

21 997

Maija Hynninen

Borrowed Tunes: 1. Dead Man Theme

for electric cello and live electronics

2011

FOR PROMOTIONAL USE ONLY

 FIMIC

Copyright © by the Composer

All Rights Reserved

No part of this publication may be copied
or reproduced in any form or by any means
without the prior permission of the composer



Distribution:

Finnish Music Information Centre Fimic

Music Library

Lauttasaarentie 1

FI-00200 HELSINKI

Finland

musiclibrary@fimic.fi

www.fimic.fi

Helsinki, 2012

FOR PROMOTIONAL USE ONLY

A smaller version of the FIMIC logo, consisting of a stylized heart shape and the word "FIMIC", is positioned at the bottom left of the diagonal banner.

Borrowed Tunes: 1. Dead Man Theme

for electric cello and live electronics

Maija Hynninen 2011

FOR PROMOTIONAL USE ONLY

 FIMIC

In general:

The electronics are programmed for Max/MSP 5. Contact the composer through Finnish Music Information Centre (musiclibrary@fimic.fi) to get the patch. Performer can choose a stereo or quadrophonic loudspeaker setup.

Borrowed Tunes: 1. Dead Man Theme was commissioned by Juho Laitinen with the support of Luses/Teosto. The piece is dedicated to Juho Laitinen.

I Part: Events

Any **event** can start the I Part. Each event is written on it's own page. Event number is marked in the upper left corner:

Within an event you can choose between **two options**.

- **events 1 and 2:** the staff rows in each option can be played in any order and as many times as the player chooses only limited by the time frame given to each event. There can be a short pause when changing to another row or not. Each bar (marked with dashed barline) in a row has a duration of one second
- **event 3:** there is only one staff row in both options. This one row is meant to be an example of the playing technique.

Events can be played in any order and have to be played once. Not more or less.

When starting an event choose **event number** with the **numeric keyboard** on your computer. F.ex. event no. 1 is chosen when pressing key '1'. Event will start when **sub event** no. 1 is chosen. For switching between sub events you can program an user specific key on your keyboard f.ex. space bar or use a pedal to trigger the next sub event. The number of sub events is dependend on the main event. F.ex. event no. 1 has 5 sub events (written in the bottom of the page). Each pressing of pedal (or user specific key on the keyboard) will increase the sub event number by one. F.ex. When starting event no. 1 the sub event no. 1 is triggered. Next pressing of pedal (or user specific key on the keyboard) will trigger the sub event no. 2 and so on.

'BEFORE NEXT EVENT'. Follow the instructions given on each individual page/event when moving to the next event. If the instructions are not followed the settings of former event will disturb the next event.

The electronics of all the events are based on dynamic level of the live sound. The dynamics of event 1 and 2 are left to be desided by the player.

II Part: Modulations

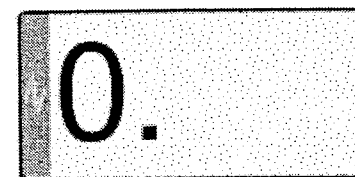
After finishing the whole first part, move on to the II Part: Modulations. Any modulation can start the II Part. In the second part you modulate the recorded events played in the first part. You control the effects made by the computer with the **dynamic level** of your playing. The cello is not amplified in the second part. The audience is meant to hear only the modulated playback from the computer (sound of live playing is not heard through the loudspeakers).

- **modulations 1 and 2:** sub event '1' will start playback of an event that has been recorded in the first part. The dynamic level of your playing is controlling the modulation of the music that's played back. The modulation result will be heard through the loudspeakers, not the live sound. Use the dynamic prosesses written in the 'modulation 1' page as an inspiration for improvising your own dynamic prosesses. The livelier the dynamic prosesses of your playing the richer the resulting texture modulation. Sub event '2' starts the playback of modulated event. Playback can be started at any time during or after the modulation. The modulation is finished by sub event '3'.

IMPORTANT: continue to sub event '3' only after you've finished the whole modulation. Otherwise the modulation will be incomplete.

- in the Max/MSP-patch you can monitor the playback by observing the a number box placed in the middle of the patch. When it's completely motionless and has stopped at 0. the playback of the event has stopped thus ending the modulation.
- **modulation 3:** sub event '1' will start the playback of event 3. There's no modulation.

Modulations can be played in any order and have to be played once. Not more or less.



MODULATIONS 1 and 2:
Wait until this number is completely motionless and has stopped to 0. until moving to sub event 3.

III Part: Theme

After finishing the whole first and second part, move on to the III Part: Theme. It's very important to **follow a precise tempo**. The Theme consists of two layers: 1) staves 1–2, 2) staves 3–4. Layer 1 is recorded, layer 2 is played on top of the playback of layer 1 and together they produce the theme.

FOR PROMOTIONAL USE ONLY

Layer 1: As written in score some of the pitches played by the cello are prolonged in electronics (here: bar 1). This so called frozen sound is modulated by cello (see music written inside a box. Here: bars 2–3). The modulation is amplitude modulation (sounding like a slow tremolo) where the pitch and the dynamic level of the modulating sound affect the depth and frequency of the amplitude modulation. The modulating sound itself is not amplified through the loudspeakers. It sounds only a little to the audience.

Layer 2: The recording of layer 1 starts in sub event 1. The playback of layer 1 starts in sub event 7. Be as precise as possible playing layer 2 in sync with layer 1.

Theme should be louder than the accompanying layers (Modulations). It can be easily adjusted by the volume control of your instrument, the patch or the mixer.

In all events, modulations and the theme 'press' followed by a number indicates the number of the numeric keyboard of your computer.

Explanation of signs:

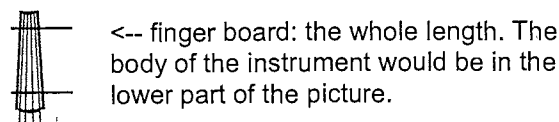
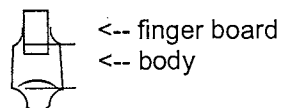
Dynamics in parenthesis: energy-dynamics. Indicates how much energy is used to produce the sound, not the actual dynamic level of the sound in comparison with the ordinary tones with pitch. The dynamic level of pitched tones cannot be reached with some of the timbral effects such as playing vertically with the hair of the bow.

Here: the player should improvise the dynamics and use a scale between pianissimo and forte.

Example of improvised dynamics:

Try to create as sophisticated processes as possible with the whole range of different levels of dynamics the more difference in shades and timbre in the electronics. The details of the electronics are completely dependent on the musical creativity used in creation of the dynamics.

Clefs: represent the different parts of the instrument.



III Part: Theme

– sub events are written in the score (inside the squares)

press **7**

♩ = 54 arco

Cello

Electronics

1 REC starts

2 Freeze sound (to continue in electronics)

Electronics continue the sound

Modulating the sound: does not sound to the audience.

make sure there's nothing sounding here

3

4 Freeze sound

mf

pp

f

mp

in the style of melancholic blues solo

make sure there's nothing sounding here

Vc.

El.

7 Playback starts Rec. stops

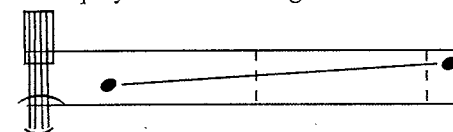
8 Overdrive etc. on

mp

f

p

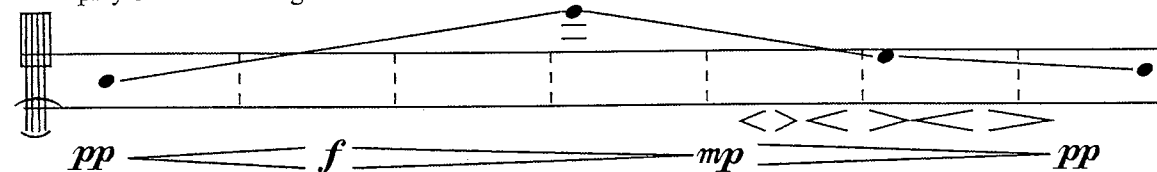
play on lowest strings



"pp-f"

play on lowest strings

given dynamics. The more



FOR PROMOTIONAL USE ONLY

FIMIC

I Part: Events

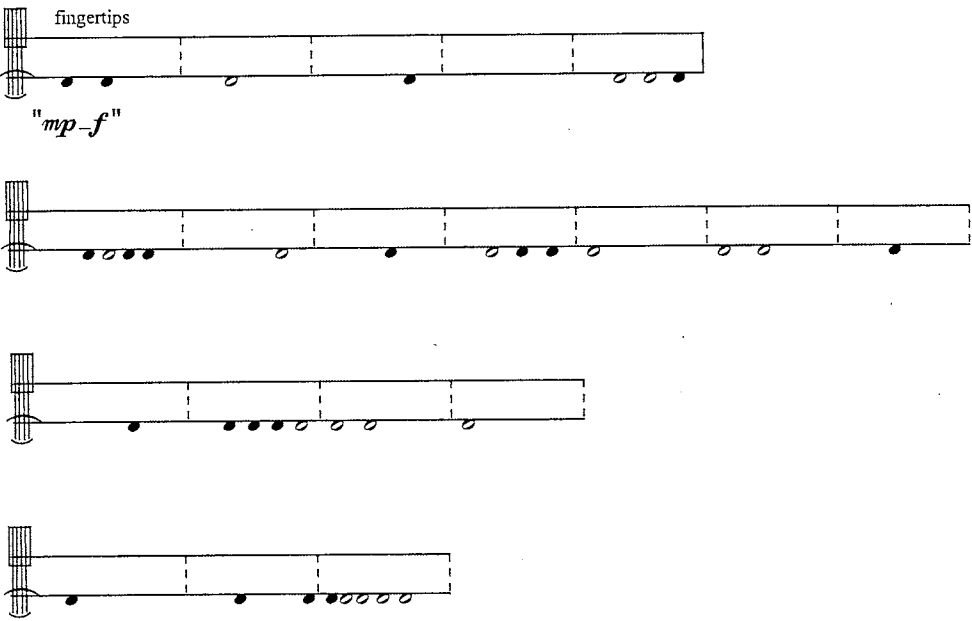
1. event dur ≈ 45"

press 1

Multilayered delay controlled by amplitude follower.

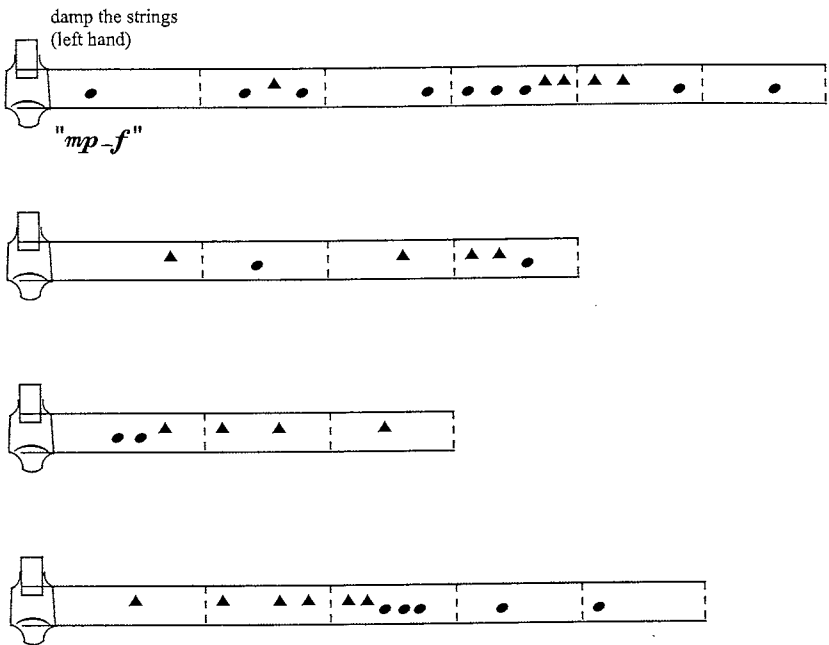
The amount of delay is dependend on the dynamics of the live sound. The louder the live sound, the more delay is added to it.
Sub events controlled by the performer: the performer can add more layers to the delay, the amount of delay and feedback.

OPTION 1:



Tap the strings (behind the bridge) with your fingertips. Use both hands.
Black noteheads: tap fingertip down and keep it on string.
Open noteheads: lift finger off the string. Lift the fingers in the tapping order.
Place fingertips freely on any string.
Avoid placing two fingers on the same string.

OPTION 2:



Tap the body of the instrument with your fingertips and nails. Damp the strings with left hand, tap the body with right hand.
Round noteheads: tap with fingertips.
Triangle noteheads: tap with nails.
Play freely any part of the body of the instrument.

SUB EVENTS: the amount of delay

1.	2.	3.	4.	5.
	← 3000 ms → ← X →	← 3000 ms → ← X →	← 4000 ms → ← X →	← 5000 ms → ← X →

6.
Select 6 or 'q'
before next
event/
modulation

I Part: Events

2. event dur ≈ 75"

press 2

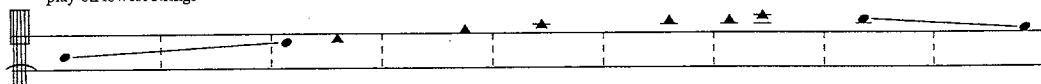
Multilayered harmonizer controlled by amplitude follower.

The amount of transposition is dependend on the dynamics of the live sound. The louder the live sound, the more the original sound is transposed in both directions. To make it as interesting as possible, experiment with different kinds of proseses with dynamics (see examples in the explanation of signs in the first pages of the score).

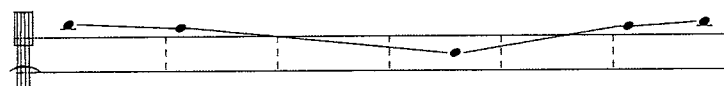
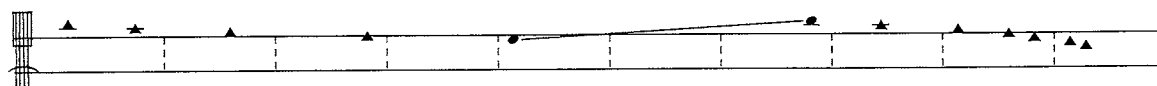
Sub events controlled by the performer: the performer can add more layers to the harmonizer and the amount of transposition.

OPTION 1:

play on lowest strings



"pp-f"



Grab the bow in the middle with both hands. Squeeze the hair of the bow into a round shape and play the strings in a vertical movement. The movement increases and some horizontal movement is added when producing crescendo. The result is a kind of grinding noise that you hear when grinding sand against a hard surphase with you shoes.

Round noteheads: continuos movement of the bow.

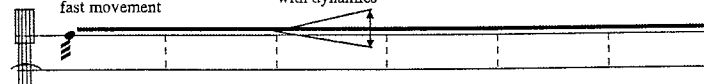
Triangle noteheads: short sounds with a sharp attack. Press the string down this sound comes when it's released.

Use the middle strings changing between them freely.

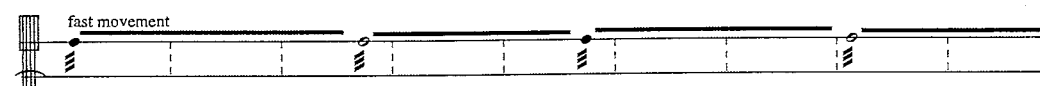
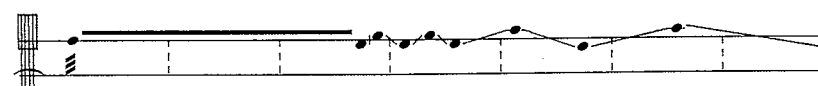
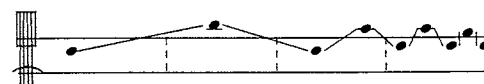
OPTION 2:

vertical tremolo
fast movement

vertical movement changes
with dynamics



"pp-f"



Make vertical tremolo with the bow and simultaneously play freely chosen harmonics with the left hand. Play one or more strings simultaneously. The result is a kind of helicopter-like sound.

Black noteheads: use the hair of the bow.

Empty noteheads: col legno tratto.

The dynamics are dependend on the amplitude of the vertical movement of the bow. The broader the movement the louder the dynamic. Use equal amount of bow pressure in all dynamics.

SUB EVENTS: the amount of transposition

1.	2.	3.	4.
	← 6000 ms → ← X →	← 6000 ms → ← X →	← 6000 ms → ← X →

5.
Select 5 or 'q'
before next
event/
modulation

I Part: Events

3. event dur ≈ 30"

press 3

Multilayered ring modulation and spatialization controlled by amplitude follower.

The frequencies of the ring modulated sound and how fast the sound moves between the loudspeakers are dependend on the dynamics of the live sound. The louder the live sound, the faster the movement between the sound sources are and the higher the frequency of the modulating sound is.

Sub events controlled by the performer: the performer can add more layers to the ring modulation and spatialization.

OPTION 1:

damp the strings
except the lowest
play with both palms
L.H.

R.H.

Wipe all the strings downwards with both palms. Choose which string or strings to press down. When palm is placed on the down-pressed strings they will give pitch followed by a glissando upwards. The result is a kind of wind machine-like sound combined with plugged electric bass. Start from the lower part of the finger board moving slowly towards the higher part reaching the highest point in the end of the whole event. The pitched sounds can be played freely on any string. The overall pitch is getting higher.

Choose between two options for dynamics written below. The movement increases, glissandos get faster and hands follow each other more rapidly when the dynamic level increases. The texture gets more dense as the dynamic level rises.

OPTION 2:

damp the strings
except the highest
play with both palms
L.H.

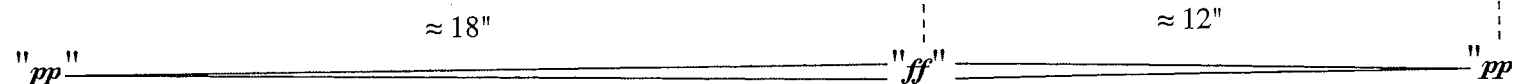
R.H.

Wipe all the strings upwards with both palms. Choose which string or strings to press down. When palm is placed on the down-pressed strings they will give pitch followed by a glissando downwards. The result is a kind of wind machine-like sound combined with plugged electric bass. Start from the upper part of the finger board moving slowly towards the lower part reaching the lowest point in the end of the whole event. The pitched sounds can be played freely on any string. The overall pitch is getting lower.

Choose between two options for dynamics written below. The movement increases, glissandos get faster and hands follow each other more rapidly when the dynamic level increases. The texture gets more dense as the dynamic level rises.

TWO OPTIONS FOR DYNAMICS:

OPTION 1:



OPTION 2



SUB EVENTS: the frequencies of spatialization and ring modulator

1.	2.	3.
	← 6000 ms →	← 4000 ms →
	← X →	← X →

4. Select 4 or 'q' before next event/modulation

II Part: Modulations

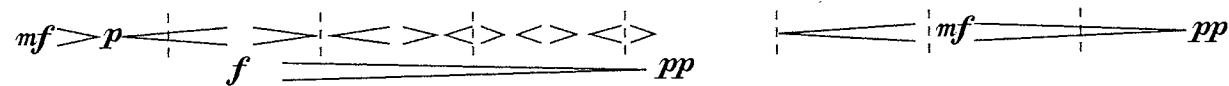
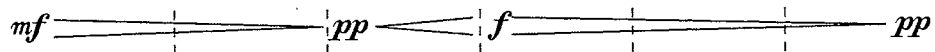
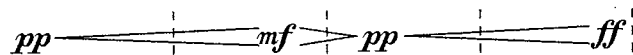
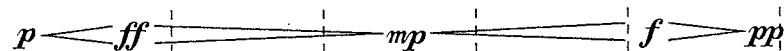
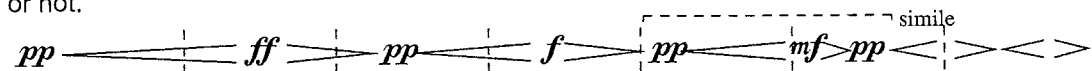
1. modulation dur ≈ 45"

press 4

Event 1. is modulated by multilayered harmonizer controlled by amplitude follower.

The amount of transposition is depended the dynamics of the live sound. The live sound is not amplified and therefore not heard. Only the dynamic level of the live sound is important. You can emphasize the dynamic changes by dialing the volume button of the instrument.

Experiment with different dynamics. You can play according to the dynamics written below or use them as an inspiration for your own improvisation. Rows can be played in any order and adding pause in between or not.



SUB EVENTS:

The playback of **event 1** starts.

Modulation 1 starts

2

Playback of **modulation 1** starts.

Modulation continues (until the end of playback of event 1).

3

Select 3 or 'e' before moving to the next modulation.

II Part: Modulations

2. modulation dur ≈ 75” press 5

Event 2. is modulated by multilayered delay controlled by amplitude follower.

The amount of delay is dependend the dynamics of the live sound. The live sound is not amplified and therefore not heard. Only the dynamic level of the live sound is important. You can emphesize the dynamic changes by dialing the volume button of the instrument.

Experiment with different dynamics. For some ideas for dynamics see **modulation 1**.

SUB EVENTS:

1

The playback of **event 2** starts.

Modulation 2 starts.

2

Playback of **modulation 2** starts.

Modulation continues (until the end of playback of event 2).

3

Select 3 or 'e' before moving to the next modulation.

3. modulation dur ≈ 30” press 6

Playback of event 3. The performer only turns on this modulation. You can start freely any other modulation on top of this playback. All the modulations can be presented in any order.

SUB EVENTS:

1

Playback of event 3 starts.

FOR PROMOTIONAL USE ONLY

press 7

III Part: Theme

– sub events are written in the score (inside the squares)

$\text{♩} = 54$
arco

Modulating the sound:
does not sound to the audience.

make sure there's
nothing sounding here

Cello

Electronics

1 REC starts

2 Freeze sound
(to continue in electronics)

Electronics continue the sound

3

4 Freeze sound

5

6 Freeze sound

in the style of melancholic
blues solo

make sure there's
nothing sounding here

7 Playback starts
Rec. stops

8 Overdrive etc. on

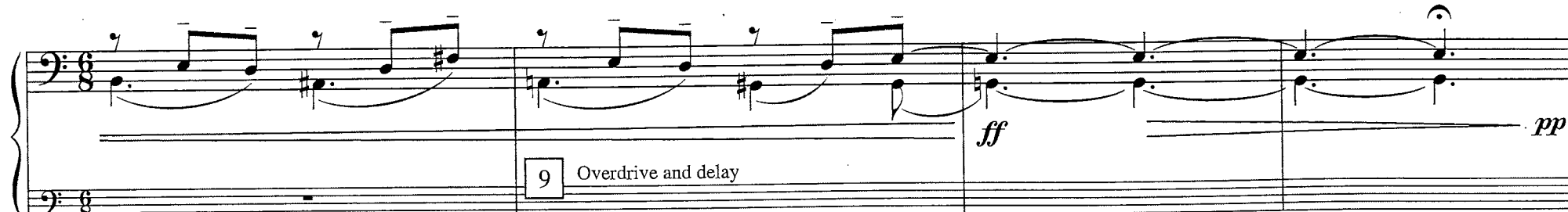
Vc.

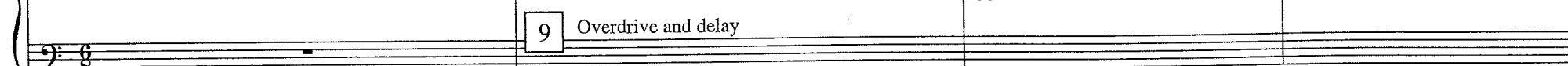
El.

Vc.

El.

FOR PROMOTIONAL USE ONLY

Vc.  *ff* *pp*

El.  9 Overdrive and delay

Vc.  *mp* *mf* *mf* *f* pizz. (l.v.)

El.  10 More delay Background gets thinner

Vc.  13

El.  11 12 13 Wait until the electronics are silent or select 14 if it feels convenient. (14 makes a fade out.)