

Music Representation

What does it mean to “represent” music?

We view the music object itself as ineffable
and unrepresentable

All we can actually represent is other
representations of it, e. g.:

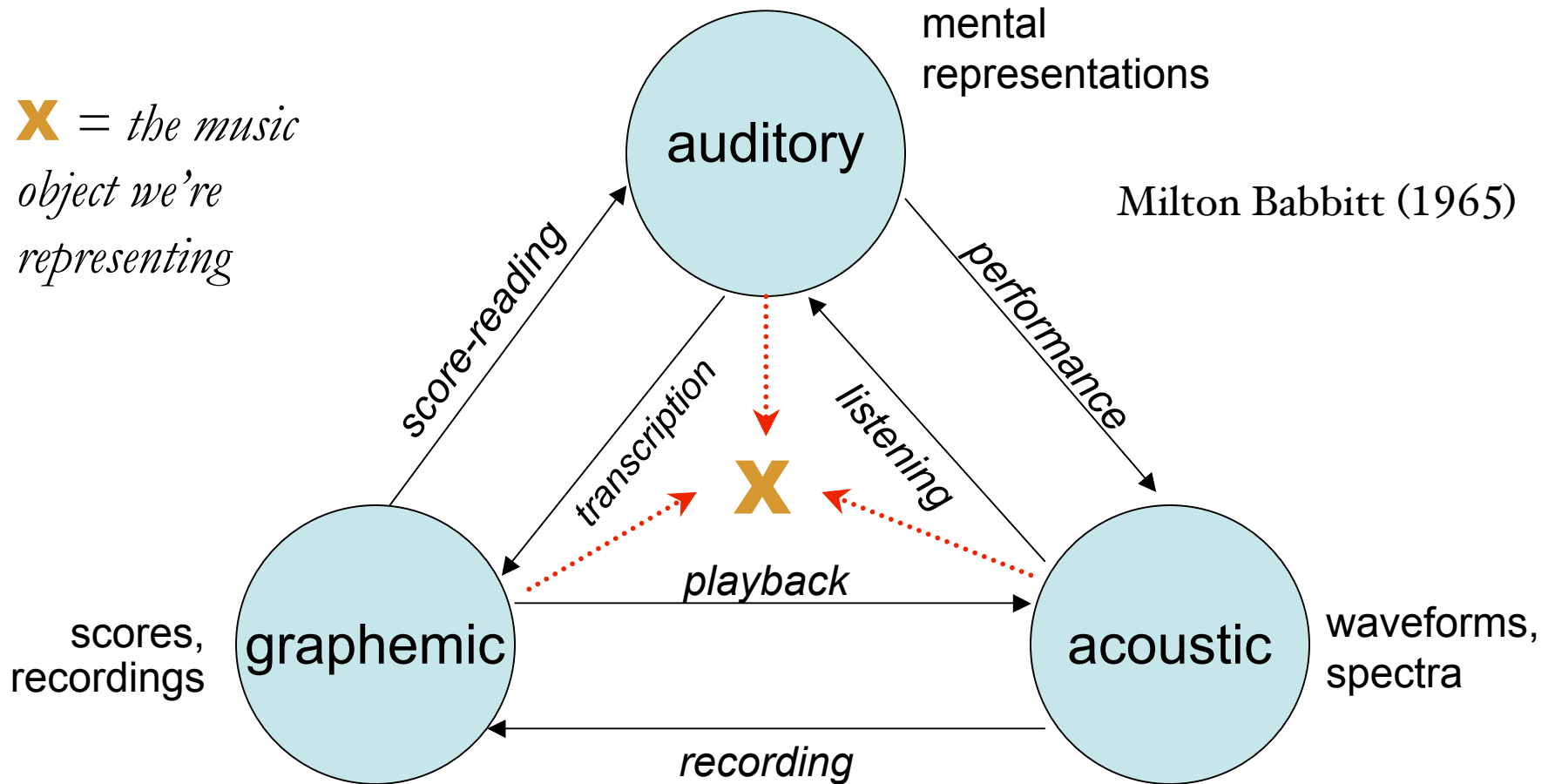
Recordings

Scores

Analyses

Domains of representation

X = *the music object we're representing*



Musical structure

Music is all about organisation/structure

We want to represent this in terms such as:

Intra- and inter-opus references

Motivic relationships

Large scale musical form

Different amounts of information may be available in different domains

Levels of abstraction

It's useful to represent music at different levels to be able to focus on different aspects, such as.:

A chorale is a superposition of four vocal parts

A chorale is a sequence of chords

We need to represent all of these things interchangeably and simultaneously

Coreference

Think of this as

A number of descriptions of something invisible

Lots of different ways of referring to the same thing, helping describe it

We need to say when two different descriptions actually refer to the same thing

Coreference marking allows us to do this

Structure

We need to annotate structural units and build them into a hierarchy

We need to express relationships between different (kinds of) structural units at different levels

These relationships may be similarities or differences of interest to us

Example

Suppose we have:

Several different editions of J S Bach's Prelude No. 1 in C Major, WTC Book 1

Glen Gould's recording and another

A structural analysis (e.g. as per Lerdahl & Jackendoff)

A score of Gounod's *Ave Maria*

All these are descriptions of (parts of) two music objects, with a strong relationship between them

Example

We want to be able to state exactly

Which parts of the spectra of the recordings
relate to notes in the score(s)

Which symbols on the scores (eg phrases)
relate to auditory structures (eg segments)

Which parts of any of the above have relations
with any other

Example

... we want to be able to say “the accompaniment of the Gounod is the same notes as the Bach”

But this needs to be said at the level of the piece, and not once for each note

Summary

We are describing the music object(s) by means of coreference between their structural components expressed in the 3 (or maybe more) domains