

“*Multum in Parvo*” – an American Approach?

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by Jack M Bethards



An Idea from England?

Starting in the 1920s, a fascinating, sometimes heated debate unfolded over three decades in the pages of *The Organ*. The topic was how best to arrive at the ideal village church organ. The object was to bring cathedral calibre music to the average parish. The most renowned organ theorists of the day, including Lt Col George Dixon, Norman Cocker, Reginald Whitworth, and Cecil Clutton, debated the merits of various schemes for organs of minute proportions. How could the important effects of the most admired British organs be distilled to their essence? This considerable bulk of articles and correspondence indicated the fascination this topic had aroused among British builders, organists, and enthusiasts since the Oxford Movement reforms took hold in the 19th century. All seemed intent on bringing nobility of organ tone to even the most modest church. Although there were arguments over detail, several general principles of small organ design, based on many years of experimentation, had evolved. The term *multum in parvo* (much in little) was shorthand for the greatest challenge facing the organbuilder: how to get maximum colour and dynamic variety from minimum stops; this, of course, in the context of supporting the Anglican service. As late as 1950, in the midst of the classical revival, great praise was heaped upon Victorian and Edwardian masterpieces such as the 1881 “Willis on Wheels” at St. Paul’s London:

Great		Swell	
Open Diapason	8	Open Diapason	8
Lieblich Gedeckt	8	Gemshorn	4
Principal	4	Cornopean	8
Fifteenth	2		
		Pedal	
		Bourdon	16

and Arthur Harrison’s 1902 gem at Cleator Parish Church:

Great		Swell	
Double Salicional (FFF)	16	Geigen	8
Open Diapason	8	Lieblichflöte	4
Claribel Flute	8	Cornopean	8
Principal	4		
Fifteenth	2	Pedal	
		Sub-Bass	16

There is a very fascinating parallel between the English *multum in parvo* organ and the contemporary French development of the *orgue de chœur*. They follow surprisingly similar patterns in general principle, but with a far different tonal accent. They are both products of a search for small instruments of great colour and dynamic variety for use either in small churches or as secondary instruments in large buildings. They both have much to teach us. The big difference, however, is that the French character of tone is primarily suited to very live acoustics, while the small English organs of the same period work well in even the driest of venues because of the mellow character of diapason and reed tone.

The System

Reading about these organs for many years led me on a search for the answers to two questions: Do these organs, with stoplists appearing rather dull on paper, live up to the accolades heaped on them by their proponents? Would these design principles make any sense in modern American churches? My experience with these marvellous examples of organbuilding genius leads to a resounding affirmative on both counts.

We have built several organs along these lines. One of the smallest, but most interesting, is at Bishop Spencer Place, a beautiful Episcopal retirement community in Kansas City. To accept an instrument so lacking in what today would be considered the essentials of a small organ took a bit of courage. Fortunately, Scott Riedel of Wauwatosa, Wisconsin, who was both acoustical engineer and organ consultant for the project, shared my enthusiasm for the *multum in parvo* concept. Scott knew firsthand the glories of the exquisite 1931 Harrison & Harrison masterpiece in the chapel of the Royal School of Church Music. As this is a classic of its type, it is worth reviewing the stoplist:

Great		Swell	
Open Diapason	8	Lieblich Gedeckt	8
Claribel Flute	8	Gemshorn	4
Salicional (Flute Bass)	8	Twelfth	2 ² / ₃
Dulcet	4	Fifteenth	2
		Contra Oboe	16
Swell to Great			
Great to Swell		Pedal	
Swell to Pedal		Subbass	16
Great to Pedal		Flute (ext.)	8

Although the beautiful and resonant Bishop Spencer Place chapel designed by C Crawford Murphy, architect of Asheville, North Carolina, seats only 50 and would barely accommodate six stops, Scott agreed with me that we should follow, as far as possible, the principles that inspired the elegant English organs we knew. Here, in brief, are the ten characteristics I have noted to be common to the best examples of *multum in parvo* British organs. These are laid out roughly in order of importance.

1. **Bold voicing.** The easiest way to describe my impression of the Victorian and Edwardian style of voicing is that it exudes confidence...perhaps borne of pride in Empire. There is nothing tentative or reticent about the *multum in parvo* British organs I know. Each stop has personality, colour, and energy, which is not to be confused with loudness. The result is an ensemble with a backbone of steel plus interesting accompaniment and solo combinations that capture and hold one's interest.
2. **Primacy of diapason tone.** The key to the scheme is a powerful 8' Open Diapason paired with a very bright 4' Principal. Noble is the best description of the unison stop. This is big, full, round, yet singing diapason tone with some treble ascendancy. It is the type of stop that if not voiced and finished with great care can become what our generation deplores most: tubby and woolly. These pipes must not be underblown! The octave stop has a much thinner and more incisive tone with strong harmonic development. Practiced skill must be applied to make this quite different character of tone blend with its 8' foundation. These two stops are of vital importance. The legendary Scudamore organs, tiny standard-model organs built in quantity by Willis and others,

often consisted of nothing but these two stops and were considered quite adequate to play a service. Contrast this with the typical small organ of our time, which inevitably starts with an 8' stopped flute foundation, often paired with a semi-open flute octave.

3. **Manual contrast.** Even in schemes as small as three or four stops, two keyboards were considered necessary to provide immediate colour and dynamic change. A third manual was often considered appropriate even where no more than 15 manual stops were possible.
4. **Effective expression.** A fine swell box is essential to the *full Swell* effect, especially when the Swell is small. It is also desirable to have expression for at least part of the Great and, of course, for a third manual.
5. **Dominant reed tone.** Reed tone can be dominant either because of its power or because of its colour and pitch placement. Two interesting solutions are seen in these small instruments. The obvious choice is an 8' Cornopean or Trumpet with full fundamental and glowing harmonics. Another solution is the 16' Contra Oboe, Bassoon, or Fagotto. Of course, having both provides a fine reed chorus, two solo colours, and an accompaniment voice. Certainly the availability of 16' reed tone under expression, at least via couplers, is mandatory for the *full-Swell* effect. The important point is that reed tone should be able to cap the full organ or at least be on an equal footing with the diapasons. One of the most compelling arguments for an unorthodox tonal scheme was made by Norman Cocker in a 1928 article, where he proposed an organ with only three manual stops: 8' Open Diapason and 4' Principal on the Great: 8' Trumpet on the Swell with Sub and Super couplers. He felt that these rudiments for supporting the Anglican service, a beefy Great and a dramatic full-Swell, could carry the day in a pinch.
6. **Colourful flute tone.** A distinctive flute tone ranging from the open Claribel Flute (England's answer to the Flûte Harmonique) through the traditional Stopped Diapason to the tiny, piquant Lieblich Gedeckt which is the flue next in importance to the Open Diapason and Principal. However, it is rare to see more than one flute voice until the diapason family is made complete. When there are two or more flutes, they are usually quite different from one another. This is contrary to the usual neo-classic practice of concentrating on similar closed and semi-open metal flutes, with open tone reserved for higher pitches.
7. **Variety in diapason tone.** Smaller scale diapasons (or echo diapasons) are used liberally on the theory that the diapason is the most commonly used tone of the organ and therefore should be represented in the fullest variety to sustain interest over a long period of time. These stops have many names including Geigen, Dulciana, Salicional, Gemshorn, Fugara, Dulcet, Salicet, etc, and should not be confused with the typical American examples, which are often very mild strings. These are true diapasons, poised directly between flute and string tone, and are relatively robust compared to their American counterparts. They are, however, secondary to the Open Diapason and Principal. They are introduced to create contrast at the same pitch level or to provide chorus upperwork. Usually in a small organ at least one of these would appear at 8' pitch and be under expression. There is no more valuable sound for choir accompaniment than diapason tone under expression. Developing the diapason family is more important in these schemes than extra flutes, strings, or fancy stops such as celestes and hybrids. The Englishman never makes excuses for too much diapason tone!
8. **Powerful pedal bass.** It was not uncommon to include a rather large Open Wood, as well as a solid Bourdon or Sub Bass, on quite small schemes.

9. **String tone.** True strings play an important role, but only after a plan has become well enough developed. When two strings are included, often the second one is a very narrow unison stop rather than a celeste. The value of a true *Viole d'Orchestre* at 8' or even 4' in the Swell cannot be overstated. This is a class of tone that has been greatly out of favour but is of immense value in creating colour and even imitative chorus effects.
10. **16' manual tone.** This is not by any means the least important element of a *multum in parvo* organ; however, it can be placed last as it is possible to achieve the effect through couplers. On the other hand, independent 16' voices, a flue in the Great, and a reed in the Swell, were considered mandatory by many designers.

Anglo-American Application

In the Bishop Spencer Place organ, we tried to incorporate as many of these ideas as possible within the space available. A few points in the stoplist require elaboration. Because of the size of the chapel and the need for maximum versatility, we decided to put both Great and Swell under expression. Since the bass pipes of the Open Diapason would not fit comfortably in the swell box, we placed them in display but provided two separate knobs to draw the Open Diapason in order to avoid the problem of a big break in loudness at tenor C should the box be closed. The firm bass of the Lieblich Gedeckt serves well to underpin the Open Diapason when it is played under expression. The extended 16' flute stop is made of four different types of pipes. Notes 1 to 24 are of stopped wood, fairly large scale. The next 19 notes are of stopped metal, reducing in scale. Chimneyed pipes (30), graduating to tapered (7) and then parallel open (5) complete the set. The Dulciana is a true echo diapason, not a soft string. Given the size of the room and the chapel's musical requirements, we decided that a celeste to the Dulciana (*Unda-Maris*) would be more useful than a narrow unison string.

The most important element of this tiny stoplist is the Trumpet under double expression. We have used double expression with great success on several large instruments. I felt that it might have even more utility in a small one. This has proved to be true. The Trumpet, with tapered shallots, is very boldly voiced. It is in its own box, speaking into the main one. This extra degree of dynamic control allows it to play as soft as a capped oboe with the shades closed and then to crescendo a dramatic amount, becoming a very powerful chorus reed dominating the ensemble, admirably leading congregational singing or serving as a solo stop. This six-rank organ has a *full-Swell* effect of real grandeur.

Modern Touches

The heart of this organ, like Cocker's scheme, is three straight stops: Great - 8' Open Diapason and 4' Principal: Swell - 8' Trumpet. The modern electric-pneumatic action with individual valve, expansion cell windchests has made it possible to expand the versatility of this *multum in parvo* plan, first through a full array of couplers, and second through octave extension and duplexing. The two secondary voices, Dulciana and Lieblich Gedeckt, fill several tonal roles to enhance accompaniment and add solo colour. Finally, the simple combination action is made economical by application of electricity.

The Essence

After studying and working with the *multum in parvo* idea, I have come to the conclusion that what makes these little organs work is not so much the plan as the execution. Bold voicing (even if one has only a Diapason, Principal, and Trumpet) plus a really tight swell box are the points that matter most. If the other elements can be added and then embellished with a modern action, all the better. But in the end it is tonal colour and dynamic range, not size, that count.

Bishop Spencer Place Chapel

KANSAS CITY, MISSOURI

SCHOENSTEIN & CO.

Great

Open Diapason – Full Bass (Display Bass)	8	61 pipes
Open Diapason – Soft Bass (Gedeckt Bass)	8	
Dulciana (Sw)	8	
Lieblich Gedeckt (Sw)	8	
Principal Great Super Octave	4	61 pipes

Swell

Dulciana (Gedeckt Bass)	8	49 pipes
Unda-Maris (TC)	8	49 pipes
Lieblich Gedeckt	8	61 pipes
Dulcet	4	12 pipes
Chimney Flute	4	12 pipes
Nazard (from Chim. Fl.)	2 $\frac{2}{3}$	
Trumpet	8	61 pipes
Tremulant		
Swell Sub Octave		
Swell Nominal Pitch Off		
Swell Super Octave		

Pedal

Bourdon	16	12 pipes
Lieblich Gedeckt (Sw)	8	

Couplers

Great to Pedal, Swell to Pedal, Swell to Pedal Super Octave

Swell to Great Sub Octave, Swell to Great, Swell to Great Super Octave

Electric-Pneumatic Action

Combination Pistons (Capture System)

Great and Pedal 1-2-3-4-5-6, Swell and Pedal 1-2-3-4-5-6

Balanced Mechanical Expression Mechanism

Master shoe controls all stops except notes 1-12 of both Bourdon and Open Diapason

Trumpet shoe controls separate box within the master box, which contains the Trumpet

Wind Pressures: Enclosed pipes, 3.3/4", Unenclosed pipes, 3"

Another quite similar instrument (except that the Great is unenclosed), is located in the gallery of a very large Episcopal parish church in Houston, Texas. It will serve as the Parish's only instrument until a new three-manual Schoenstein chancel installation is completed.

St. Thomas Episcopal Church

HOUSTON, TEXAS

SCHOENSTEIN & CO.

Great

Open Diapason	8	61 pipes
Dulciana	8	<i>Swell</i>
Lieblich Gedeckt	8	61 pipes
Principal	4	61 pipes
Great 16		
Great Unison off		
Great 4		

Swell (Enclosed)

Dulciana	8	61 pipes
Unda-Maris (TC)	8	42 pipes
Dulcet	4	12 pipes
Trumpet	8	61 pipes
Swell 16		
Swell Unison off		
Swell 4		

Pedal

Resultant	32		
Bourdon	16	12 pipes	<i>Lieblich Gedeckt Treble</i>
Dulciana	8		<i>Swell</i>
Lieblich Gedeckt	8		<i>Great</i>
Fifteenth	4		<i>Great Open</i>

Couplers:

Great to Pedal 8, Great to Pedal 4, Swell to Pedal 8, Swell to Pedal 4, Swell to Great 16, Swell to Great 8, Swell to Great 4, Great to Swell 8, Great to Swell 4.

Mechanicals: Electric-Pneumatic Action, Solid State Combination Action with 10 memories, 32 pistons and toe studs, Great to Pedal reversible, Swell to Pedal reversible, Full Organ reversible, Crescendo Pedal.

Wind Pressure: 4" throughout

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From the Same Issue. . .

An excerpt from Roger Fisher's article

A Clutch of Miniatures



Much as I love to play and to listen to some of the world's largest and most resourceful organs, I often find that rich rewards come from playing and listening to very small instruments so here are brief descriptions of some of those which have given me exceptional pleasure.

My final choice is an instrument which I have only heard on CD. It was built by Schoenstein in 1988 and stands in the church of **Our Mother of Good Counsel in Los Angeles**:

Clavier I, Grand-Orgue expressif

1	Bourdon	16	(7 & 15)
2	Montre	8	(61 pipes)
3	Flûte harmonique	8	(61 pipes)
4	Prestant	4	(61 pipes)
5	Octavin	2	(61 pipes)
6	Basson-hautbois	8	(61 pipes)

(Basses of 1 & 3 not enclosed)

Clavier de pedales

15	Bourdon	16	(12 pipes rest from 7)
16	Basse	8	(from 3)
17	Bourdon	8	(from 7)
18	Trompette	8	(from 11)
19	Basson	8	(from 6)

Clavier II, Récit expressif

7	Bourdon	8	(61 pipes)
8	Viola de gambe	8	(49 pipes) (bass from 7)
9	Voix celeste (T.C.)	8	(49 pipes)
10	Flûte octavante	4	(61 pipes)
11	Trompette	8	(61 pipes)
12	Basson-hautbois	8	(from no. 6)
13	Tremolo		
14	Récit	4'	

This organ is notable, not only for the flexibility of registration that the borrowings make possible, but also for the extra dynamic variety of separate enclosures for the manuals, a feature which is successful, not only because of the design of the swell boxes themselves, but also because of the open placement of the organ within the building. My own house organ is also totally enclosed and both instruments disprove old theories about the need to place diapasons in the open to enable the tone to expand. If that be so, why were we told at the height of the classical revival that, for tonal success, each division should be in its own housing to ensure good blend — surely theories are not enough and fine design is the final arbiter where enclosure is concerned.

The other notable factor here is that, like many of Cavaillé's small instruments, the pedal organ is almost entirely derived from the manuals. This is the case on my house organ, too (but with more registers derived from fewer pipes) and no one has complained of lack of independence, whether the organ is being used for teaching, master classes or even recitals — as on Schoenstein's CD. I find, at home, that it's all a matter of discerning registration — certainly I can find enough balancing combinations for Bach playing.

Another aspect of the Schoenstein instrument is the superb tonal finishing — there is no doubt that Jack Bethards has absorbed the Cavaillé-Coll aesthetic and carried it out with panache. Moreover, as heard on the CD, the organ has been tuned to a degree of precision which is rare these days.

Returning to the individual registers, the Flûte harmonique is outstanding — it glows. Also the reeds, which have all the fire and intensity of French examples, but they are so even and polished that they are very far from the roughness which so often passes for authenticity in the French style! Small as it is, on recorded evidence this is an exceptionally beautiful instrument and Kurt Lueders playing of it on this CD sounds as if he is loving every moment of it.



The Schoenstein organ in Our Mother of Good Counsel church, Los Angeles