PTL,

a graphical sequencer
dedicated to pure-data

Graz, I.E.M. 2004

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Paris

- Acoustical Engineer
- Code since ZX81
- Play electronic music since AWE32
- Use pd since version 27
- Create the « pd internal msg » documentation
- Create Xgui a set of objects to allows a pd user to create any kind of graphical interface.
- Give pd courses for artists & engineer
- Play in chdh band (tonight @ MKL)

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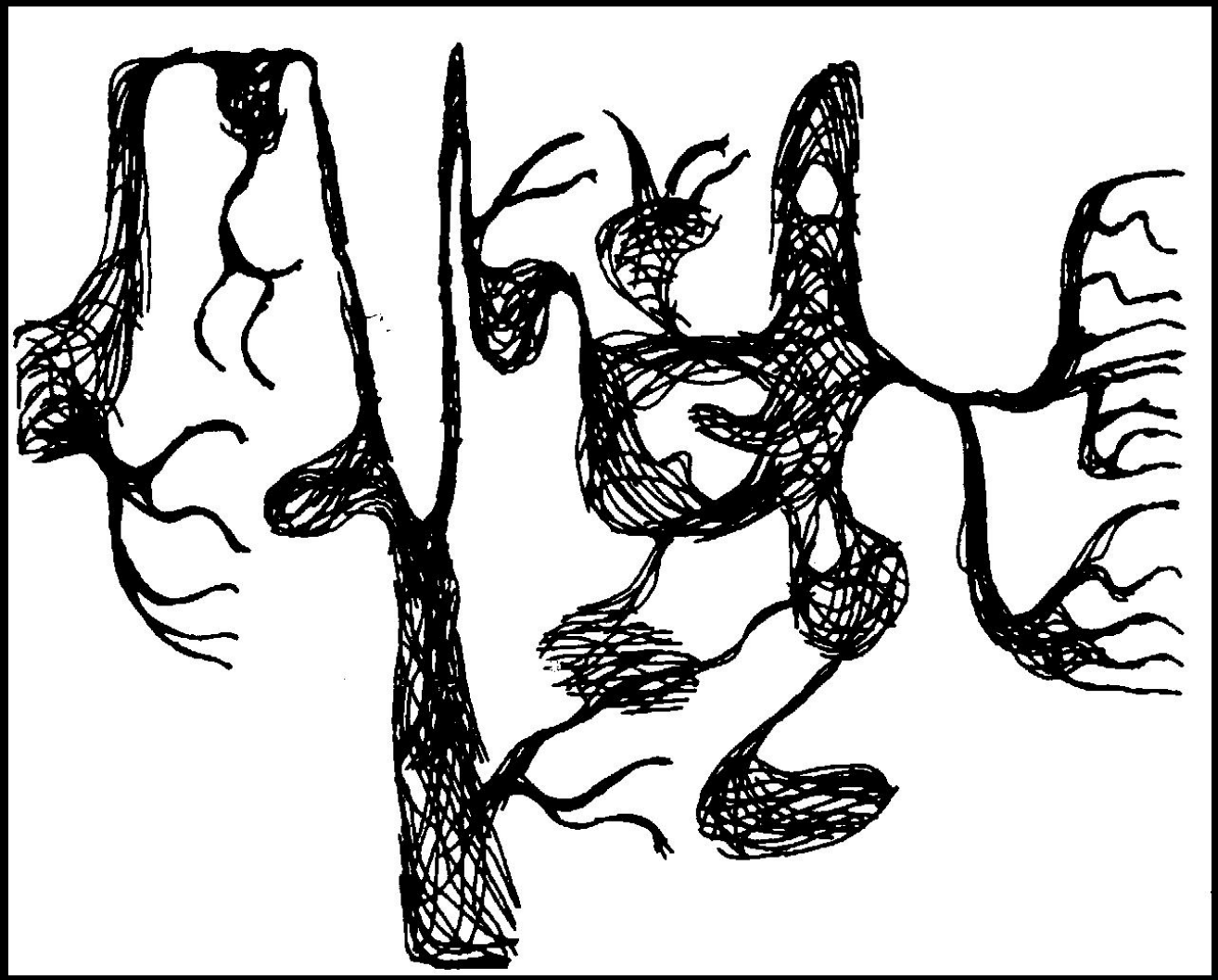
Plan :

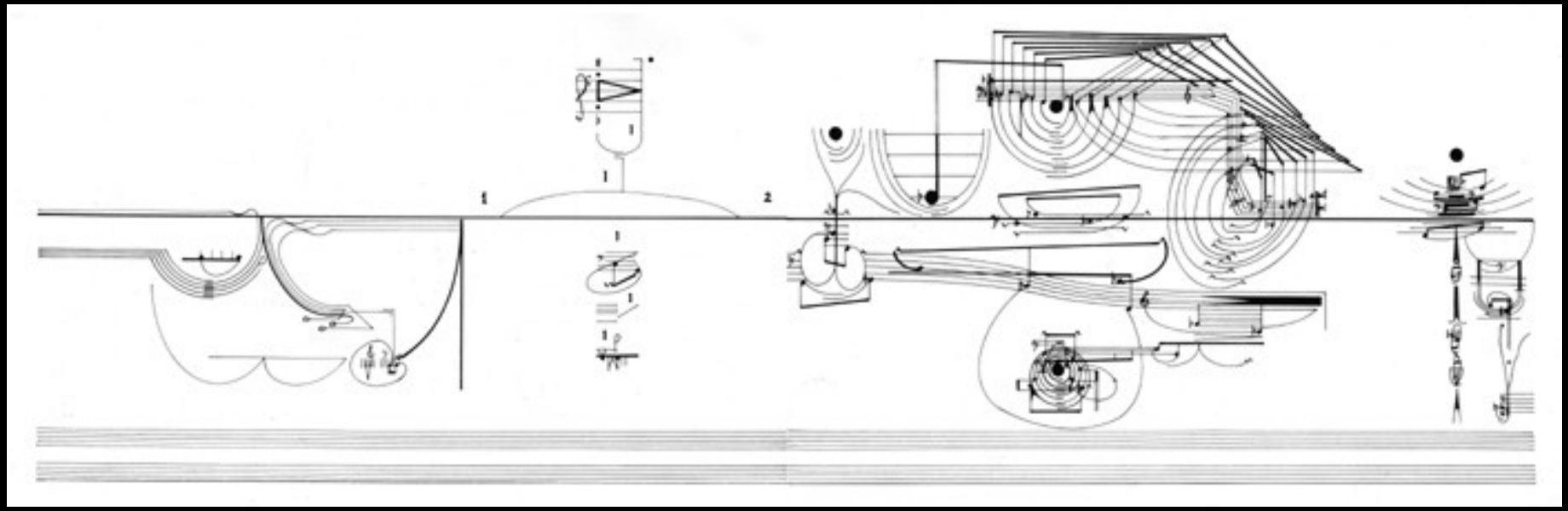
- Graphical scores and electronic music ?
- Midi (and electronic music)
- Alternatives
- Ptl : goals
- Ptl short demo
- Problems
- Conclusion

Graphical scores



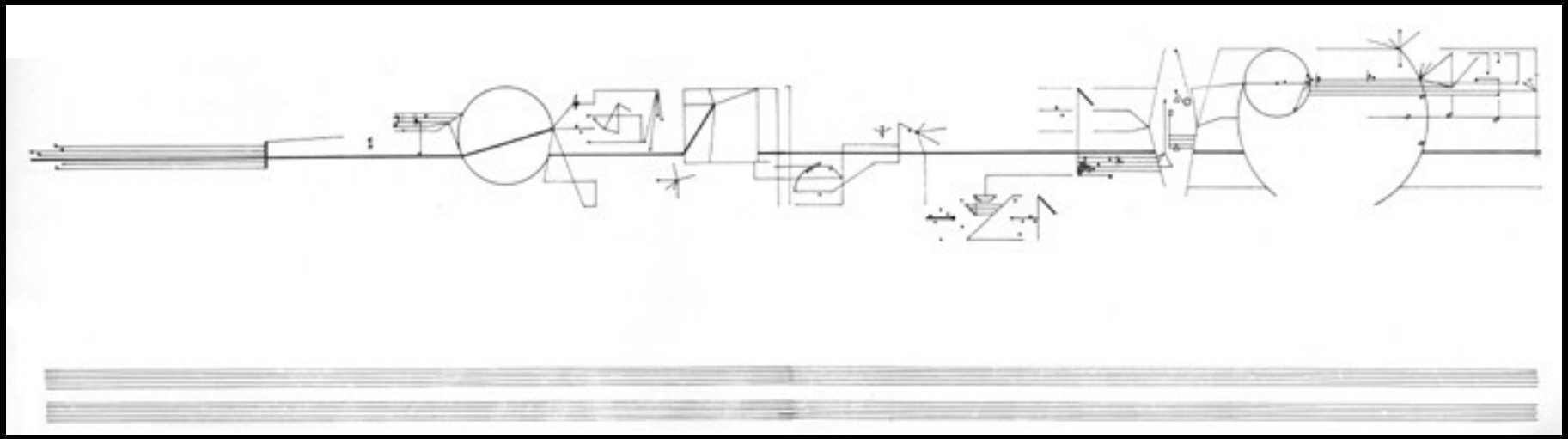
Iannis XENAKIS,
Mycenae alpha

Graphical scores

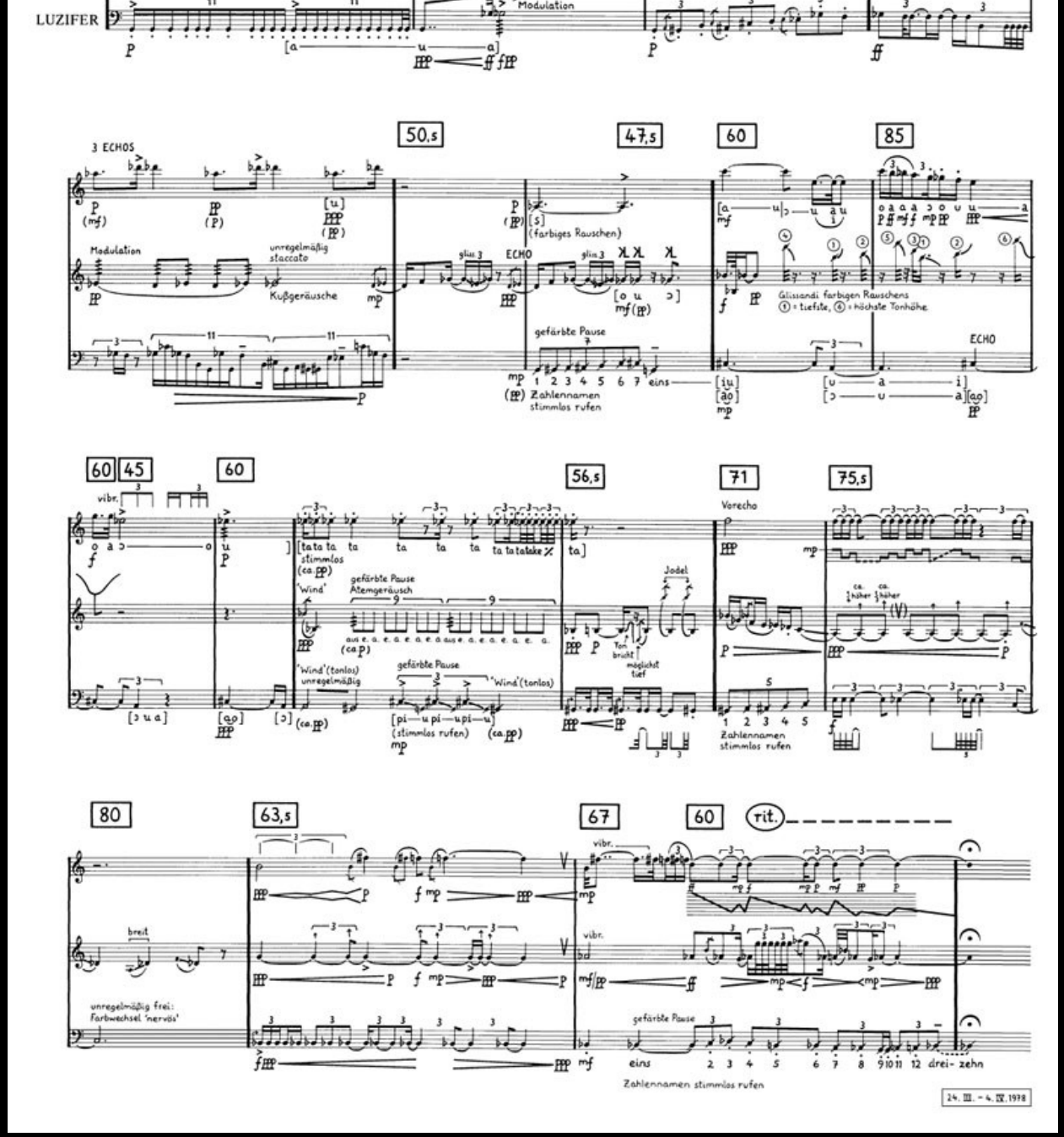


Cornelius Cardew,
Treatise

Graphical scores



Cornelius Cardew, *Treatise*



Stockhausen,

Super formula for Licht.

Graphical scores

- Graphical scores seems to fit particularly well the aim of representing Electronic music.

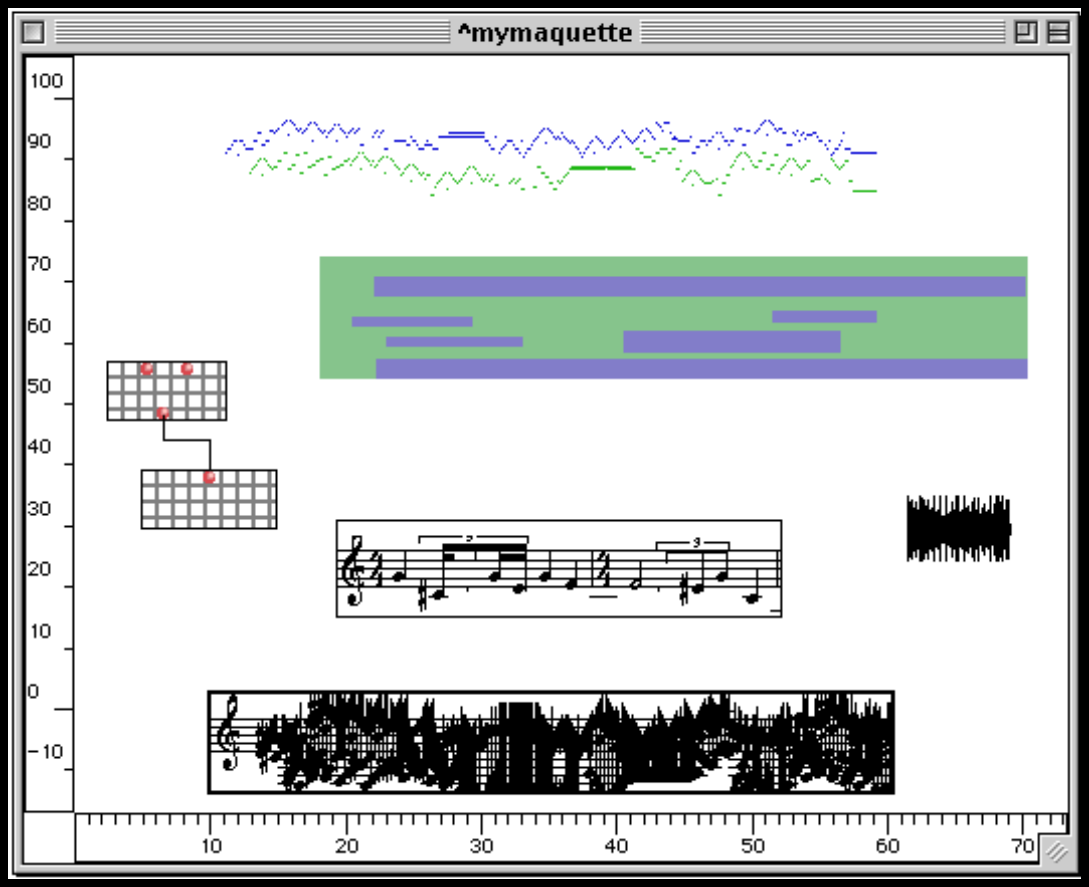
- Graphical score are OPEN : no more fixed symbol like in the classical notation system

- The author of a graphical score is free to use any graphical pattern and associate them with any kind of sound.

Midi is dead ?

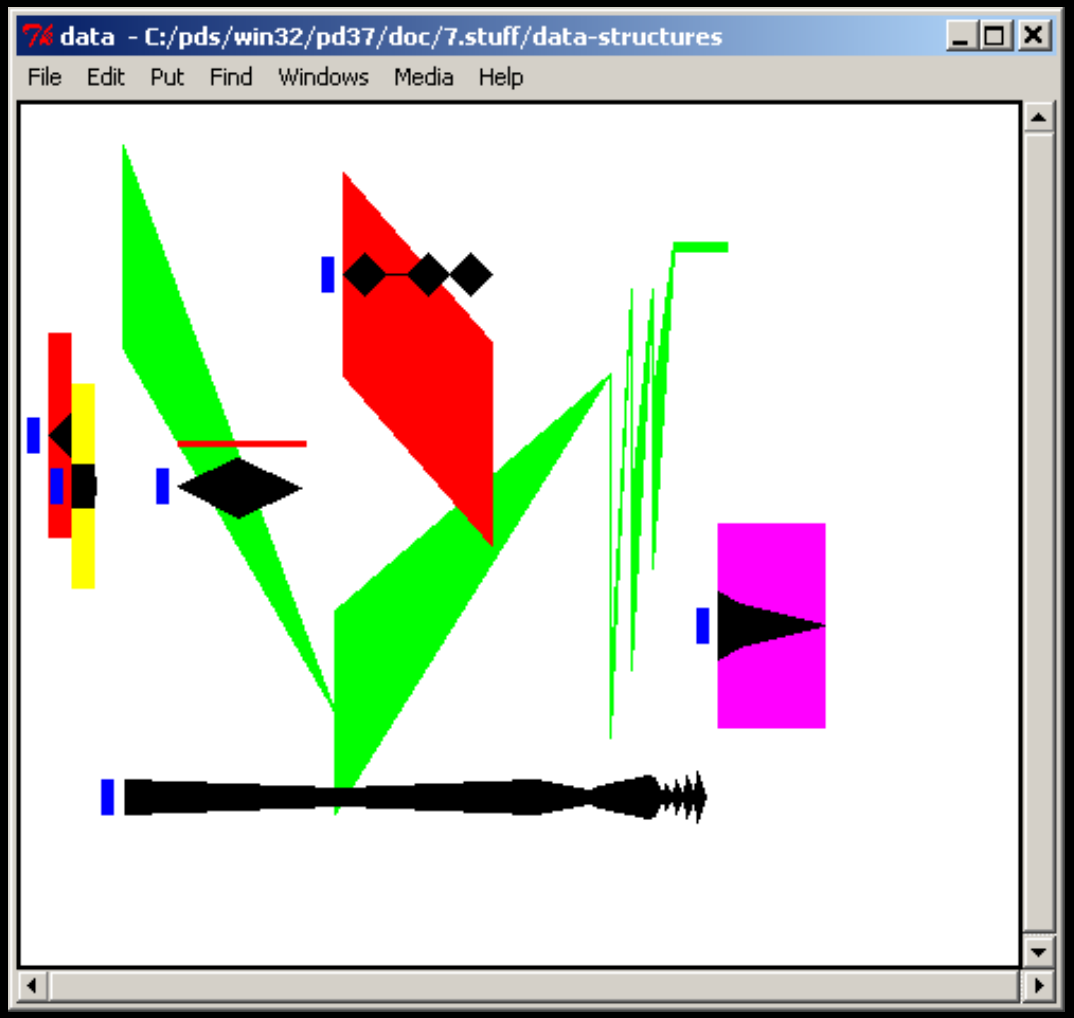
- Midi is too limited regarding what pd offer.
- Pd is hard to drive using a classical sequencer
- New solution like OSC are coming and seems to be good and used.

Alternatives



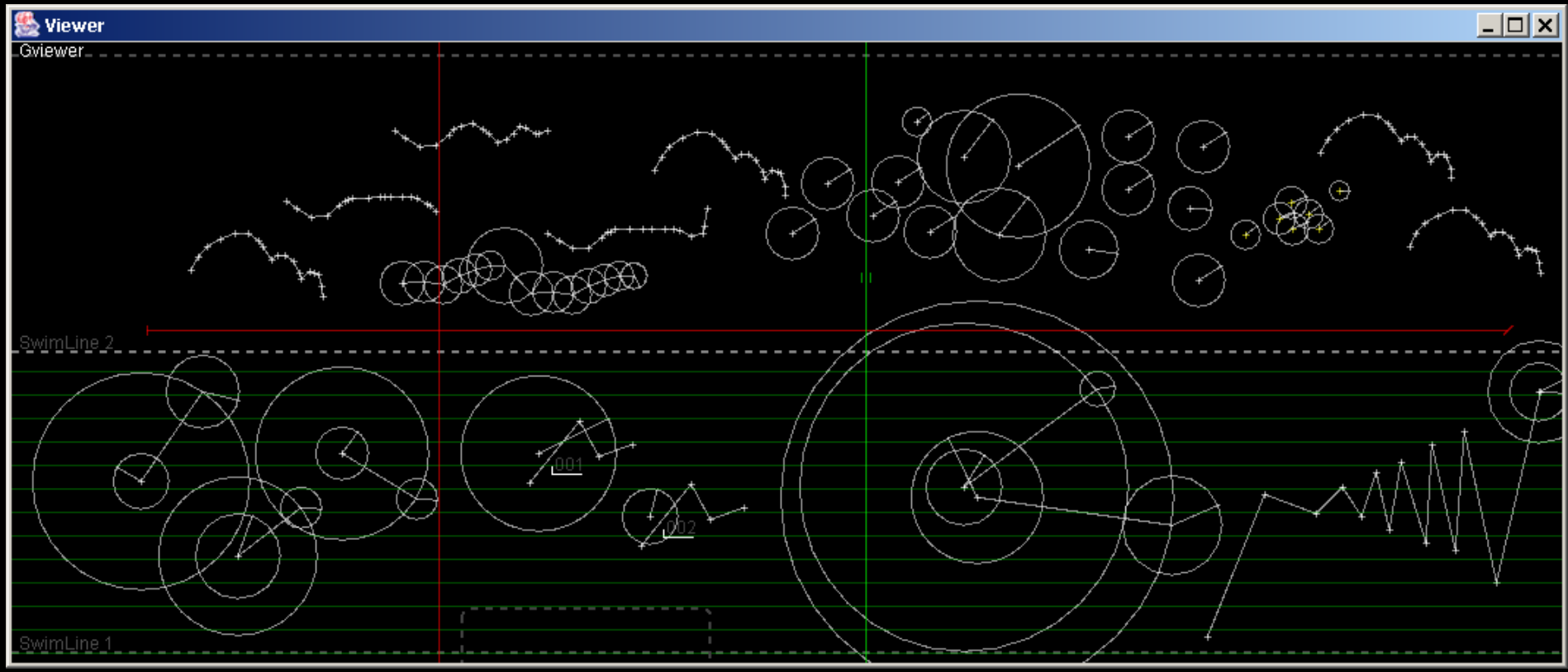
Open music, Ircam

Alternatives



Pure data data-structures

Alternatives



PTL

Why PTL ?

- Today no sequencer dedicated to graphical scores.
- Today there is no OSC sequencer.
- No sequencer is able record live performance when using hi-resolution devices (like kroonde from la-kitchen.fr) ; edit it ; replay.

Why PTL ?

- Using pure-data as a sequencer for recording, drawing and playing a graphical score seems to be possible using data-structures ; but it's a skilled work to create such a complex pd patch. Moreover, basic features like zooming or splitting events are not implemented yet.

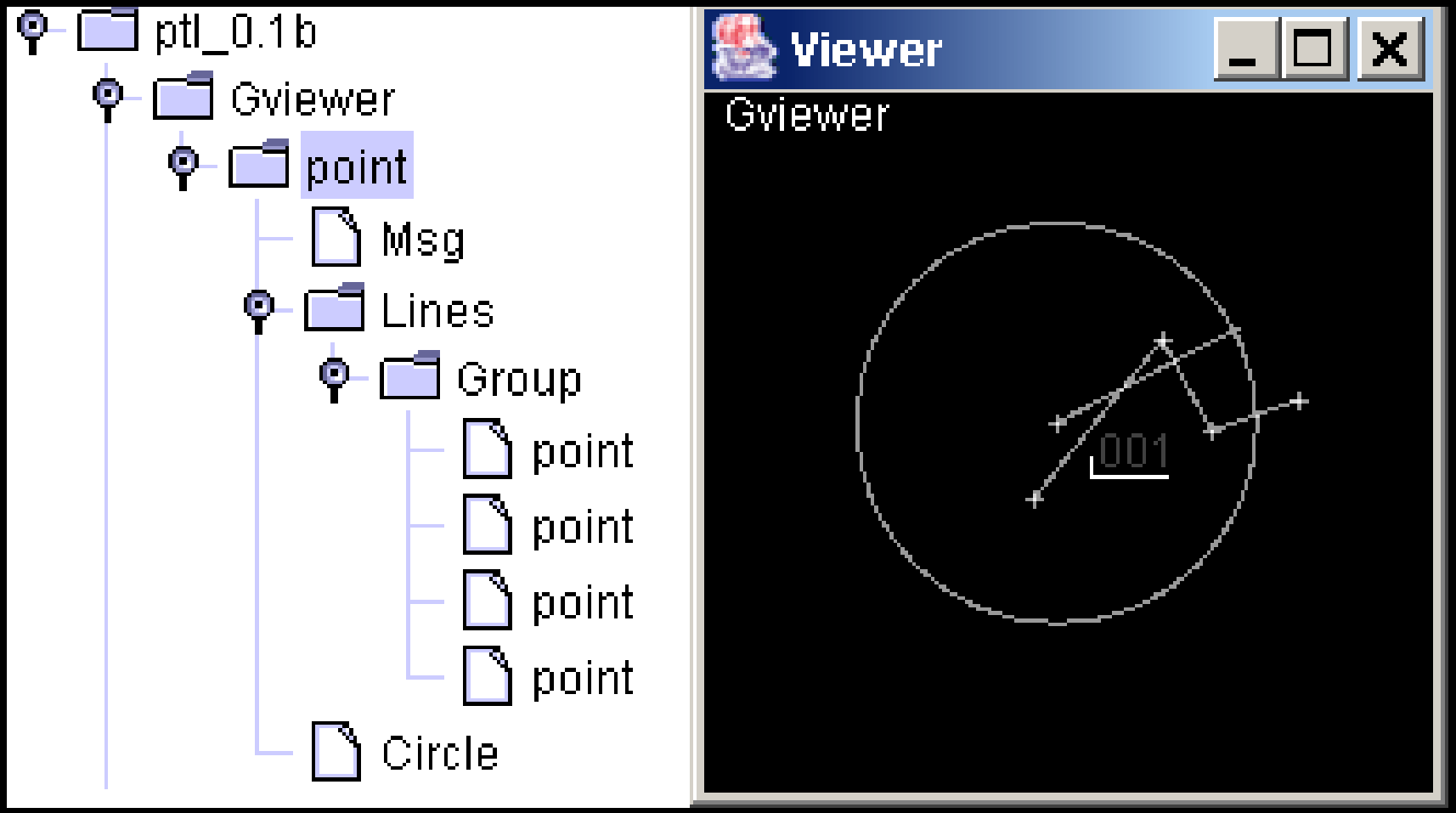
- Creating a stand alone solution is more flexible : you can use it to drive pd or to export a qlist, create a patch, drive any other OSC instrument.

PTL Goal

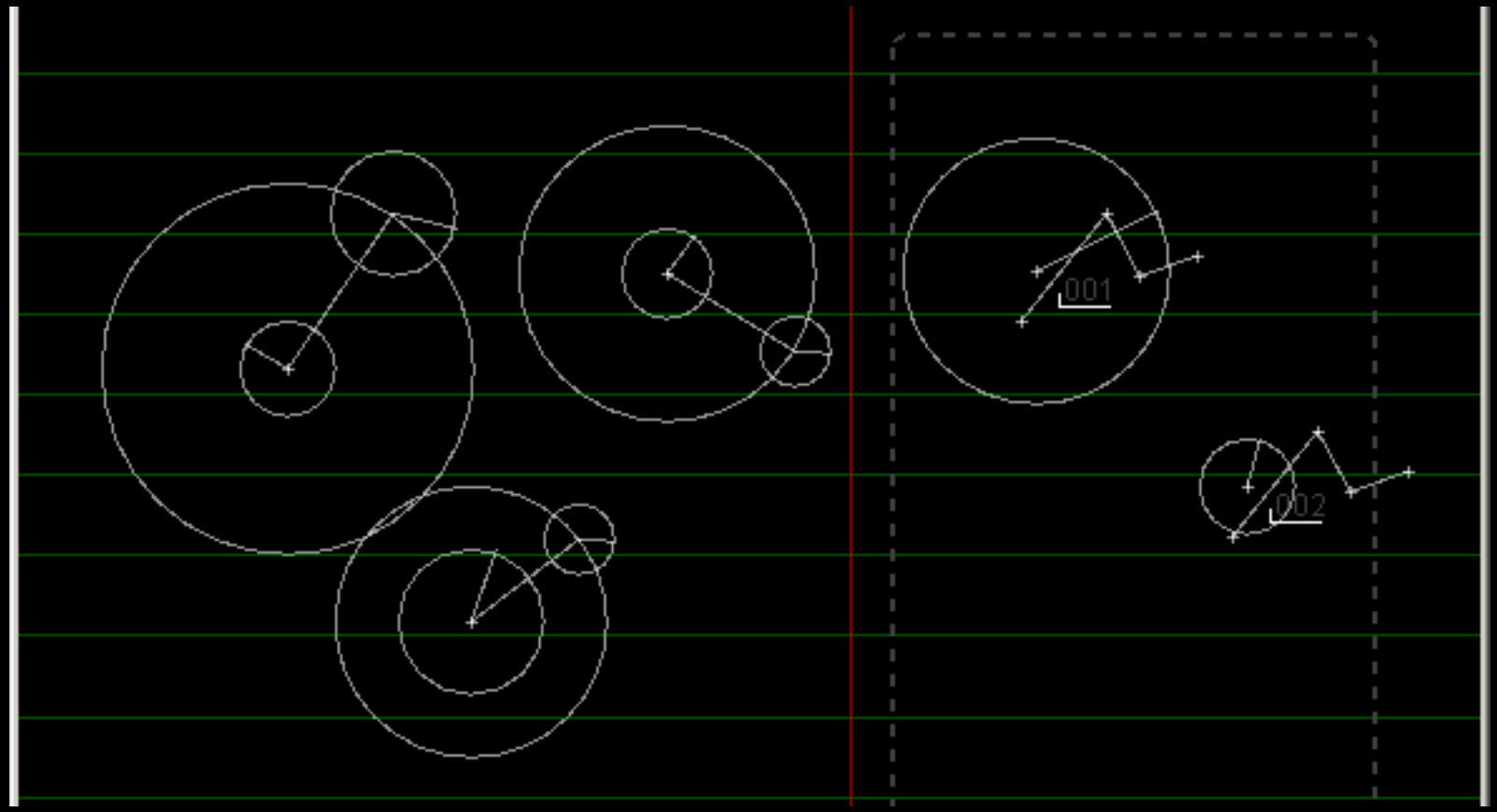
- Offer to composer an easy to use interface for creating and playing graphical score

- No pre-defined link between graphic and sound, this must be up to the composer.

PTL - combine event



PTL short demo



PTL today (28/9/2004)

- PTL is implemented in java
- Use XML files
- Use the FUDI protocol for driving pd.
- Use inheritance for easy extension for any new ptl-object.
- Is able to render a Qlist.
- Open Source Licence

Problems

- PTL is poorly design : no undo redo chain ; not based onto a robust Document-view model.
- The user graphic interface is too slow
- No documentation ☹
- OSC not implemented yet
- The only developer is overbooked !

Future

- Redesign for undo redo, quicker user interface.
- OSC
- Export as pd-patch ?
- Render as patch ?
- Render as cScore ?
- Implement sound and open GL ;-)

Help !

- I won't succeed this project alone
- Need for other contributor : documentation, coding, testing.
- Main hot topics : speed up the user interface ; find a better design.
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Conclusion

- There is a place for a stand alone software dedicated to graphical score for electronic music.

- PTL offer the composer a tools to create, edit, record and play, graphical score that looks the way he want.

- Contributions are needed to achieve the project.