

This paper on the Swiss firm of Metzler was read at the foundation conference of the British Institute of Organ Stuidies in 1976 and was published in The Organ Yearbook VIII (1977) p64. Someone may be able to comment on the development of the firm in the twenty years since then.

A NEW DIRECTION IN ORGAN BUILDING REFLECTED IN THE HISTORY OF METZLER UND SOHNE

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It was in 1890 that Jakob Metzler, an Austrian who had migrated from Schwarzenberg in the Bregenzerwald, started an organ workshop in Felsberg, near mountain-walled Chur (Kanton Graubunden). Initially he was concerned with repairing and rebuilding small mechanical instruments, not following the new fashion for pneumatic action until about 1905. Some of his work still exists in villages of Graubunden.

Jakob Metzler died in 1925, having already passed the business to his two sons. There was a shortage of work, however, in this backwood region impoverished by post-war inflation and in 1930 Herr Oskar Metzler moved down to a central, industrialised area, setting up his own workshop in Dietikon, below Zurich. He soon had work enough for ten employees and attracted skilled hands. In 1934 he gambled on the erection of the present grey three-storey workshop block and started fabricating his own metal pipes. According to size, his organs had pneumatic or electric action, but from 1935 he reverted to slider chests in all cases. Important 45-stop instruments were provided for the Pfarrkirche, Muri (1937) and the Stadtkirche, Biel (1943). The latter organ showed 'baroque' influence in the stop-list. It also demonstrated Metzler's readiness for innovation in employing the Schwimmer under-chest wind regulator which had been invented by the engineer Maag of Zurich. To provide unvarying wind pressure with a saving of space, the Schwimmer is now in world-wide use, although Metzler was subsequently one of the first organ-builders to make the return to old-style reservoirs on account of their natural and living response to music.

There were developments of a more beneficial nature in which Metzler took the lead. He built the first modern mechanical actions in Switzerland (house organ for Dornach, 1937, and the Zollikon Dorfkirche, 1939) and took the remarkable decision at the end of the war to abandon remote key-action altogether. This initiative was based on his own convictions - the customer had to be persuaded - and he recalls with pleasure his father's prediction, now largely realised in Switzerland: 'You will see the day when once again only mechanical actions are made'.

Meanwhile, Oskar Metzler's two sons completed their apprenticeship and joined the firm - Oskar Jr, cabinet-maker and action specialist, in 1943, and Hansueli, voicer and organist, in 1945. The style which developed at this time was to spread across Switzerland, particularly under the influence of Ernst Schiess, the Bernese organ consultant. To a large extent the dicta of the Orgelbewegung were followed, in reaction against the symphonic organ: mechanical key-action, a return to the Ruckpositiv instead of a swell division, a minimising of the number of 8ft registers, chiffy speech from un-nicked languids, and thinness of tone resulting from low wind pressures. The better Swiss firms, however, avoided unmusical extremes and Metzler in particular, building instruments of fine craftsmanship and finish, reflected Swiss sensibility in making his pipes sound very clean and pastel-coloured. Even so, the chorus build-up would not pass the test of developing in majesty but without an increase of harshness. The search, then, was to find a strong, healthy yet pure tone which avoided the aggressive chiff and inharmonious buzz characteristic of contemporary German instruments, without reverting to the warm but inelegant thickness in sound of more conservative firms like Kuhn of Mannedorf, who retained

their French trained voicers and compromised Orgelbewegung specifications with a somewhat coarsened version of late-romantic tone.

The way ahead in the late 1950s was shown by the Dutch and Scandinavian builders. Hansueli Metzler sees their influence, especially in the adoption of open foot-hole voicing, as a turning point in his firm's stylistic evolution. A close association developed with Poul-Gerhard Andersen of Marcussens, and Metzlers became a leading exponent of the forthright, cool and dazzling northern sound. Commissions for major instruments at this time gave them a challenge which resulted in epoch-making creations for the cathedrals of Schaffhausen (1958), Zurich (1959), and Geneva (1965). For both the latter organs Andersen designed outstanding cases combining Werkprinzip layout with modern styling in an unusually satisfying manner. At the same time Andersen must have had considerable influence on scaling and design in general. The large Swell divisions include strings, and the electric stop-control mechanisms incorporate plenty of pistons which at Zurich are independent for each manual in the English manner. These organs possess strong personality and are immaculately finished; tonally there is great diversity without loss of unity, and dazzling excitement is offset by refinement and subtlety. Having adopted the Scandinavian style, Metzlers brought it to its highest point of development. By the mid-sixties the name of Metzler was becoming known outside Switzerland and orders in other countries, particularly Holland, further spread their reputation.

Exciting and impressive as these organs are, the results do depend on a kind and expansive acoustical environment: the excitement embodies an element of harshness which is exposed in choruses and reeds. They lack the body and warmth, the singing vocal personality, the purity and nobility of vintage organs.

Painstaking restorations of a number of old Swiss organs at this time brought Metzler into contact with early organ-building practices. For the Johann Andreas Silbermann organ at Arlesheim, Baselland, Metzler had, in 1960-61, a first experience in making stopped metal pipes with caps soldered on, and, at the insistence of the perspicacious consultant, Heinz Kobel, the old winding was reconstructed instead of being replaced by Schwimmer regulators. As a result, Arlesheim is one of the best-sounding remnants of the Strasbourg Silbermanns - a wonderful monument, even though post-war stridency still shows in the new mixtures and reeds.

Metzler's emergence as a pioneer was, however, due to the influence of Bernhardt Edskes. Guided by his brother, Cornelius Edskes, the doyen of Dutch church and state organ experts, Bernhardt had been studying the lost methods of the old masters, whose work is better preserved in Holland than anywhere else. He saw a need for a new direction in European organ-building as a conscious reaction against the misconceptions of the post-war Orgelbewegung. For the true organ reform, Edskes believes, had never reached Germany. Albert Schweitzer's original campaign was directed against the inartistic excesses of the 'factory organ' which had developed in Germany by the end of the century, and, at a slower rate, also in France, Italy and England. It was largely a question of quality rather than quantity. Yet in modern Germany, organ-building became again a vast factory-based industry which has in fact rejected many of the traditional characteristics of both the baroque and romantic organs loved by Schweitzer.

An explanation is found in the German tendency to overeact. which was never stronger than after the war when there was a determination to break with the past. Yet the energy of the German people, the opportunities available after so much destruction, and the incentive of economic redevelopment all led to the re-establishment of the organ-building industry. Redevelopment funds, church tax and business instincts were all in favour of production lines. The ideological need was answered by reaction against the symphonic organ. Instead of imprecise actions and sliderless chests with high wind pressures, poor materials, haphazard layout and excessive foundational weight, there would be mechanical action with slider chests, low pressures

(excessively so - under 3" as a rule, com pared with 3" to 3.75" common in old organs), high contents of tin for the pipe metal, Werkprinzip layout with pipe-boxes (no matter how cramped), and narrow scaling with a minimum of foundational tone. These features, in reality only partially coinciding with traditional practice, were translated into slogans to engender enthusiasm for the new style, which was proclaimed the fulfilment of the Orgelbewegung. But to break with tradition is dangerous; and, in fact, the neo baroque organ is further removed from the eighteenth century than were the organs of the nineteenth century. It is constructed under a modern aesthetic that is brash and insensitive, often showing little awareness of the subtle beauty and grandeur of the past. Its side-effects have included the ruin of many vintage German organs by so-called 'restoration' according to neo-baroque principles (including lowering the cut-up of pipes), and the unfortunate influence of the movement internationally even where, paradoxically, mechanical action is not yet accepted as a fundamental virtue.

Other countries which participated with zeal in the post-war Orgelbewegung - Holland, Scandinavia and Switzerland - avoided its excesses but not its misconceptions. The need for a more profound effort to recover the secrets of the old masters was first recognised in Holland in the 1950s. Cor Edskes's opposition to many restorations of that time led to a timely controversy (2). In 1960 Cor Edskes guided Ahrend & Brunzema to a first attempt at an historically based instrument at Scheveningen Zorgvliet Kerk. International flood-aid to Holland in the same year brought Metzlers into contact with Bernhardt Edskes, then acting as consultant for a replacement project at Heenvliet, near Rotterdam. Initially neither party had enthusiasm for the ideals of the other.

In order to give a new direction to organ-building based on a re-discovery of the spirit of the work of the old masters, Bernhardt Edskes was seeking a stable, financially strong and well-equipped firm with plentiful workshop space. He needed craftsmen accustomed to perfection and he was looking for a firm which had been through the experience, largely negative, of experimenting with modern materials and design; a firm prepared to sacrifice all preconceptions and habits in following the old masters. All these things Edskes found in Metzler, and he joined the firm as designer in 1963.

Edskes's aim was not merely to copy old organs, having studied their construction in greatest detail, but to make new ones in the spirit of the old, with which object he has immersed himself in the outlook and aesthetic of earlier builders. As a designer and organist he sees an organic relationship between each part and the whole; a series of remarkably unified masterpieces has resulted. Always free-standing, framed and panelled in solid hand-planed timber, with finely-carved pipe-shades and highly polished case-pipes, they are reminiscent of old Dutch organs of noble and satisfying proportions. To find them over-studied and wanting in spontaneity would be to undervalue the immaculate correctness due to the rigour of their conception. Fortunately this is in keeping with the serious Swiss approach to art and church.

These visual aspects are paralleled in the tonal character of the Edskes/
Metzler organs. There has been a dogged search for perfection, for body
with clarity, for strength with purity, for majesty with economy. Each stop
seems part of a whole, and even unconventional combinations form new
unities. Build-up of the chorus strengthens the fundamental, a subtle
result of proper internal resonance. The vowel component approximates the
rounded 'O' of the Dutch tradition in all voices. The 8ft principal is
again the key to the whole instrument, determining the height and width of
the case and the size of the main chest. Its tone is simple, natural and
free, with unaffected warmth; no heaviness of the flute nor thinness of the
string, no fuzziness or breathiness of the neo-baroque organ. Even alone,
it has fullness, clarity and precision enough to take any Bach fugue. This
must be so if the principal is to provide a sure foundation to the chorus,
for the upperwork should serve to add brilliance, power and majesty to a

self-sufficient foundation rather than be a camouflage for a lack of promptness and clarity in the foundation pipes.

This was the Kernklang the search for which led Metzler in the 1960s to voice without heed of the environment, so that instruments were often incongruously loud. The maximum energy was developed in each pipe and focussed into the pure harmonics. Listened to, the choruses of this period are overwhelming in magnificence and power; but they rapidly become overbearing, to some ears even painful. Then in about 1970 the tone became more relaxed, the elusive ideal was captured and the natural vocal qualities appeared.

What are the secrets of Metzler's voicing? Gottfried Silbermann is reported as saying: 'My best voicer is my pipe-maker'. At Dietikon one can take newly made pipes at random from the pipe-maker's bench and find that each will speak perfectly, and would hardly need the voicer's attention. (The mouths in fact are already cut out in the flat.) Anout 1965 Metzlers resumed the ancient practice of hammerting the metal after planing. This tensions the metal and allows a pipe to ring like a bell when tapped, providing a resonance which can be coupled with the acoustic resonance. Hansueli Metzler revealed that hammering makes the voicer's task much easier. The hammering machine is not shown to visitors, but an adequate description is given by Dom Bedos. Only case-pipes are not made of hammered metal.

Metzler uses tin contents lower than is customary today - principals vary from 25 to 70%, flutes have 10 to 25%, and case-pipes are of 80% tin. This, however, is regarded as a point of secondary importance. Completely open foot-holes? Not necessarily, but again of secondary importance. Nicking? Where necessary, particularly in the 4ft to 2ft region of the principals - but small, fine Haarsticke as used by organ-builders of the seventeenth and eighteenth centuries. The bevel of the languid is 65-70 degrees for flutes and 70-80 degrees for principals, changing so from bass to treble. Languids are of low tin content to encourage the early development of a patina.

By 1965 the Metzlers had installed their own wood mill, and some of their timber comes even from their own forests. Ninety per cent of it is oak, seasoned one year for each centimetre of thickness. Fine-grained mountain pine from tall straight trees high up near the tree-line is used for small pipes, and so sometimes is larch. Trackers and pallets are of pine and quite traditional; no plastics are used and every component is manufactured in Dietikon. Sometimes wooden rollers are used, but normally they are of 9mm or 11mm steel tubing which results in unusually compact rollerboards. Recently, the amount of felt in the action has been reduced since felt causes friction. Plenty of space is left between wires and holes for the same reason. Sliders are of oak and operate lightly even though the ball-bearings of the 1950s have gone.

After Geneva Cathedral indirect stop-action was rejected on idealistic grounds of unity and practical grounds of simplicity and reliability. Other aspects of the return to historic style have become apparent in the last five years. The manual compass was reduced to f''' which has been found to be the limit of satisfactory voicing of mixtures, cornets and reeds. No 4ft reeds are used in the manuals. The pedals, C-f', are now straight and parallel in traditional style which, Edskes maintains, is as natural as the straight piano keyboard, for the human body orientates itself in relation to vertical and horizontal lines. The Albankirche, Basle, saw the reversion to free-breathing wind reservoirs in 1967, to give the sound a natural responsiveness to the music. The reservoirs are not necessarily as large as formerly and are interrelated with size of trunking. Wind pressure varies between 70mm and 95mm (2.75 - 3.75 in.) Important for the purity of tone is the use of unequal temperament, which has been standard practice now for five years. Initial trials included restitution of the mean-tone tuning in the choir organs at Klosterkirche, Muri, in Argau. Metzler frequently uses a temperament with six perfect fifths; it appears to be

suitable for Mendelssohn but gives a certain grittiness and false colouring to Franck's harmonic palette. Open flues are cone-tuned, and stopped pipes have fixed caps. The tuning stability which results is extraordinary. The flues at Netstal did not need tuning after eight years when Anton Heiller made his recording of Das Orgelbuchlein.

Whereas by 1950 the number of workers at the Dietikon establishment exceeded thirty-five, from 1958 it was gradually reduced in order to improve quality control and to keep all voicing in one pair of hands. The present staff of eighteen are nearly all of Metzler training, and produce six to eight instruments per year. In spite of the great demand for Metzler organs, delivery time is kept down to three years by refusal to build for modern buildings and unsuitable acoustics. Large orders, such as for the cathedrals of Uppsala and Haiti, have been turned down on account of size and distance. Unit cost at present is approximately S.Fr. 10,500 per rank. The Dietikon workshop has had inestimable influence on Swiss organ-building which today, in quality of craftsmanship, materials and design, and in the way independent artist-builders stimulate one another, is comparable to the situation in England 125 years ago. Swiss builders trained by Metzler in clude: Mathis (Nafels, Glarus), Fuglister (Grimisaut, Valais), and Grenacher and Schmidt (Firma Goll, Lucerne); and in Canada there is Karl-Wilhelm (Montreal). Oskar Metzler Sr has been in an active retirement since 1974, and Berhardt Edskes, while continuing as Metzler's sole designer, is extending his influence by undertaking work for other builders.

Notable instruments of Metzler's development phase, 1963-1970, include those for Netstal (1964), Brugg Stadtkirche (1967), Zurich Josephskirche (1968), Baden Stadtkirche (1968-69), Frauenfeld Stadtkirche (1968), and The Hague Cathedral (1970; with its 32ft front, the largest ever built in Switzerland). The recent, matured style is shown, for instance, at Solothurn Cathedral (choir organ, 1972), Zurich Martinskirche (1973), Rheinfelden Reformierte Kirche (1974), Fislisbach (1974), and St Polten in Austria (1974). Important restorations in Switzerland include Arlesheim (1960-61), Sitzberg (1959) and above all the three instruments of the Klosterkirche, Muri (1962-72) which represent the finest assemblage of historic organs in existence. Among restorations in Holland are those of the Schnitger organ at Nieuw Scheemda (1968) and the Hinsch organ at Wassenaar (1974), the latter being singularly outstanding.

The results of the Metzler-Edskes partnership since 1970 suggest that at this stage of European cultural history there is no more satisfactory ideal for the artist organ builder than a return to the letter and spirit of earlier traditions. Since the modern organ repertoire centres on the past, it is surprising only that this principle is not more widely recognized. Here we find the roots of an Orgelbewegung true to Albert Schweitzer's ideas. Furthermore, a way is pointed to an authentic resolution in tonal terms of the current conflict between baroque en thusiasts and lovers of the romantic organ; for the latter can be seen as but a development of the earlier tradition. Other artist organ builders may not desire to imitate Metzler in style but can learn the inescapable moral: that a finally satisfying result will only be achieved by accepting the discipline of stylistic unity rather than pursuing the chimera of stylistic eclecticism.

Notes

(1)

This paper was read to the Foundation Conference of the British Institute of Organ Studies at Cambridge, July 1976.

- (2) The 'restoration' of the Muller organ at St Bavo, Haarlem by Marcussen (1958-60) was typical and reminds one of current English restoration practice:
- a) tuning changed to equal temperament and open pipes cut down to take tuning slides
- b) replacement of the single-arm suspended action with modern backfall type

- c) renewal of wind-supply and the old reservoirs replaced by modern regulators
- $\ensuremath{\mathtt{d}}\xspace)$ the old slides unnecessarily replaced with a modern type
- e) replacement of every reed tongue with new and thinner tongues
- f) removal of the original fine nicking
- $\ensuremath{\mathtt{g}}\xspace)$ additions to the specification
- h) reduction in the wind-pressure