



## MTO 7.4 Examples: Huron, What is a Musical Feature?

(Note: audio, video, and other interactive examples are only available online)

<http://www.mtosmt.org/issues/mto.01.7.4/mto.01.7.4.huron.php>

**Table 1.** Summary of Terminology Related to Features

### Summary of Terminology Related to Features

#### General Terms:

presence	existent within an artifact
negative presence	absent from an artifact (although expected)
salience	noticeability of an event
distinctiveness	greater salience compared to occurrences in other artifacts
significance	notable, important, worthy of attention

#### Some Intratextual factors contributing to salience:

prevalence	noticeable because it recurs frequently
accent	noticeable because it is stressed (e.g., dynamic, agogic ...)
recency	noticeable because it is last
primacy	noticeable because it is first
mnemonic	noticeable because it is easily remembered

#### Some Intertextual factors contributing to salience:

evocation	unintended reminder of similar passage in another artifact
quotation	intended exact quotation from another artifact
allusion	intended indirect reference to another artifact
parody	intended exact or indirect reference, intended to spurn
model	intended or unintended borrowing of a structural framework

**Example 1.** Brahms, String Quartet Op. 51, No. 1, mvt.1, mm. 1–6

**Allegro**

**Example 2.** Some Sample Sets from Forte’s Motivic Analysis of Brahms Op. 51, No. 1, mvt. 1

**Table 2.** Prevalence of “Alpha” Patterns in First Movements of Brahms’s String Quartets

**Prevalence of "Alpha" Patterns in First Movements of Brahms's String Quartets**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	136	72	139
-2,-1	94	129	226
-1,-2	52	116	199
+1,+2	70	104	110
	352 (5.00%)	421 (6.37%)	594 (7.92%)
of	(7045)	(6612)	(7498) two-interval instances

**Table 3a.** Instances of “Alpha” Patterns Involving Pitch-class Doubling

**Instances of "Alpha" Patterns Involving Pitch-class Doubling**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	11 (34th)	6 (39th)	12 (30th)
-2,-1	0	1 (95th)	32 (7th)
-1,-2	2 (85th)	3 (64th)	31 (10th)
+1,+2	9 (42nd)	5 (51st)	11 (32nd)
	22 (1.72%)	15 (1.83%)	86 (7.26%)
of	(1282)	(820)	(1184) pitch-class-doubled instances
of	(120)	(112)	(108) unique pitch-class-doubled interval patterns <sup>(1)</sup>

**Table 3b.** Instances of “Alpha” Patterns Following a Rest

**Instances of "Alpha" Patterns Following a Rest**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	24 (2nd)	9 (9th)	17 (3rd)
-2,-1	13 (9th)	11 (8th)	7 (10th)
-1,-2	4 (20th)	15 (3rd)	11 (4th)
+1,+2	1 (58th)	19 (1st)	10 (6th)
	-----	-----	-----
	42 (11.83%)	54 (15.84%)	45 (17.24%)
of	(355)	(341)	(261) rest-linked instances
of	(75)	(88)	(71) unique rest-linked interval patterns

**Table 3c.** Instances of “Alpha” Patterns Preceding a Rest

**Instances of "Alpha" Patterns Preceding a Rest**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	18 (3rd)	14 (4th)	11 (1st)
-2,-1	4 (24th)	18 (2nd)	9 (3rd)
-1,-2	2 (36th)	14 (4th)	5 (10th)
+1,+2	3 (29th)	10 (7th)	1 (55th)
	-----	-----	-----
	27 (7.56%)	56 (16.23%)	26 (9.89%)
of	(357)	(345)	(263) rest-linked instances
of	(78)	(102)	(85) unique rest-linked interval patterns

**Table 3d.** Instances of “Alpha” Patterns Coinciding with Slur or Phrase Onsets

**Instances of "Alpha" Patterns Coinciding with Slur or Phrase Onsets**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	27 (2nd)	35 (2nd)	22 (13th)
-2,-1	30 (1st)	12 (16th)	2 (79th)
-1,-2	4 (42nd)	4 (63rd)	36 (6th)
+1,+2	13 (14th)	41 (1st)	10 (26th)
	-----	-----	-----
	74 (11.24%)	92 (9.27%)	70 (6.66%)
of	(658)	(992)	(1053) slur/phrase-linked instances
of	(118)	(220)	(138) unique slur/phrase-linked interval patterns

**Table 3e.** Instances of “Alpha” Patterns Beginning a Measure

**Instances of "Alpha" Patterns Beginning a Measure**

interval -----	Brahms Quartets -----		
pattern	No. 1	No. 2	No. 3
+2,+1	42 (2nd)	18 (9th)	7 (38th)
-2,-1	17 (9th)	12 (20th)	29 (9th)
-1,-2	6 (24th)	9 (28th)	23 (12th)
+1,+2	12 (13th)	6 (39th)	17 (19th)
	-----	-----	-----
	77 (9.55%)	45 (4.53%)	76 (7.20%)
of	(806)	(994)	(1056) downbeat-linked instances
of	(118)	(165)	(158) unique downbeat-linked interval patterns

**Table 3f.** Instances of “Alpha” Patterns in Outer-Most Voices

**Instances of "Alpha" Patterns in Outer-Most Voices**

-----Brahms Quartets-----

interval

pattern	No. 1	No. 2	No. 3
+2,+1	79 (5th)	35 (12th)	71 (12th)
-2,-1	60 (7th)	50 (6th)	110 (6th)
-1,-2	33 (20th)	49 (7th)	86 (11th)
+1,+2	50 (9th)	42 (8th)	63 (13th)
	-----	-----	-----
	222 (6.68%)	176 (5.50%)	330 (8.53%)
of	(3321)	(3200)	(3868) outer-most pitch interval-dyad instances
of	(341)	(385)	(327) unique outer-most pitch interval-dyad patterns

**Table 4a.** Comparison of the Saliency of the (+2,+1) Interval Patterns

**Comparison of the Saliency of the (+2,+1) Interval Patterns**

	-----	Brahms Quartets	-----
	No. 1	No. 2	No. 3
Table 3a	11/1282 (0.9%)	6/820 (0.7%)	12/1184 (1.0%)
Table 3b	24/355 (6.8%)	9/341 (2.6%)	7/261 (2.7%)
Table 3c	18/357 (5.0%)	14/345 (4.1%)	11/263 (4.2%)
Table 3d	27/658 (4.1%)	35/992 (3.5%)	22/1053 (2.1%)
Table 3e	42/806 (5.2%)	18/994 (1.8%)	7/1056 (0.7%)
Table 3f	79/3321 (2.4%)	35/3200 (1.1%)	71/3868 (1.8%)
	-----	-----	-----
	201/6779 (3.0%)	117/6753 (1.7%)	130/7422 (1.8%)

**Table 4b.** Comparison of the Saliency of the (-2,-1) Interval Patterns

**Comparison of the Saliency of the (-2,-1) Interval Patterns**

	Brahms Quartets		
	No. 1	No. 2	No. 3
Table 3a	0/1282 (0.0%)	1/820 (0.1%)	32/1184 (2.7%)
Table 3b	13/355 (3.7%)	11/341 (3.2%)	7/261 (2.7%)
Table 3c	4/357 (1.1%)	18/345 (5.2%)	9/263 (3.4%)
Table 3d	30/658 (4.6%)	12/1053 (1.1%)	2/1053 (0.2%)
Table 3e	17/806 (2.1%)	12/994 (1.2%)	29/1056 (2.7%)
Table 3f	60/3321 (1.8%)	50/3200 (1.6%)	110/3868 (2.8%)
	-----	-----	-----
	124/6779 (1.8%)	104/6753 (1.5%)	189/7422 (2.5%)

**Table 4c.** Comparison of the Saliency of the (-1,-2) Interval Patterns

**Comparison of the Saliency of the (-1,-2) Interval Patterns**

	Brahms Quartets		
	No. 1	No. 2	No. 3
Table 3a	2/1282 (0.2%)	3/820 (0.4%)	31/1184 (2.6%)
Table 3b	4/355 (1.1%)	15/341 (4.4%)	11/261 (4.2%)
Table 3c	2/357 (0.6%)	14/345 (4.1%)	5/263 (1.9%)
Table 3d	4/658 (0.6%)	4/1053 (0.4%)	36/1053 (3.4%)
Table 3e	6/806 (0.7%)	9/994 (0.9%)	23/1056 (2.2%)
Table 3f	33/3321 (1.0%)	49/3200 (1.5%)	86/3868 (2.2%)
	-----	-----	-----
	51/6779 (0.7%)	94/6753 (1.4%)	192/7422 (2.6%)

**Table 4d.** Comparison of the Saliency of the (+1,+2) Interval Patterns

**Comparison of the Saliency of the (+1,+2) Interval Patterns**

	----- Brahms Quartets -----		
	No. 1	No. 2	No. 3
Table 3a	9/1282 (0.7%)	5/820 (0.6%)	11/1184 (9.3%)
Table 3b	1/355 (0.3%)	19/341 (5.6%)	10/261 (3.8%)
Table 3c	3/357 (0.8%)	10/345 (2.9%)	1/263 (0.4%)
Table 3d	13/658 (2.0%)	41/1053 (3.9%)	10/1053 (0.9%)
Table 3e	12/806 (1.5%)	6/994 (0.6%)	17/1056 (1.6%)
Table 3f	50/3321 (1.5%)	42/3200 (1.3%)	63/3868 (1.6%)
	-----	-----	-----
	88/6779 (1.3%)	123/6753 (1.8%)	112/7422 (1.5%)



**Table 5.** Second Order Delta-duration Patterns in Brahms String Quartets

**Second Order Delta-duration Patterns in Brahms String Quartets**

Duration Pattern -----	Brahms Quartets -----		
	No. 1	No. 2	No. 3
same same	3762 (65.29%)	2533 (51.23%)	3702 (62.41%)
longer longer	18	80	34
shorter shorter	50	72	65
	-----	-----	-----
	68 (1.18%)	152 (3.07%)	99 (1.67%)
shorter longer	600	402	295
longer shorter	722	688	630
	-----	-----	-----
	1322 (22.94%)	1090 (22.05%)	925 (15.59%)
same longer	257	498	508
longer same	96	145	122
shorter same	205	394	452
same shorter	52	132	124
	-----	-----	-----
	610 (10.59%)	1169 (23.64%)	1206 (20.33%)
	-----	-----	-----
	5762	4944	5932

**Table 6a.** Durational Context of “Alpha” Patterns for Brahms Quartet No. 1 (1st movement)

**Durational Context of "Alpha" Patterns for Brahms Quartet No. 1 (1st movement)**

duration patterns	Interval Patterns			
	(+2,+1)	(-2,-1)	(-1,-2)	(+1,+2)
same same	22	41	18	31
same longer	16	0	6	18
same shorter	2	0	5	0
longer same	0	2	6	0
shorter same	2	0	0	0
longer longer	0	0	0	0
shorter shorter	0	0	0	2
shorter longer	44 (47.8%)	7 (10.9%)	4 (9.8%)	3 (5.2%)
longer shorter	6	14	2	4
	92	64	41	58

**Table 6b.** Durational Context of “Alpha” Patterns for Brahms Quartet No. 2 (1st movement)

**Durational Context of "Alpha" Patterns for Brahms Quartet No. 2 (1st movement)**

duration patterns	Interval			
	(+2,+1)	(-2,-1)	(-1,-2)	(+1,+2)
same same	9	24	9	36
same longer	20	26	25	2
same shorter	0	4	0	0
longer same	0	4	9	0
shorter same	1	0	5	3
longer longer	0	6	7	0
shorter shorter	2	0	0	0
shorter longer	7 (14.0%)	25 (26.6%)	6 (8.1%)	3 (5.3%)
longer shorter	11	5	13	13
	50	94	74	57

**Table 6c.** Durational Context of "Alpha" Patterns for Brahms Quartet No. 3 (1st movement)

**Durational Context of "Alpha" Patterns for Brahms Quartet No. 3 (1st movement)**

duration patterns	-----	Interval	Patterns	-----
	(+2,+1)	(-2,-1)	(-1,-2)	(+1,+2)
same same	45	125	116	51
same longer	5	12	3	1
same shorter	2	7	4	8
longer same	3	6	0	1
shorter same	2	3	0	2
longer longer	0	0	1	0
shorter shorter	9	1	1	0
shorter longer	25 (22.9%)	34 (16.9%)	25 (14.5%)	31 (31.6%)
longer shorter	18	13	23	4
	-----	-----	-----	-----
	109	201	173	98

**Table 7.** Interval Dyad Contexts for 'Shorter-Longer' Durational Patterns in Brahms Quartet No. 1 (1st movement)

**Interval Dyad Contexts for 'Shorter-Longer' Durational Patterns in Brahms Quartet No. 1 (1st movement)**

rank	semitone interval pattern	# of instances	percent
1	+2 +1	44/660	6.7%
2	+3 +0	34/660	5.2%
3	+0 +3	28/660	4.2%
4	+2 -2	27/660	4.1%
5	-4 -3	26/660	3.9%
6	+4 +5	25/660	3.8%
7	+2 +2	22/660	3.3%
8	+4 +3	21/660	3.2%
9	+4 -4	19/660	2.9%
10	+3 +5	18/660	2.7%
11	+4 +1	15/660	2.3%
12	+5 +4	12/660	1.8%

**Table 8.** Pitch Contour Patterns for Brahms Quartet No. 1 (1st movement)

**Pitch Contour Patterns for Brahms Quartet No. 1 (1st movement)**

-----	Instances	-----
Contours	alpha included	alpha excluded
up-up	198 (37.1%)	151 (31.8%)
down-down	101 (18.9%)	90 (18.9%)
up-down	106 (19.9%)	106 (22.3%)
down-up	128 (24.0%)	128 (26.9%)
	-----	-----
	553	475

**Example 3.** Schematic Representation of the Principal Motive in Brahms Op. 51, No. 1, mvt. 1 as Developed Using a Comparative Analysis Method

