

## THE PERFUMER'S ART\*

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It is with pleasure that I avail myself of the opportunity to present a few personal ideas on the art of perfumery. Such a subject cannot be exhausted in a few minutes and I do not pretend to do so. Therefore, I am only going to talk about certain facts which I deem particularly pertinent. Having devoted all my life to the art of perfumery with firms in Paris and Grasse, I would be happy if, in giving you the French point of view on those subjects I can contribute, in a modest way, to a better understanding and co-operation between the technicians of both countries and thereby further the advancement of our marvelous science.

The great strides made by the American perfumery industry during the last few years have resulted in such an improvement in the methods of advertising, distributing and packaging of perfumes, that the success of a perfume is generally credited to these factors. Consequently, the part played by the quality of the perfume has remained

in the background. This is a serious mistake because, the quality is of primary importance. If we study, objectively, the perfume market, we see that if well-planned promotions have been successful, on the other hand, the perfumes whose success have best withstood the test of time are those of which the quality was decidedly superior. The others continue to sell only through a sustained effort and their sales fall off whenever this advertising and promotion slow down.

Inasmuch as I am addressing a group of technicians I do not think it necessary to stress that point, except to emphasize the advisability to make it generally known.

I shall endeavor to analyze for you the qualities that a good perfume must have and how this can be obtained.

I will classify these qualities in two groups: the artistic quality and the technical qualities.

Artistic qualities:

1. A perfume must be pleasant.
2. It must be elegant.
3. It must be original.

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Technical qualities:

1. A perfume must be powerful.
2. It must be balanced.
3. It must be lasting.

Let us first deal in detail with the artistic qualities.

*A perfume must be pleasant.* This is obvious and will be obtained through the excellence of the products used and also through the richness of combinations, or, rather as we say in French, "des Accords" of these products among themselves.

*A perfume must be elegant.* It must have "chic," that is, it must be in harmony with fashion although it must not have the temporary character of the latter.

*A perfume must be original.* Whether it is based on a new idea, a new accord, or whether it is a new interpretation of a note already known, it is indispensable that a perfume be original. It will attract not only women who are always looking for novelty but also those who are rather conservative.

Let us now deal with the technical qualities: strength, balance, and tenacity.

*A perfume must be powerful.* In order to compensate for the increase of price of certain raw materials it is often decided to reduce the concentration of perfumes. In my opinion, the result so obtained is just as disastrous as an orchestra heard from too great a distance or a beautiful painting poorly lighted. But, if it is obvious that the strength of the perfume is in proportion to its

concentration, I must add that the balance of the formula contributes also greatly to its strength, for it is through balance that we will obtain a perfume having body and leaving a lingering fragrance.

*A perfume must be balanced.* By balance we do not mean that a perfume must be so well rounded that it will present no dominant note. On the contrary, a perfume too much leveled off or overpolished, lacks character just as an overfinished drawing or a too monotonous tune. A balanced perfume means a perfume clear and clean cut. A perfume must not be a complicated mixture of pleasant odors the total price of which must not exceed a maximum determined by sales considerations. It must be the exact and living expression of a principal idea surrounded and supported by a proper background.

Therefore, a perfume formula must not be burdened by useless products which not only render its manufacture complicated and increase needlessly the necessary stock of raw materials, but also bring confusion to the perfume instead of making its proper note come out.

*A perfume must be lasting.* By this I mean that the characteristic note of the perfume must not change and that it must continue to effuse for several hours from the person who wears it.

I must insist somewhat on this point because if many fanciful tales have been said and written about the technique of perfumes, it is on the subject of fixation that the most

errors have been committed. It is true that many persons do not have a correct sense of smell. Certain people are afflicted with a kind of odor-blindness or astigmatism and make errors in odor values. Others are sensitive only to certain odors; others yet suffering from a sort of olfactory myopia have a very limited sense of smell. In our own profession we are not immune to certain temporary deficiencies, caused by colds, fatigue, a temporary physical indisposition or even by the climate or the surroundings in which we happen to be. But the knowledge that we have of our nose, the training of our sense of smell, the numerous daily checkups we make, and finally our custom of relying strictly on comparisons, enable us to have a certain assurance in our judgment.

Unfortunately, it is very often that we meet people such as the ones I have just mentioned. They are the ones who generally claim that perfumes are not lasting, whereas the contrary may have been definitely proved by test made by technicians having a trained sense of smell. The danger is that in order to comply with these requests for extreme lasting qualities we run the risk of sacrificing other qualities of the perfume. This is a serious error and it is our duty as technicians to avoid it.

Nevertheless, it remains true that a good perfume must be lasting and in order to obtain that result it is generally advised to use fixatives.

Fixatives have received the attention of the most authoritative

technicians and I don't want to discuss this point in detail, their respective value nor, the way they retain the perfume either by their porosity or in lowering the boiling point of the blend.

There are various opinions about fixatives but I feel that we must not depend entirely on them to increase, to a great extent, the value of a perfume if the latter has been poorly constructed.

In many cases if an odor remains perceptible longer it is that of the fixative and not the characteristic odor of the perfume.

However, the most efficient fixatives are the natural tinctures of Musk, Ambergris, Civet, etc. These products, aside from their fixative action, act as the binder of the various elements of the perfume and give it life. These tinctures are always used after being matured. Certain technicians use artificial and rapid aging, whereas others prefer natural aging for several years because they hesitate to stop using a process which has consistently proved satisfactory to them.

In passing, let us note that aging is also used for some oils like patchouli, vetiver, Bulgarian rose, whereas other oils must be used in their highest state of freshness.

Tenacity is also dependent on the chemical stability of the perfume. As you know, the raw materials used must be free from chlorine for instance, since this may alter the perfume. But it is also necessary to avoid other impurities which,

although hardly perceptible, when we smell the pure raw material, will act on the final compound and form secondary accords which will create in the perfume an unpleasant condition of confusion. I will not insist on the necessity of selecting raw materials in keeping with the medium in which the perfume is to be utilized. All of you know how different the products must be when they are to be mixed with an oil, powder, or soap.

#### CREATION OF A PERFUME

Once we have selected an accord or a combination of accords, pleasant and original, on which we decide to create our perfume, our first preoccupation will be to perfect carefully a good base taken from these accords.

Next we will have a lifting opening note to precede this base and we will prolong the effect of the base by means of a lasting background note. In other words, we may say, that we will have to develop three perfumes since the beginning and the background must harmonize with the principal note, the opening being made of volatile products, and the background, of very tenacious products.

To illustrate what I have just said I have selected a concrete and simple example—a violet:

I will add that although it appears to be simple, this perfume is one of the most difficult to make satisfactorily. In the first place this subject has so often been treated already that it may seem difficult to

arrive at something original. Secondly, the odor of the violet flower is so delicate and so light that it is just as difficult to make a *strong* perfume of violet as it would be in the realm of colors to make a loud tone of pastel.

We will avoid this difficulty by building our perfume around the principal note of violet, for what attracts us in a perfume of a corsage of violets is not only the imperceptible odor of the flower, but also that of the leaves, of the forest, and of the soil that the flower carries.

There is another obstacle: This perfume is so vegetal that it will be difficult to find an animal transition which will harmonize with the human body wearing it. This transition is nevertheless indispensable because we must never forget that perfumes must be worn by women and not smelled on testing blotters alone.

We will begin our formula by setting up its principal accord, based on an excellent Ionone Alpha mixed with Methyl Heptene Carbonate. Once the proportions of this compound have been well defined we will be able to perfect it by eventually adding Ionone Beta or Methyl Ionone Gamma, Delta, or Omega. Finally a good Rhodinol judiciously proportioned, will supply the necessary contrast to reinforce the basic note and make it stand out.

We will increase the richness of this base by adding Absolutes or Lavages de Pomades of natural Violet, Violet leaves, Cassie, to which we will give a flowery note by

means of Ylang, Absolute Jasmin, and a trace of Absolute Orange Flower.

Then, we will enlarge the accord with a dark tone, by using a trace of Absolute Reseda or a good specialty of that type. We will build a solid background with natural Orris, Vitiveryl Acetate, and a Violet Root base. The odor of earth and undergrowth would be obtained by means of a small quantity of Oak

Moss and one of the excellent mosses which are offered by various specialty houses.

The animal effect of transition will be given by Civet and Muscone, extracted from the American Muskrat, rather than tincture of natural Musk which has a secondary odor which may stand out unfavorably in a perfume as simple as Violet.

A slight rounding effect will be

VIOLET PERFUME FOR VARIOUS USES

	Extract		Cheaper Extract	Cream	Powder		Soap
Aldehyde C-8, 11, 12	1		1	1			
Citral Citron	2		2	2		Bois de Rose	40
Bergamot	8		8	8			
Ionone Alpha	400		400	500	500	Ionone Soap	200
Methyl Heptine Carbonate	40		40	40	40		40
Ionone Beta	20		20	30	20		
Methyl Ionones, Gamma, etc.	50		100	150	100	Methyl Ionones for Soap	100
Rhodinol	15		15	15	15	Geranium	10
Violet Absolute	20	Violet Syn.	200	100			
Violet Leaves Ab- solute	80						
Cassie Absolute	15	Cassie Syn.	20				
Jasmin Absolute	35	Jasmin Syn.	70	50	40		
Orange Flower Ab- solute	2	Orange Flower Syn.	4				
Ylang Extra	20		20	30	20	Cananga or Ylang III	100
Reseda Absolute	5	Reseda Syn.	5	5	5		
Orris Absolute	10		..	..	..	Orris Resin for Soap or Orris	250
Orris Resin	..		..	..	125	Liquid Dist. on Cedarwood	25
Vetiveryl Acetate	10		12	15	20	Vetiver	10
Oak Moss Resin	8		..	..	..		50
Moss Bases	12		18	18	18	Sandalwood	35
Heliotropine	12		10	16	15		
Anisic Aldehyde	10		10	20	20		
Ambergris Tincture	25	Labdanum Resin	1	..	5		25
Civet Tincture	100	Civet Syn.	4	..	10	Benzoin Resin	100
Muscone Tincture	100	Musk Ketone	40	..	50	Musk Xylol	35
	1000		1000	1000	1000		1000

given by using small quantities of Aubepine, Coumarin, Heliotropin, and natural Ambergris, whereas an initial note of freshness will be obtained with traces of Aldehydes C-8, C-12, Aldehyde Violet, Citral, and Bergamot.

This perfume diluted in a high-grade alcohol can—although it is made of expensive products—be balanced in such a way that the cost will not exceed that of a good French perfume.

If we want to derive from this formula a perfume less expensive or an oil for scenting a powder or a soap, we will have to do what I call transposition work.

For example: In the case of a less expensive perfume, we will replace the costly products (such as absolutes) with one of the numerous compounds offered at various prices by specialty houses. There is an important point which I must emphasize, that is: the replacement will have to be done on the basis of equal strength; if the product of replacement is, for instance, half as strong as the absolute which we eliminate, we will have to use twice as much of the replacement product so as to maintain the balance of the formula.

We will also have to modify the

formula if we want an oil for powder. In that case we will have to keep in mind that an oil for powder is generally cheaper than the oil we use for the extract. We must also take into consideration the fact that materials oxidize and evaporate more in powders than in the extract. We will have to use larger quantities of products like Orris, possibly use resinoid rather than concrete, reinforce the Vetiver notes, use fixative like Benzoin and increase the Civet.

It is evident that it will be very difficult to make an oil for soap, because Ionones are generally destroyed by free alkali which is present in soaps. Nevertheless, we may use a certain quantity of Ionones and Methyl Ionones as long as we fix them properly. According to the price that our compound must cost, we will use Ionones and Methyl Ionones of technical grade for soap and even some residues. If we can afford Orris Resinoid or Liquid Orris, distilled on cedar, we will use these products. Oak Moss and Synthetic Moss will furnish a very interesting background; a trace of Geranium Bourbon instead of Rose; Cistus or Labdanum and Clary Sage instead of Ambergris and a little synthetic Civet and Musk will complete the formula.