A Sampling of Organ Ranks with Special Properties

~Blaine Olson

The following is a list of a few common organ voices that can have a special effect when used in combination with certain other ranks. This list is by no means all-inclusive, rather a list of ranks you are more likely to encounter. Please note that there is no guarantee you will achieve the expected results, as all organs are different and some builders take wide liberty in labeling their stops. Substitutions are not likely to achieve the same results. For example, a Gemshorn will NOT achieve all of the same results as an Erzahler, even though they are very similar in construction.

Erzahler. Shaped like a Gemshorn but with a smaller mouth line diameter and sharper end point as well, this quiet voice is one of the biggest surprises in organ tone. It's inventor, Ernest M. Skinner said, "It is neither Flute, String, nor Diapason; has a light voice, yet will sound through a considerable amount of tone... and sounds the first upper partial, or octave, in equal prominence with the foundation tone. **The Erzahler apparently changes color to suit its surroundings. The Erzahler is the chameleon of organ stops**. ...does not resemble the tone of other tapered stops such as the Gemshorn or Spitz Flute. I am almost prepared to say that it forms a fifth family of tone." (Stevens Irwin, in The Dictionary of Pipe Organ Stops).

Think of a famous person with a distinctive solo voice. Now think of that same person humming instead of singing with open mouth. That is a lot how I personally hear the tone of the Erzahler: it almost seems to be humming, instead of "singing."

In his Dictionary of Pipe Organ Stops, Irwin said, "It **serves as a binding tone between bright and dull stops, high-pitched and low-pitched stops, and the unisons and the mutations and mixtures... It points up the pitches of the stops being played instead of masking them and making them lose character. It is probably the most valuable single adjunct to the tones of all stops that exist in the organ. It does not destroy timbre in another stop, rather it supports it by giving it additional strength. Nor does it make the tone colors more vivid, as does the Gedeckt**."

Even though its inventor said it does not belong to ANY of the traditional 4 families of organ tone, we tend to "adopt" it into the Foundation group as being a diminutive hybrid. It makes a gorgeous celeste, and is often found as a compound stop (NOT a mixture nor a Celeste) of 2 on-pitch ranks, rather than tuned as a Celeste. (See the stoplist of the Salt Lake Tabernacle Organ, Choir Organ).

Gedeckt. The most common covered Flute stop, the Gedeckt can be used to make other tone colors appear more vivid. According to Irwin, "...its main function is to offer a fundamental suitable for ensembles of both soft and moderate dynamic levels. Secondary functions include **diluting the too-prominent partials in another stop**, solo playing, contrast with bright stops like the Gamba... also known as one of the most useful Copulas. It is not an ideal accompaniment stop... Since this Flute is not valuable in building a vertical line of tone, as are the Diapasons and the Gemshorns, this can be a useful source of many stop pitches, such as the 4', 2 2/3', 2', or 1 3/5'." When building a synthetic reed which requires both a strong fundamental and a prominent third harmonic, such as a Clarinet, it is an ideal starting point because it already has a lot of the third harmonic (the 2 2/3' pitch) already present in its pipes, because of the stoppered construction. (A synthetic Clarinet may need a little more 2 2/3' than the Gedect has to offer, plus it will need a 1 3/5' pitch).

Copula. Sometimes stops are named for the function they perform, rather than for their shape, or construction. A "Copula" is a stop which is intended to **bind tones of one stop to yet another stop**, or ***"couple"*** them together in a more unified tone. (The actual name on the drawknob or stop tablet may be **Copula,** or it may be another stop name which has the Copula function).

This "coupling" of tone may be a coupling between: 1) bright and dull stops, 2) loud and soft stops, 3) low-pitched and hi-pitched stops, 4) 8' and 4' stops with Mixtures, 5) coarse-toned and smooth-toned stops, and 6) Reed and flue stops. Some Copulas are used to hasten the speech of slow Reeds or bass pipes. Powerful **Open Flutes** with their complement of harmonics are usually the best binders between the other flues and the Reeds. More stops with the Copula function follow below.

Koppel Flute. It's very name (in German) indicates "copula." It has a tone color midway between a bright cylindrical metal Flute and a Gemshorn, and is **intended to enhance the blend between other stops.**

Spill Flute. Smaller-scaled than the Koppel Flute but similar in construction. The **Spill Flute (Spindle Flute)** can **build up brightness in other flues without destroying the chorus' unity of effect.**

Gemshorn. Both the **Gemshorn** as well as the **Erzahler** can hold together the bright and dull registers, or low- and high-pitched. Irwin says it is " the ideal accompaniment stop for many solo stops because it does not disturb the identity of the more colorful registers. It can build up the bright tones of the Swell. All conical ranks are good binders between bright and dull flue stops."

Hohlflote or **Major Open Flute.** Either of these can give unity of tone to a poorly designed Diapason Chorus, if not too loud.

Nachthorn is yet another stop than can bind together a soft ensemble

Recipes the Owner's Manual Did Not Tell You About

Synthetic **8' Orchestral Oboe**: 8' String + 2 2/3' (preferably also a string)
Synthetic **8' Clarinet**: 8' stopped flute (Gedeckt or Bourdon) + 2 2/3' + 1 3/5'
"Alexander Schreiner Flute Chorus: Open Flutes 8' +4' +2' with "Sub" (16') coupler, to yield open flutes at 16' + 8' + 4' + 2'

Be sure to use a String, such as a Salicional along with a 2 2/3 for your Orchestral Oboe, as a Flute will give you too much fundamental. You want a "thin" sound.

For the Clarinet, you actual **want** more fundamental, so you will use a Flute as your starting point. (A Clarinet has a "fatter tone" than an Oboe, so we need a "fatter" starting point). Try to avoid using an open Flute, as we do not want the amount of 2nd harmonic (octave pitch) that is inherently present in open flutes. A "stopped flute" tends to choke out the even numbered harmonics while stimulating the odd, which is exactly what we want here. If a stopped Flute is not available, look for a "half-covered" flute such as a Rohrflute (Chimney Flute).

Play the Alexander Schreiner Flute Chorus on one manual against a soft string celeste, Gemshorn celeste, or other contrasting background. The synthetic reeds should also be played against a contrasting background.

I encourage everyone who is interested in learning more registration secrets to attend David Chamberlin's class on advanced registration!

For more information, please make a list of the stops available on the organ you practice on and look them up in The Dictionary of Pipe Organ Stops by Stevens Irwin (published by Schirmer Books) or go online to The Encyclopedia of Organ Stops at www.organstops.org