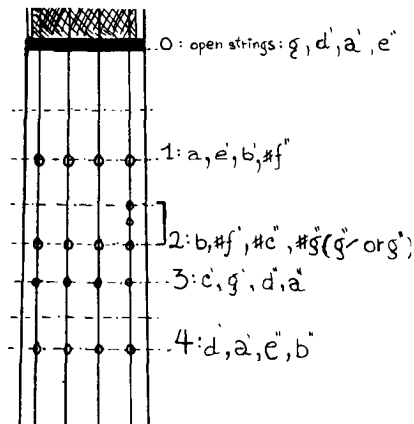
The scale given in ex. 7 is applicable for my whole selection of slåtts – still, there may be some variation of the tone  $g''/g$  sharp. It varies between low (=  $g''$ ), halfhigh (=  $g'''$ ) and high (=  $g$  sharp). The fingering is shown under the scale:

o means "open" string (i.e. without finger), and the following numbers: 1, 2, 3 and 4 (to be read: "first, second, . . . etc). represent in the mentioned order: index finger, middle finger, ring-finger and little finger.

According to the characteristics of the scale, not only can the same fingering be used by fifth-transposition, but also the distribution of semitones and wholetones between the four fingers can be maintained when transposing a segment from one string to another. On all four strings (playing: g sharp) the relationship between semi- and wholetones and the position of the fingers is as follows:

0 – 1:	whole tone	~	large distance
1 – 2:	" "	~	" "
2 – 3:	semi	"	small "
3 – 4:	whole	"	large "

This may be illustrated as follows:




Ex. 8.


From this diagram of the playing-range of the fiddle's fingerboard related positions of the fingers should be pointed out: The vertical lines represent the strings, the horizontal lines represent the possible chromatic disposition of the fingerboard.

### *The concept of modules*

A great number of fifth-transpositions are found in all slåtts of my selection. In Hovstaden the contrast-vensels 15–18 and 35–38 are played with exactly the same fingering, but on different strings.

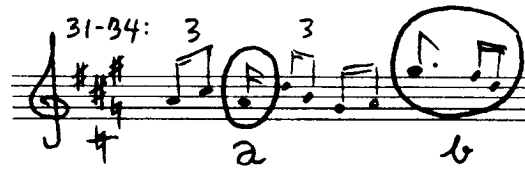


15-18: 

35-38: 

Ex. 9.

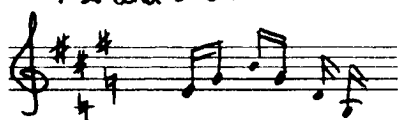
In example 9 we find a fifth-transposition of a whole vessel. A comparison of the two vessels to e.g. 31-34 (ex. 10) shows that the idiomatic fifth-transposition is also present within smaller segments of vessels.


31-34: 

Ex. 10

The last part of this vessel has been independently fifth-transposed, compared with the rest (b). Furthermore, the single semi-quaver in the beginning of the vessel has been transposed downwards, compared to the vessel 15-18 (a).

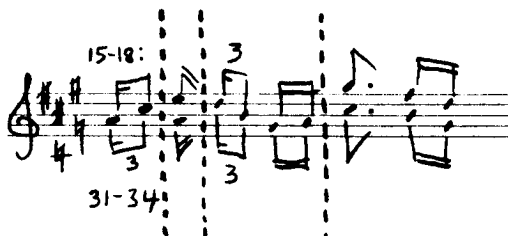
Consequently, the two first vessels of the slått, 1-4 and 5-8, turn out to be composed of two almost identical halves which have only been fifth-transposed in relation to each other (ex. 11).

1-2 and 5-6: 

3-4 and 7-8: 

Ex. 11.

Fifth-transpositions of partial segments as well as whole vensels form an important condition for variation in the slått. As shown in ex. 9 the fifth-transpositions are incorporated in the vensels in a rather complicated way. Ex 12 compares the vensels 15-18 to 31-34:



Ex. 12

Comparing the two vensels, certain lines emerge – *breaklines* – which for the fiddler seem to represent a possibility of choice between an upper and a lower succession.

We may consider the vensel in its entire extent as composed of *four mutually transposable partial segments*. Two of these partial segments can be transposed without any implications for the remaining two segments (ex. 13):

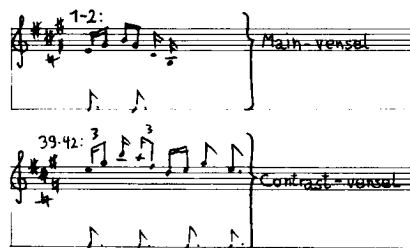


Ex. 13

The partial segments form the building bricks of the slått and are in the following called *modules*.

In the following a segmentation into modules will form the basis for further investigation of the changes which take place during the slått.

As a basis for the description of these changes we choose the following segments:



Ex. 14.

The following symbols are used:

- M: main-vensel  
 C: contrast-vensel  
 $m_1, m_2, \dots$ : segments of M and C, considered as modules  
 $+5, -5$ : used before a symbol, they respectively indicate up and fifth-transposition of the segment in question.

*The main-vensel*

Comparing the seven main-vensels of the beginning of the slätt, we find that one breakline may be drawn in the main-vensel:

Ex. 15

In the two  $-5M$  (3-4 and 7-8) the last semi-quaver has been transposed upwards in relation to the rest of the vensel.

The main-vensel 12-13 differs rhythmically from the others. As a fairly common feature we find that the same motivic material forms the basis of building up both co-group and counter-groups:

Ex. 16

The re-organized module  $m_1$  is designated in the following as  $\bar{m}_1$ .

*The contrast-vensel*

Ex 11 and 12 merely discussed the changes found on the a-string. The following two vensels contain all possibilities for variations in the contrast-vensels:

Ex. 17

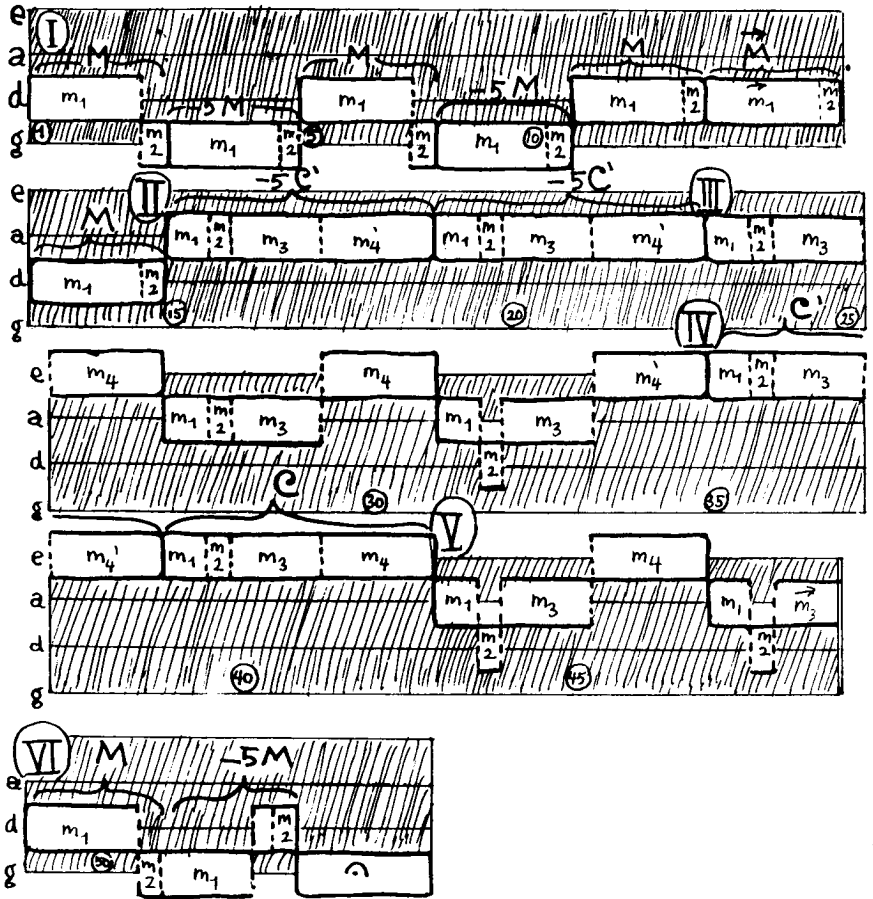
Certain implications seem to be between the modules. This fact is illustrated in the following survey of the composition of all contrast-vensels:

Ex. 18

The building up of the vensel may be started from two points:  $m_1$  and  $-5m_1$ . The two possibilities of  $-5m_2$  only implicate internal variation of the vensel – they both lead on to  $-5m_3$ . The whole segment  $-5(m_1 m_2 m_3)$  can be followed by all three  $m_4$ -modules. In contrast,  $m_1 m_2 m_3$  can only be followed by the modules  $m_4$  and  $m_4'$ .

Consequently, there are no partial fifth-transpositions in the two contrast-vensels 35-38 and 39-42. The variations take place in the fifth-transposed contrast-vensels.

In the next example a survey is given of the entire module structure of the slätt (ex. 19 p. 276).



Ex. 19.

The diagram is a graphical survey of the succession of modules in Hovstaden. As indicated on the left side of the diagram, the four horizontal lines illustrate the four strings of the fiddle. On the same level one square is equal to one semi-quarter-note.

A comparison between this module diagram and ex. 18 shows that  $m_4$ , which in relation to  $m_4'$  has a cadencing function in the vensels, forms the conclusion of all vensels which are followed by fifth-transposed  $m_1$ -modules. It exists only in these cases: The transition from vensels ending on one string to vensels beginning on the same string seems to be limited to  $m_4'$ , which marks a distinction between the vensels, but leads on the movement in a much higher degree than  $m_4$ . My intention is to consider C as the basis for building up the whole structure of contrast-vensels (15-48). Consequently,  $m_4'$  is considered as an alteration which is determined partly by ordinary repetitions (18, 22, 37)

partly by the transition between the partially fifth-transposed segment  $m_4'$  (33-34) and the subsequent first playing of the contrast-vensel on the e-string.

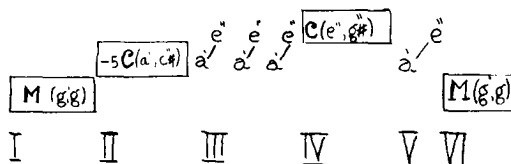
Consequently, the total succession of contrast vensels can be considered as the succession of a vensel and its fifth-transposed form. A variable conclusion forms the connection between them.

### *Tonality*

A general feature of all the slåtts of my selection is the determinating role of the idiomatic fifth-transposition in the building of the variations of the slåtts.

In all the slåtts the tones g and g' are quite outstanding and can be regarded as the basic tonal centre of the slåtts. In Hovstaden you will find this basic tonality in the main-vensel segments at the beginning and at the end of the slått (I and VI). In both I and VI the melodic movement is concentrated around e' and g', but in general the importance of g' is supported by use of the open g-string.

In the majority of slåtts investigated the contrast-vensel is only played on the e-string, and the name contrast-vensel has been chosen because of the great tonal and motivic significance of these segments. The tonal movement points out e'' and g sharp as outstanding tones – as in IV in Hovstaden. In Hovstaden this segment has no special significance because of the great number of preceding transpositions of the contrast-vensel on the a-string. A general feature is that there are gradual transitions from the main-vensel range to the contrast-vensel and back again. In general the slåtts build one large arch of tonality: The tonal movement moves from the area around g' and g, in some segments pointing out tones on the a-string, then moving to the contrast range and then returning, usually through the same tones on the a-string, to the range of the main-vensel. The motivic material used on the a-string is either fifth-transposed segments of the main-vensel, some material which is neither from main-nor contrast-vensel, or – as here in Hovstaden – contrast-vensel which are transposed downwards.



Ex. 20

Ex. 20 shows the tonal arch in "Hovstaden". Part of the variations in the vensels can be regarded as representing a tendency by the fiddler/composer to underline the continuity of this arch – a tendency to form bridges between segments of different tonality.

I intend to emphasize the following matters:

- 1) The use of the module  $m_2$  within I and IV. On 2, 6 and 50 the module forms a transition to the following downwards transposed main-vensels, on 4, 9, 10, 14 and 51 the following segments are played on the same string or the string above and the module is played one fifth higher than in the other cases.
- 2) In III the  $m_4$ -modules played on the e-string form a gradual transition to the range of the contrast-vensels (IV).

This paper demonstrates some principles of investigation. In the music considered the rules of composition – as shown in the concept of modules – seem to be closely connected with the instrumental character of the fiddle. The selection of slåtts which I have used for my dissertation, contains a number of slåtts which are all different. As mentioned, each of these is found in as many varied forms as the number of fiddlers who play them. A detailed investigation of the rules and principles of composition, will only be possible by including every varied form of the slåtts.

## Notes:

- 1) An example of direct transfer to traditional notation is given in "Norwegian Folk Music" vol. I-III, Oslo University Press, Oslo 1958. Critical remarks are given by Morten Levy in: "Yearbook of the International Folk Music Council" Vol. 2, Illinois, 1971.
- 2) See Morten Levy: "Den stærke slått" Wormianum, 1974.
- 3) The idea of extracting the principal voice has first been presented by Morten Levy. See note 2.
- 4) The conception of 'group of interference' as well as 'co- and countergroup' is used in accordance with Morten Levy: "Sur le problème de la définition des unités musicales", *Semiotica* 15:1, 1976.
- 5) Among the fiddlers the term 'vensel' is the ordinary name for motivic units in the slått.

## RESUME:

I artiklen vises nogle centrale led i mit forsøg (Transskription og undersøgelse af en gruppe Setesdalsslåtter -speciale 1977) på at etablere en brugbar undersøgelsesmetode overfor et udvalg af norsk spillemandsmusik fra Setesdal. Det overordnede synspunkt i dette stykke musikvidenskabelige husflidsarbejde har været - ud fra en erkendelse af spillemandsmusikkens instrument-idiomatiske karakter - i så høj grad som muligt at tage udgangspunkt i forholdet mellem instrumentet - hardingfelen - og musikken.

Den enkelte slått indenfor gruppen indeholder et motivisk grundmateriale bestående af mellem 1 og 3 musikalske forløb - hver af få sekunders varighed. Grundmaterialet danner udgangspunkt for spillemandens/komponistens udformning af hele slåttforløbet med en varighed på i reglen mellem eet og tre minutter. Såvel selve det motiviske grundmateriale som den samlede formale helhed er genstand for variation - en given slått findes i et tilsvarende antal forskellige former som antallet af spillemænd med den pågældende slått på repertoiret. De variationsgivende faktorer er dels den overleverede tradition, dels spillemandens musikerpersonlighed og dels de instrumentale muligheder for musikkens udformning. I denne slåttegruppe er felens stemning g-d'-a'-e'' (på norsk "lause bas" - dvs. løs bas - nederste streng er stemt een tone ned), og netop denne stemning giver mulighed for overflytning af musikalske forløb fra een streng til en anden uden forstyrrelse af interne relationer af fingersætningsmæssig art mellem delforløbene. Sådanne kvintforskydninger er i alle slåtterne en meget væsentlig forudsætning for variation.