The Trials and Tribulations of the Perfumer

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The general theme requested by the program committee, Creation Through the First Production Batch, began my thinking on the trials and tribulations the perfumer has to face up to in creative work, before the product actually goes into production. Having thus set the stage for my act, so to speak, I could not think of a better title than The Trials and Tribulations of the Perfumer. Please, do not expect me to tell you how I go about creating—the subject is too abstract to put into words—but I can tell you some of the problems inherent to the perfumer's profession.

I shall keep my paper geared to the problems of the perfumer of an essential oil-compound house in Europe exporting a major part of its production worldwide. I am purposely stressing the point of worldwide exports because this has a direct bearing from the outset on the modern perfumer's code of conduct. Before getting into the thick of the subject, I think it would be interesting to make a comparative survey of the practice of the perfumer of a finished goods house and that of the perfumer of an essential oil-compound house. In the course of my career I have been on both sides of the fence and thus appreciate what distinguishes these two types of perfumers.

The expertise of the resident perfumers in finished goods houses plays an important part and contributes largely to the success of their firm. This success is shared with all the departments of the firm involved in launching new products, be they perfumes, toiletries, or skin care products, in short, any product where fra-

grance is a decisive factor in the quest for success. In other words, the modern resident perfumer has to fit into a team and follow the rules of the game in any creative work.

Apart from keeping within a set costing policy and fitting into given profiles, what do these rules involve? They involve following the company's policy as far as safety is concerned, which can mean having to comply with RIFM and IFRA guidelines and with any other in-house guidelines. The perfumer also gets very much involved in quality control and technical advice to the purchasing division with the satisfaction of being able to select raw materials and suppliers and to have a free hand in using specialty bases and compounds from a wide selection offered by suppliers. The resident perfumer's task in a finished goods house is fascinating and difficult but restricted to creating in the style and image of the employer firm. This firm is virtually the perfumer's one and only customer. I have lived this experience and recall now that I got very much more involved in production then than I ever have while working for an essential oilcompound house.

Now let us look at the situation of an essential oil-compound house as seen from the perfumer's point of view. The perfumer has to operate very much in the same way as mentioned earlier on, but being in a compound house with a calling for worldwide exports, the constraints the perfumer has to put up with are multiplied.

Safety first is a constant "leitmotiv" and complying to RIFM and IFRA guidelines is routine and almost child's play compared with some of

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the other restrictions imposed by certain customers. With a view to making fragrances as safe as possible and exportable to anywhere in the world it is not unusual for me and my fellow perfumers to work taking into account the twenty restrictive lists we have recorded in our computer. These twenty lists cover all the continents where we have customers. Fortunately, it is rarely necessary to have to make fragrances to meet all of the requirements of these twenty lists at the same time, but it is quite usual for me to develop products that cover up to eighteen out of the twenty lists. Readers might be tempted to ask why it is necessary to have such a wide range of restrictive lists when probably four to six lists would suffice. The answer is that I work for a compound house and the firm relies a lot on export for its turnover.

A simple example will make things clear. If I develop a speciality base or compound that complies only with RIFM and IFRA guidelines, the chances are that it will only be suitable for alcoholic perfume formulation in a limited number of countries. If on the other hand I develop a speciality base or compound that meets a far greater number of restricted lists, the chances are that it will be eligible for use in formulation covering a wide variety of uses worldwide. In compounds for alcoholic perfumery I aim at covering up to twelve restrictive lists; for skin care products from eighteen to twenty lists and for sun products and eye makeup twenty lists is the target.

The perfumer in an essential oil-compound house has the advantage of being at the source of many natural raw materials and in-house chemical isolates and synthetics. The benefit of a firm's "know-how" in various extraction and distillation processes gives the perfumer access to unique products. One slight drawback—the compound house perfumer is generally dissuaded from using outside specialty compounds except in very specific cases. The advantages for the firm, however, are manifold:

- —This restriction stimulates the creation of inhouse specialty compounds.
- —With in-house specialties in formulation, the firm has 100% control of the constituents of its formulae.
- —The firm does not have to rely on outside suppliers, particularly when big orders and urgent deliveries are at stake.
- —Last but not least with in-house specialty compounds, checking compliance with safety guidelines is made easy.

The perfumer in a finished goods house creates fragrances to fit into given profiles from the firm's

marketing people. The perfumer in a compound house has to work on projects from numerous customers, which means fitting into profiles from a wide range of marketing people. Most marketing people nowadays are highly professional but nevertheless the compound house perfumer does occasionally have to cope with outrageous requests. I recall, years ago getting a request for a men's cologne which was to be reminiscent of the atmosphere of the barrack-room of a given cavalry regiment. I hardly recall with delight the atmosphere of the barrack rooms I frequented in World War II.

Over the last two or three decades we have witnessed many changes in the world of perfumery, which leads me to say that the perfumer must be gifted with a great power of thick-skinned adaptation. When you consider the hundreds of formulae a perfumer develops after numerous experimental trials and the relatively small percentage of formulae that actually develop into sales, I am sure you get my meaning. Years ago the perfumer often had direct access to would-be customers who sometimes would act as partners in the development of a fragrance. New sales and marketing techniques have changed the face of our industry and today most perfumers have had to forego the privilege of this direct contact with the decision maker in favour of a go-between named marketing. In the early days of marketing there was a certain amount of embarassment between perfumers and marketing due to a lack of mutual understanding. Today we have learned to live together and perfumers and marketing people are certainly pulling their weight judging from the number of launches in every field of perfumery.

Marketing, a now well established and accepted institution, has brought in its wake the need for evaluation boards. In firms where you now have teams of perfumers, evaluation boards are proving their usefulness and perfumers have adapted to this situation. The only fly in the ointment, as far as the perfumer is concerned, is the low cost level on certain projects. This is certainly frustrating and detrimental to the aesthetics of perfumery and if anything should be done, a fairer share should be allotted to the perfume compound in budget plans prior to launching. Since the 1950s raw material prices have been escalating but there has been a constant reduction in price targets on projects the perfumer has to tackle. Perfumers need an enormous talent for creativity coupled with a good sense of humour to meet the requirements of certain very low cost projects.

Mentioning restrictions always seems to

suggest something negative, but looking at the matter with philosophy one discovers that, like in electricity, there is always a positive somewhere. Necessity being the mother of invention rings very true to the perfumer, for when we compare formulation twenty years ago with formulation today, we realize how precious has been the contribution of research and new technologies in coming up with new and exclusive raw materials. Some of these have enabled the perfumer to obtain special effects and to abandon the use of blacklisted or restricted materials.

Creating is fascinating and vet one of the most difficult facets of the perfumer's art, largely because a creation is not designed to be a unique showpiece but to be reproducible in quantity. This requires foresight and planning. Before creating a fragrance for a customer's project, it is of course essential for the perfumer to know what cost price will be alloted. It is also vital to have an idea of the tonnage of compound the customer is likely to require. This last information is important becaase it will influence the perfumer's choice of raw materials. For instance, if the customer is one of the large firms in the industry, all raw materials that have a bad supply record should be avoided, natural products where only small crops are available are best left out, materials with prices that have the uncanny habit of fluctuating incessantly on the world market should not be depended on.

I remember developing a soap fragrance some years ago in which I was using an unusual essential oil. The fragrance was to be presented to one of the big soapers and when I was informed what the tonnage requirements were likely to be, I discovered with horror that the world supply of the unusual oil I was using would not have covered our requirements. This is typical of what can happen if the perfumer lacks either experience or certain vital information prior to reaching the

sample submission stage.

The perfumer's intervention should not cease once the fragrance has been adopted by the customer for, prior to making the first delivery, it is advisable to make a small pilot batch as a trial run to compare it with the adopted sample. This is a good safety measure to check if the odour difference between the adopted sample and the trial batch is normal and minimal. Both the supplier and the customer must realize that there will always be an odour difference between the reference sample that has had time to mature and a freshly made batch. This checking of the odour of the fragrance should be done by the perfumer together with the quality control people, for it takes an expert nose to estimate whether a new batch will mature to resemble the reference sample. The perfumer may also have to prescribe a maturing period before delivery, for it is a wellknown fact that certain fragrance types require more aging than others. Knowledge within the firm of this prescribed aging period is important because it must be taken into account in purchasing and manufacturing schedules.

Once the fragrance has been safely put into the production line and the first batches have been certified up to standard, the perfumer should no longer have to intervene and total responsibility for checking should be taken over by the quality control division. Odour differences between reference samples and batches can and do arise and this is intimately connected with the age and origin of the raw materials used. For example let us say that if the sample adopted by a customer was made last year, the chances are that some of the natural raw materials in the sample will be from last year's crop, or a previous crop and the first batch made this year will contain products from the current year's crop. This alone can account for slight differences in odour, even when all analytical specifications are up to standard.

Production problems can be avoided if all information concerning a project is correctly exploited and handed down to all persons likely to be involved in it. Periodical reports on the market situation and availability of raw materials are of importance to the perfumer. Price stability, within reason, is a must, because the supplier may have to guarantee delivery of the compound without any price increase for up to two years. If an important crisis does arise, either involving the supply of a raw material or an unacceptable price increase or a change in RIFM-IFRA guidelines, the first course to follow is to make a modified version of the compound and to submit it to the customer for approval while giving the reasons justifying this action.

Creation should be geared to the ultimate target: production and sales. In perfumery, creating a masterpiece that cannot be put into production is irrational. In order to forestall production problems before they arise, frequent contacts are indispensable between the buying division and the perfumer concerning raw materials. This is particularly necessary when it comes to searching for alternative supply areas for a product in short supply or for a product that has become obsolete in the usual production

In the perfumery industry we have occasionally witnessed the shifting of crop areas to new geographical areas. The reasons for these transfers are generally political and economical, but for the perfumer this usually means a difference in odour quality and the need to select new standards to replace the obsolete quality. Geranium oils from La Reunion, from Morocco and Egypt are finding competition now from geranium oil from China. Jasmin concrete traditionally produced in Grasse is also produced in Morocco, Egypt, Italy, Algeria, South Africa, and India, but the absolutes from those concretes all display different odour characteristics that require selection on the part of the perfumer. These are just two illustrations of the shift of crop areas.

It is interesting to note that the shift is generally from west to east and, in certain instances, back to the area from where the plant originated before migrating west. The jasmin flower, for instance, originated in Northern India, in Nepal to be more precise, and it was introduced into Europe in the 17th century probably via Persia.

Wars also influence the perfumery industry. A genus of marigold was accidentally introduced into South Africa during the Boer War in the pack mule fodder British troops brought from Sudan. The wild marigold became prolific and was called Khaki Bos, an Afrikaans word meaning

Khaki Bush—the word *Khaki* referring to the colour of the British military uniform. South Africa now produces marigold concretes and absolutes from this plant. A somewhat similar phenomenon occurred in Japan where a weed bearing yellow flowers and growing profusely is reported to have been accidentally introduced by the U.S. Forces. Talking about Japan, I remember it being a big supplier of mint oil of the arvensis type, but owing to the war, Brazil became and is still a major supplier of this oil. In World War II the western perfumery industry was cut off from supplies from Africa and Asia and new experimental crop areas were developed in Guatemala, Brazil and Honduras.

After this little geographical escapade let me wind up the subject of getting a compound into the first production batch by stating briefly that (provided the perfumer and purchasing do their homework properly) all problems related to the fragrance will be resolved before reaching the production stage. In fact they should be tackled before the creative work is accomplished. This can only be carried out smoothly if a good relationship exists between the perfumer and all the departments involved in meeting the requirements of a profile.

I would like to pay tribute here to one of the departments which does not often get in the limelight but which nevertheless plays an important part in testing the perfumer's products, thus helping to make safe and stable products. I am, of course, referring to the people in the application laboratory. This good relationship I mentioned is possible provided the perfumer is an all-round good mixer and an accomplished person who likes to keep abreast with what is going on in the trade and in the world.

The compound house perfumers are very adaptable creatures but hope to be relieved one day of part of the burden of some of the constraints that cramp their style. A universal policy on safety guidelines, a better deal for the perfume in the total mix budget, longer deadlines on projects requiring creativity are just a few of the wishes perfumers hope to see come true for the benefit of the aesthetics of perfumery.

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