‘Sulle Orme’ (‘On The Footprints’)

Rudy Ceccato remix of ‘Scambi’, by Henri Pousseur
Format: SDII stereo;
Duration: 7:48

I would like to spend a few words describing the criteria I have chosen to use in the realization of my own version of ‘Scambi’.

When I first glanced at the documentation accompanying the soundfiles of ‘Scambi’ and in particular the table representing the sounds’ beginning and end characteristics and the sequences they belong to (here reproduced as Table 1), I was immediately struck by the fact that they were essentially a series of binary numbers.

Table 1

START	sequences	END	sequences
0001	19-20, 29-30	**0001**	21-22, 25-26
0010	17-18, 31-32	**0010**	23-24, 27-28
1000	13-14, 27-28	**1000**	9-10, 29-30
0101	3-4, 21-22	**0101**	5-6, 17-18
0110	1-2, 23-24	**0110**	7-8, 19-20
1100	5-6, 11-12	**1100**	1-2, 13-14
1011	15-16, 25-26	**1011**	11-12, 31-32
1111	7-8, 9-10	**1111**	3-4, 15-16

From this starting point I decided to take an existing simple and common melody, convert each note to their binary MIDI equivalent and use them to choose the sequence of soundfiles to use.
For someone not familiar with MIDI, each musical note as its equivalent in MIDI note number and in binary numbers, as MIDI messages are essentially a series of binary numbers, thus C3 is equivalent to 60 and 111100.

The melody sequence (of which I will not tell the name as its too obvious) is:
E3-F3-G3-G3-F3-E3-D3-C3-C3-D3-E3-E3-D3, thus creating the next table:

Table 2

NOTE	MIDI NOTE	BINARY
E3	64	1000000
F3	65	1000001
G3	67	1000011
G3	67	1000011
F3	65	1000001
E3	64	1000000

D3	62	1111110
C3	60	1111100
C3	60	1111100
D3	62	1111110
E3	64	1000000
E3	64	1000000
D3	62	1111110

I have to say that the sequence use is actually just a part of the melody as it was too long to use all of it.

At this point I had to simplify the MIDI binaries by cutting them from seven to four digits in order to make them correspond to the beginning or end of a soundfile in 'Scambi'. I decided, completely at random, to keep the last four and discard the first three. I soon realized that three sets of numbers did not have their counterpart on table 1 so I reverted to the use of the first four binaries for two sets, namely from 0000 to 1000 and from 1110 to 1111. For the third set, 0011, I took away a one at the end (as the left side 1000 was already used) leading to 0010.

I then took each set of binary numbers one by one and matched it with any sequence in 'Scambi' beginning with that set, choosing to use the first one of each set.

At this point two new columns can be add to table 2, columns that respectively indicate the "filtered" binary sequence and their equivalent 'Scambi' soundfile, creating table 2A.

Table 3A

NOTE	MIDI NOTE EQUIVALENT	BINARY EQUIVALENT	FILTERED BINARY	'Scambi' SOUNDSEQUENCE
E3	64	**1000**000	1000	**13** (14, 27-28)
F3	65	100**0001**	0001	**19** (20, 29-30)
G3	67	100**0011**	0010	**17** (18, 31-32)
G3	67	100**0011**	0010	**17** (18, 31-32)
F3	65	100**0001**	0001	**19** (20, 29-30)
E3	64	**1000**000	1000	**13** (14, 27-28)
D3	62	**1111**110	1111	**7** (8, 9-10)
C3	60	111**1100**	1100	**5** (6, 11-12)
C3	60	111**1100**	1100	**5** (6, 11-12)
D3	62	**1111**110	1111	**7** (8, 9-10)
E3	64	**1000**000	1000	**13** (14, 27-28)
E3	64	**1000**000	1000	**13** (14, 27-28)
D3	62	**1111**110	1111	**7** (8, 9-10)

We can notice that the following sequences are not selected: 1-2, 3-4, 15-16, 21-22, 23-24, 25-26.

At this point I was left with my sequence: 13-19-17-17-19-13-7-5-5-7-13-13-7.

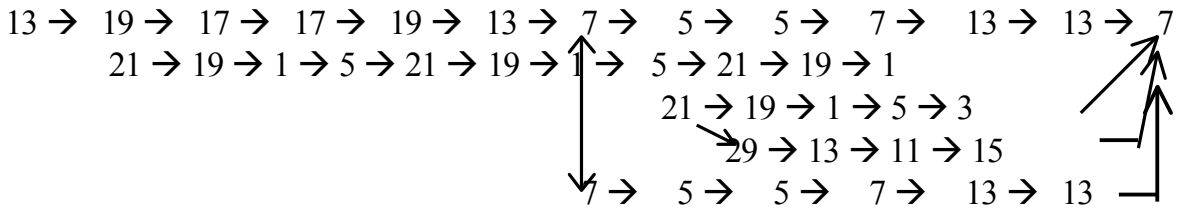
Firstly I wanted to create two compositions, one using just the sequence I have described above, one created following Pousseur's 'complete continuity' principle: the use of 'connecting rules' for the 'making of a unified whole' (Pousseur, 1959), in a multilayered fashion.

As, after a few listening I found the first composition quite boring (!) I decided to create a single composition applying both methods. Consequently, I begun assembling a second main sequence using the 'complete continuity' principle and trying to avoid, for as much as I could, any sequence that was left out from the list of sequences available in table 2A.

The result is the sequence 5-21-19-1 repeated three times.

At this point, listening to the result I noticed the lack of a common element, element that I identify in the sense of conclusion into a common final soundfile. Therefore, starting from the end and back by the 'complete continuity' principle, I constructed two short sequences: 21-19-1-5-3 and 29-13-11-15. On top of this, I added a final short sequence that is the repetition of the final part of the main structure but pitch shifted up of eight semitones.

An overview of the composition can thus be drawn:



As can be noticed, there is a strong emphasis on the sequence number seven.

This is partly casual, partly intended by trying to create a sense of centre and resolution or, dare I say it, of a key.

Other editing involves dynamic stereo panning and level balancing. Additionally, I have applied a noise gate to the sounds in order to get rid of cross-talk noise derived from analogue tape. The overall composition is also being processed through a mastering plug-in.

Rudy Ceccato, London, March 2005