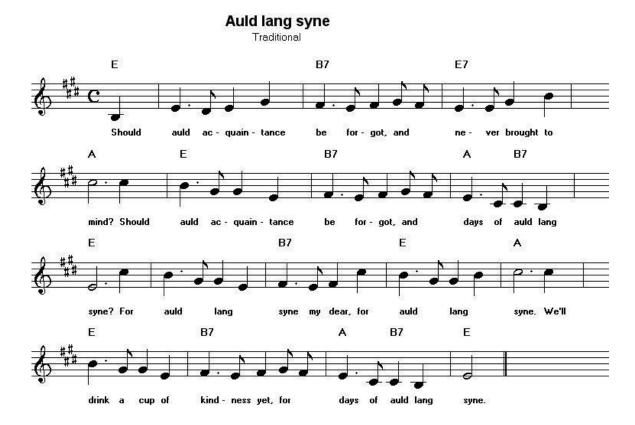
Keyboard Instrument Basics

Electronic Keyboard

The keyboard (electronic keyboard) focuses on a right hand melody accompanied by chords on the left hand, whereas piano tends to incorporate chords and melodies into both hands.

This is an example of a song composed for electronic keyboard:



Source: http://www.1manband.nl/sheetmusic/index.htm

Note that it has a single clef (the treble clef) and chords outlined above the stave (E, B7, E7 etc.). This is quite typical for a piece written for keyboard, as it contains one main melody: the vocal line for auld lang syne. The chords provided lack any detail regarding inversions or specific notes to be played, but rather provide a harmonic outline to accompany the main melody. Up until recently grade examinations were available for keyboard instruments, however in the last 2 or 3 years they have been removed from ABRSM and RIAM examinations. This is unfortunate as I originally learned my music theory by undertaking a series of keyboard examinations.

Electronic keyboards come in a variety of different makes and models. Some allow for the additional use of a sustain pedal, others provide touch sensitive keys and then there are some that use weighted keys. All these additional features try to make the instrument imitate the rich timbre provided by an acoustic piano. A typical keyboard looks similar to the following:



Source: http://en.wikipedia.org/wiki/Electronic_keyboard

Pianoforte (Piano)

The following excerpt of stave music is an example of a song composed for piano:

Hammock in the Philippines www.StevenCravis.com

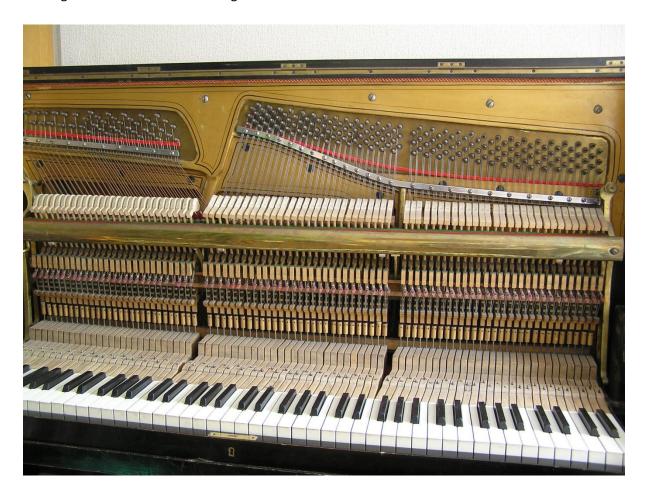


Copyright © 2004 Steven Cravis

 $Source: \underline{http://www.stevencravis.com/html/music/sheetmusic.html}$

Note how the song contains systems linking two different lines of music – a right hand (treble clef) and left hand (bass clef). Immediately the difference between keyboard and piano works is clear. There are no chord markings in the piano example as they have been replaced by a pitch and rhythm specific bass clef part. Also visible in the example is the marking for the use of a sustain pedal along with a variety of dynamic markings (mf, mp, p).

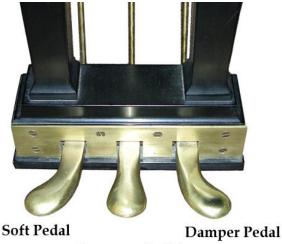
The fundamental process behind using a piano revolves the pressing of keys which in turn cause a hammer to press down on a series of strings. The diagram below shows an upright piano missing its cover to reveal the strings underneath.



Source: http://en.wikipedia.org/wiki/File:Upright_piano_inside.jpg

<u>Pedals</u>

In order to fully utilise the acoustic values of the piano, pedal markings and dynamics are provided in the score. These are often influenced by the amount of pressure a player places on a pianos weighted keys, and also by their use of pedals. Pianos have three main pedals, on the left is the soft pedal, in the middle is the Sostenuto pedal and on the right is the Damper pedal.



Sostenuto Pedal

Source: http://www.music.vt.edu/musicdictionary/appendix/pianopedal/pedalmarkings.html

The soft pedal when pressed allows the pianos hammer to strike less strings (minimum one string), whereas when released the hammer would hit all available strings (max three strings). This dampening of strings allows for a softer sounding note to be produced. When instructed to press the soft pedal the term 'una corda' (one string) will appear under the bass stave, and 'tres corda' (three strings) will appear when the pedal it to be released.

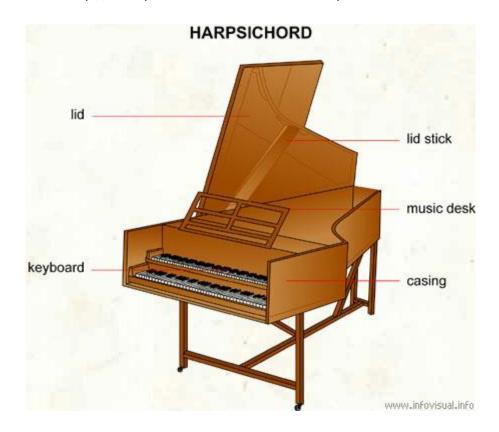
When the damper or sustaining pedal is pressed a mechanism of felt dampeners are released from the pianos strings allowing them to resonate. The symbol indicates for the pedal to be used, and a symbol indicates for the pedal to be released.

Pressing the Sostenuto pedal will only dampen the notes that have been struck. The letters S.P. will show when the pedal is to be used followed by a line slanted up with a downward line on the end to indicate the release of the pedal.

Harpsichord

The Harpsichord was the precursor to the piano and was most popular in the 17th and 18th centuries. Unlike the piano the harpsichord has strings that are plucked by 'jacks' (rather than hit by hammers). Some harpsichords contain one keyboard while others contain two. The different timbre of the notes from the keyboard manuals equips the musician with the ability to implement a form of volume differentiation. Unlike the pianos soft, Sostenuto and damper pedals, the harpsichord has no method of differentiating the notes. The harpsichord shares a similar form of notation with the piano; however piano notation contains a variety of symbols indicating dynamic changes for volume.

For a more detailed guide the following video provides an excellent explanation of how a harpsichord works: http://www.youtube.com/watch?v=71x4MSlpGUk



Source: http://www.infovisual.info/04/022_en.html

<u>Organ</u>

The Organ works by blowing wind throw a series of pipes. The musician plays the keyboard manuals with his hands, but also plays a variety of pedals with his feet. The foot pedals are organised in a similar fashion to the standard keyboard octave – however the musician must become able to use the pedals by feel, as he/she cannot look at the keyboard manuals and foot pedals simultaneously. There are a variety of different organs out there including pipe organs, rotor organs and electronic organs.

Pictured below is an example of the manuals the organist would use. Also depicted are a few examples to represent the grand scale of the pipe organs. There are several YouTube videos available if you are interested in studying more on these organs. But first an excerpt from a sample of organ sheet music is provided.

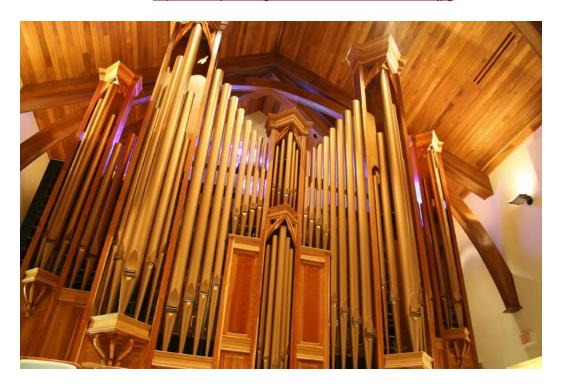
J.S. Bach Prelude and Fugue in C Major BWV 545



Source: http://www.all-music-sheets.com/prelude-and-fugue-in-c-major-bwv-545-p-64.html



Source: http://en.wikipedia.org/wiki/File:StGermainAuxerrois1.jpg



Source: http://www.n8rrb.com/pipeorgans/

Music Centre: http://danielmcmahon.webs.com



Source: http://www.rosenallis.com/churches/new_organ.htm