DEVELOPING MUSICAL INTUITIONS
A PROJECT BASED APPROACH TO MUSIC FUNDAMENTALS
-----Framing the Questions-----

Almost everybody can make sense of the folk and pop music they have grown up with. But what is it in the music that makes the sense we so easily hear? And why is it that sometimes a piece of music doesn't seem to make sense, or that one person hears a piece as making perfect sense, while another does not? What, indeed, is the relationship between sense-making and liking or disliking?

To help in answering these questions, consider the following proposal: In listening to music, the sense we seem simply to find, we are in fact making; making-sense is not in the music alone, it is an active process--a kind of on-going "conversation" with listener, performer(s), and the piece as participants.

Given that this proposal is plausible, it then suggests another: If the sense we find is indeed a constructive interaction between listener and piece, then differences in the "hearings" we make could be traced to differences in the means we have available for musical sense-making. For instance, individuals may differ with respect to the aspects of music they choose or are able to attend to. What if, for example, you are used to focusing your attention primarily on melody giving less attention to harmony, or maybe finding it difficult even to hear harmonic change? What happens when you are confronted with a composition where the melody is relatively static and uninteresting, while there is a lot going on in the harmonic dimension? With your attention on the melody where there is little action going on, you would most likely find the piece simply boring.

It's a little like a person watching a baseball game who focuses attention only on the batter. Not yet able to see the many other "dimensions" of the game, and thus unable to shift attention when the action is somewhere else than with the batter, the person will most likely conclude that baseball is a boring sport.

But in gradually learning how to see what's happening where, and learning appropriately to shift attention to where the action is, the game will obviously become more exciting. Similarly, in learning how to move freely among the multiple dimensions of music, and also learning how to shift your attention to wherever the action might be in a piece--melody, rhythm, harmony, instrumentation--your hearing of the same piece and your feeling about it will probably change, too: What was initially a boring piece that you didn't like, could become a piece that you liked a lot and even found quite exciting.

But how can you learn to do that? One way is to listen more actively and to be guided by analyses that help to differentiate among the various dimensions, highlighting those that are important at different moments in a given piece. Another way is to design and build musical structures yourself--melodies, rhythms, and eventually larger pieces. For in actually <u>making</u> musical structures, as in learning to play baseball yourself, or in learning to build a sandcastle or a model bridge that will stand up, you need to solve problems, and confront practical questions. In doing so, features and relations are liberated that otherwise may remain hidden within the undifferentiated total meld of a piece as it unfolds continuously in time.

Think of the process of learning as a conversation with the materials of music. By "conversation" I mean the usually <u>silent</u> conversations we have with materials as we are building, fixing, or inventing. As we handle these materials, arranging and rearranging them, watching them take shape even as we shape them, we learn. The stuff "talks back" to us remaking our ideas of what is possible. The back-talk leads to new actions on our material objects in a spiral of inner and outer activity: our inner intentions are reflected back by the results of our actions, leading to new outer actions and often to changing of our intentions. It is a kind

of "re-search"--one that is as familiar to the scientist designing a theory as to the painter or composer designing an artifact.

Arnold Schoenberg, juxtaposing the "technique of musical composition" with "carpentry," puts it this way:[1]

> For if the carpenter knows how to join pieces of wood securely, this knowledge is based no less on fruitful observation and experience than is the knowledge of the [composer] who understands how to join chords effectively. And if the carpenter knows which types of wood are required by a particular job and selects accordingly, he is thus taking natural relationships and materials in account, just as does the [composer] when, appraising the possibilities of themes, he recognizes how long a piece may be.

Thus, I have designed the projects that you will be working on as a workplace in which to explore, experiment, and question the materials and relations that help to give musical structure its coherence. The projects begin with the most common tunes, but these tunes also include the basic structures from which the greatest musical complexity grows. As you work you will be making explicit what you know how to do already--that is, making sense of the shared structures embodied by our most familiar music, while at the same time expanding your "hearings" to include the multiple, intersecting dimensions of more complex compositions. Beginning with relatively easy, composition-like projects, each subsequent project builds on the previous ones. Putting all of that to work, you will make longer and more complex compositions within design constraints that derive from listening to a variety of music from different historical periods and different cultures.

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[1] Arnold Schoenberg (1874 -1951) was one of the composers who had the greatest influence on the music of this century. He is best known for his formulation of the principle, "composition with 12-notes related only one to the other." Schoenberg also wrote several books on music including a text, "Harmony," and a collection of essays, "Style and Idea" from which this quotation is taken.

Each project includes several kinds of guidance:

A. The Task:
A description of the goals of the task and specific directions for how to do it.

B. Info Box:
Directions for how to get started with a project.

B. Notices:

Suggestions for avoiding common difficulties and how to remedy them if encountered.

C. Experiments:
Suggestions for making small excursions that derive from and carry further some concepts or principles found in the tasks.

C. Explorations:
Questions, probes, and puzzles that suggesting broader musical implications of the tasks.

To get the most out of working on the projects it is important that you actively question your own spontaneous, intuitive responses as you go along. For instance, the most significant learning often happens when you confront surprising or puzzling results. Surprises reveal expectations and expectations are clues to the powerful musical intuitions you are already using in making sense of familiar music. Becoming aware of these healthy intuitions is an important step in developing them further. For example, in building a melody or even just a rhythm, you may be surprised as you listen back to the sounding results of your descriptions--that is, the instructions you give to the computer. Sometimes the surprising result is more interesting than what you intended, and these are just the moments to stop and ask, "I wonder why that happened?"

These are the moments of most important learning, but they are also moments that quickly disappear from view and from memory. For once you have an insight, and have learned to use a new idea, it is very difficult to remember what it was

like before--life without that idea is as if wiped out. Try to imagine what it was like, for instance, before you knew how to read, or before you knew how to count.

So, in order to track your progress, to be able to look back at what you have learned, and to reflect on it, you will be asked to keep a running log as you work through the Impromptu projects. These logs will then become the basis for the papers you will be writing. There will be more about log keeping in the context of each project.

GETTING STARTED With IMPROMPTU

Impromptu software is designed to be closely linked with the musical activities of the projects., thus, only the bare basics for getting started with the software are introduced here. Further instructions for using the software will be introduced as they become relevant to specific projects. Included here is just what you need to know to begin work on Project 1.1. For more information, select HELP in the Edit Menu.

Software

The IMPROMPTU Folder on your computer includes:

a. The application, TextbookImp xxxx

b. Tunes Folder: A folder of prepared material, one folder for each of the following Impromptu Environments: TUNEBLOCKS, DRUMMER, ROUNDS, HARMONIZE, 4-VOICES.

c. Synthesizers Folder: A folder that includes set-ups for several kinds of synths, including General MIDI.

Starting Up Impromptu:

To start up Impromptu follow the instructions in the INFO BOX:

INFO BOX

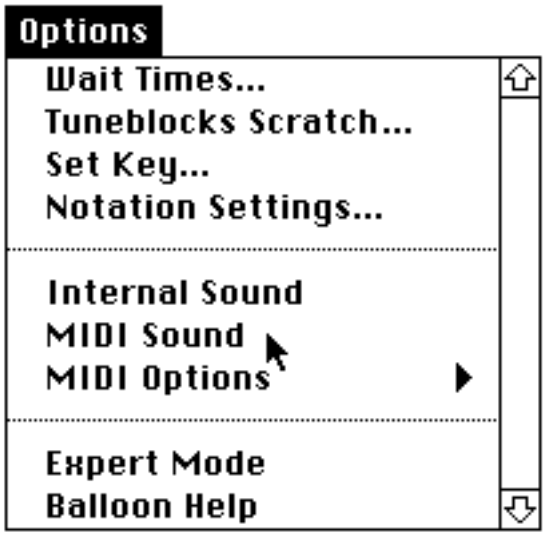
START UP IMPROMPTU

Using Internal Sounds

1. Turn on the computer
2. Double click on the IMPROMPTU Folder
3. Double click on Impromptu
4. Connect and turn on your amplifier and speakers (optional)
5. Plug in your headphones (optional)

Using MIDI

6. Connect and turn on your synthesizer
7. In the Options Menu select MIDI sound



Impromptu gives you two different options for generating sound: "Internal Sound" which uses Quicktime Instruments, and "MIDI Sound" which links to any MIDI synthesizer. The default is "Internal Sound"--that is, when you load Impromptu you are automatically using the internal Quicktime Instruments. Using the Internal Sound option, your Macintosh computer with its built-in speaker running IMPROMPTU can stand alone for working on most projects. To improve.the Internal Sound, you can connect any amplifier/speaker system to the audio output on your computer. If you select the MIDI Sound option, you will need to connect a MIDI synthesizer to your computer and couple it with an amplifier/speaker. Using MIDI, the sound will always be much better. Impromptu includes menus of instruments for both internal sounds and MIDI. You will find information on selecting instruments as you get into the projects.