MOTH is a short piece for two saxophones, with an open structure that allows the performers' choices to build a form starting from a 30-second melody. It explores the idea of a stereophonic digital glitch in the instrumental domain.

It is structured as nine tables that can be played in any order, except from the starting and the ending point.
The two performers use a visual cue that allows constant synchronicity while playing at different tempi in different parts of the piece. For this reason a computer with a double external monitor is required for the performance. A MIDI pedal is also required: one of the two performers uses it to control the metronomes. The interactive visual metronome is currently built in MaxMSP, but I'm considering further development.

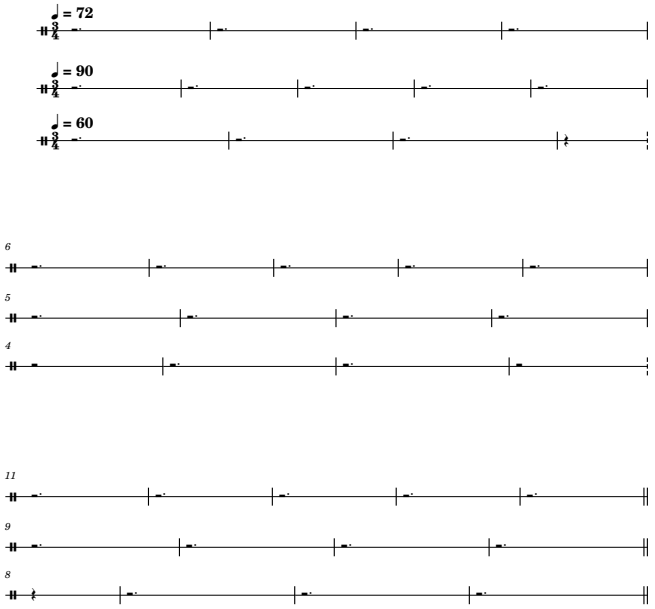
STRUCTURE: a brief overview of the processes that are applied to each table.

Table 1 (Refrain)	Both saxophones play the melody as it is: as much synchronization as it is humanly possible. The table should be repeated two other times during the performance (not consecutively), each time with a different tempo as indicated on the score.
Table 2 / 3	Different instructions for ornamentation are given on each table: the performers choose where to apply the ornamentations as given. Table 2 indicates all the possible notes where a microtonal trill or mordent can be performed. On Table 3, instead, different notes can be held for longer than their durations, by the performer's choice, and each note has a specific timbral fingering or multiphonic that has to be applied to it when held longer.
Table 4	Tempo fluctuations are realized with irregular augmentations on each line independently, keeping the same metronome. Some segments of the melody, when distorted on the time axis, are cut to compensate the latency and periodically re-synchronize.
Table 5 (Cadenza)	Intermission, one of the performers takes a solo (everything is written down). Doesn't use the main melody but keeps some of its structural elements.
Table 6 / 7 / 8	The two players are split between different tempi: in this case the melody for the different tempi are slightly different so that the overall melodic contour synchronizes even if the metronomes are different. I will give detailed explanation of this process further on.
Table 9 (Finale)	As in the cadenza, the original melody is left away. This is the only quiet moment in the piece and is notated with no indication on rhythm but just as a sequence of pitches.

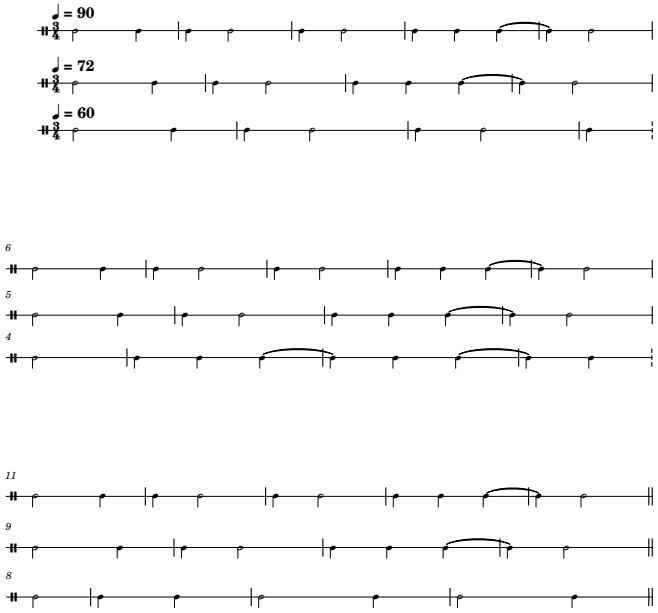
Whatever will the chosen order be, the result will always be a non-linear progressive distortion of the original melody.
This same structure could be easily applied to any given material, and it could be expanded in order to integrate more than two agents and more processes of distortion based on the same principles.

MATERIAL: how the melody is built in the first place. The same criteria of construction could be applied to a new melody that takes advantage of the idiomatic qualities of another instrument if working on a transcription in the future.

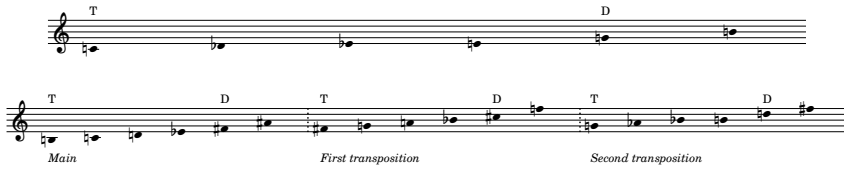
The starting point is a three-metronome structure that goes in and out of phase every ten seconds. It is repeated three times to obtain a 30-second template. Any other time cycle could have been chosen, but I chose this one in order to suggest an intelligible thematic value as within the classical music syntax.
The three metronomes are chosen in order to have an integer number of beats within a 10-second cycle. In this case the values (in BPM) are 90, 72 and 60. Any other metronome could be derived by having integer proportions to the chosen time cycle in seconds and applying the same proportion to 60BPM (in this case, since the time cycle is 10 seconds, the proportions are 6/5 for 72BPM and 3/2 for 90BPM). In order to facilitate the reading I wrote the template in 3/4 time.



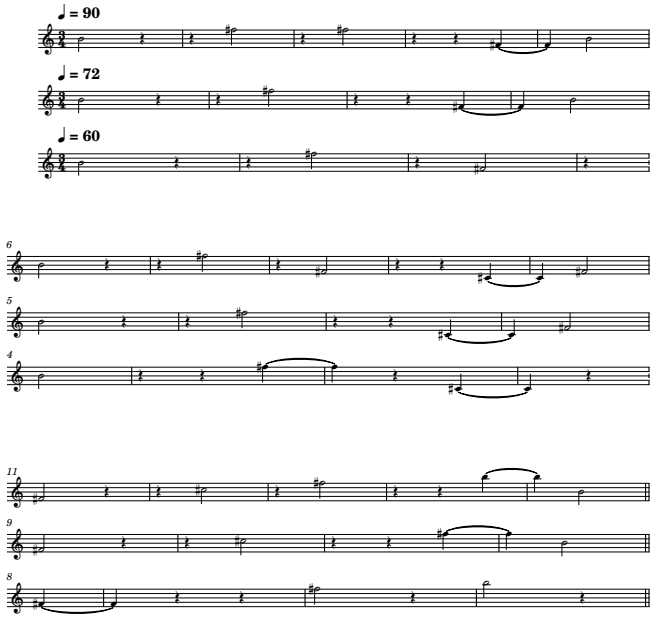
Within the 10-second cycle a rhythmic pattern is built with permutations applied to each different line in order to fit with the different metronomes. The main pattern is derived from an ancient Greek metrical structure called Adonic verse (— U U — U / — U U — —), from that two other patterns are obtained by elision.



I used a six-tone scale with two different transpositions. The first transposition is used as a secondary pitch class within the melody, the second transposition is only used in the Cadenza and Finale as the main pitch class. I arbitrarily assigned a tonic and dominant function to two pitches in the scale.



A proto-melodic structure is then built with the tonic and dominant pitches, in order to preserve a sense of the same melodic contour across the three different rhythmic patterns.



Each half note then becomes a micro-articulated long note and each quarter note becomes a fast stream of notes.