

The Perfumer's Apprentice
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(Disclaimer: this article was written in 1961, when attitudes towards women in perfumery and women in general were quite different than what they are now. I hope that readers of this paper can take this into consideration, and passages referring to women can just be read as though the author had referred instead to the consumer in general, both men and women.)

A Method of Creation in Perfumery
By Jean Carles (1961)

Part 2

Accords with Methyl Ionone

To facilitate their work, I recommend proceeding as follows: let us assume the study of all possible accords with the natural products listed under the base notes heading of the previously published table (relating to a classification of products with respect to the evaporation rate) is complete. The accords with synthetic or defined products can then be studied. With Methyl Ionone as starting material, for example, one of the more important perfume ingredients, it will be advantageous to work systematically, taking into consideration, where accords are concerned, various suitable combinations of the great variety of constituents offered to the perfumers choice, such as are illustrated in the examples shown.

The creation of accords

Methyl Ionone + natural products .

Methyl Ionone .
Vetiver
musk ambrette, etc.

Methyl Ionone + natural products + defined products

Methyl Ionone
Vetiver
Eugenol
musk ketone, etc.

Methyl Ionone + natural products + defined products + synthetic products

Methyl Ionone
absolute oakmoss
Acetivenol or vetiveryl acetate
Opoanax 21
musk ketone, etc.

Methyl Ionone + natural products + defined products + synthetic products + bases or specialties

Methyl Ionone
absolute orange flowers
Acetivenol
Oeillet 25
Althenol, or Selvione, etc.

In these various accords, the proportions between products will vary according to our young perfumers inspiration and originality, so that in accord already set forth, e.g.

6 absolute oakmoss .
3 ambergris 162B
3 Vetiver bourbon .
1 musk ketone

Might very well become

5 or 4 absolute oakmoss .
3 or 2 ambergris 162B
4 or 6 Vetiver bourbon .
1 musk ketone

The same is true where selection of the products is concerned. When so desiring, the perfumer may vary his choice somewhat less systematically and use whatever materials appeal to his taste. Free scope is given him in this respect, and there is no absolute rule to be followed in the search for accords since any modifications deemed useful , will serve to produce very characteristic novel notes.

The olfactory evaluations of such working formulations will be effected desirably on evaporation because their starting notes might appear somewhat surprising due to the lack of modifier products. The bottles containing these accords will be filed in boxes, and their labels will show the number corresponding to the formula. After completion and adequate selection of the accords, the student perfumer will advantageously practice olfactory evaluations of their constituents. This will prove the best possible olfactory training and will provide a constant checking means of the students familiarity with perfumery raw materials. Thus, any research work undertaken will be greatly facilitated. As already stated, there are no miracles in perfumery, and the perfumer will never be able to identify the accord

Absolute oakmoss
Methyl Ionone
Vetiver
musk ambrette

Unless thoroughly trained to do so. Considerable and very rapid improvement of the students know how will follow, resulting in a wonderful aptitude for identifying the constituents of perfumes he wishes to study.

Constant practice essential

Although fully aware of the difficult monotonous work involved, I feel the long years devoted to it are *absolutely necessary*. In no other way can the creative perfumer expects to attain proficiency. Could a musician write a symphony without ever having practiced solfeggio, scales, harmony? It should be emphasized, time and time again, that olfactory studies alone will open the way to true mastery and, hence, to success. Should freakish chance play into your hand and make a sales success of some early attempt do not believe, by any means, that you have become a Master of your Art. Emphatically not. Rest satisfied only when the day comes that you can boast of the number of successful creations to your credit and *feel assured that many more will follow*.

All my colleagues have noted the self complacency of some very green perfumers who have not yet created anything worthwhile, and never will, because they do not work. They take laboratory life easy, smelling strip close to the nose all day long, feeling entirely open to some miraculous

perpetually elusive inspiration. Others are entirely lacking in imagination and never even try to create something of their own, bearing no resemblance whatever to perfumes already on the market; they restrict their efforts to the imitation of successful perfumes, with some not always happy modifications! They apparently delude themselves into the believe that they have created something bearing the mark of their personality.

What a pity that the time of truly original creations-where great craftsman relentlessly pursued their search for novel notes-may seem a thing of the past. This deplorable state of affairs cannot be said to be specific to perfumery since similar erring ways seem to have become the rule in music, where rank imitations are even more frequent. Young . "composers" appear to seek inspiration from successful tunes, distorting them to suit their purpose, modifying their rhythm, and seem convinced that their amateur music will become as great a commercial success as the original. The same is true at present in our industry. It is in this respect that, in my opinion, there is actually no particular fashion in perfumery; it is the fact that *the perfumes with sales appeal derive for the major part from perfumes dating back 30 years or more* , and still foremost in the bestseller list. It could very easily be demonstrated that many of the more recently successful perfumes fall into this category. Obviously, young perfumers with a good "nose" find it much easier to seek inspiration from some acknowledged good perfume than to devote themselves to a search for novel original notes.

Creation and imitation .

Let our future perfumers meditate upon the subject and discover the zest of true creative effort. Means for such achievements have been made available to them. Let them persevere in their task, in spite of disappointing results, even if such efforts may seem unrewarding at first. Perfume creating is far from easy. But what pride once they have created a perfume they can call entirely their own! Only then will they understand that it is *better to be imitated than to imitate*. There lies the sign of success.

It should also be said that very few, among the public at large, are able to detect the similarity between copy and original perfume. This undoubtedly provides an excuse and encouragement for imitators. This is most unfortunate for French perfumery, an art so typical of our people and in which we can justifiably take some pride since it has greatly contributed to the worldwide reputation of our country. But this reputation is jeopardized by a lack of originality against which steps must be taken with a will for keeping off the beaten track. While our customers are largely responsible for the present state of affairs-always requesting X. type or Y type perfumes - it is up to us, however, to persuade them to abandon this policy and to turn to entirely new notes. Thus, the market will no longer be crowded with perfumes of more or less similar fragrance, but will at last offer new, original, sometimes disconcerting notes maybe, but notes , which will renovate entirely this wonderful art of ours for the greatest benefit of French perfumery.

This being understood, the task of our young perfumers should be facilitated. Therefore, I advise them once again to establish for each floral or fancy note a table corresponding to said note and keeping in tabular form the top notes , modifiers and base notes compatible with the perfume they wish to create. Such tables are very valuable memoranda.

Having undertaken a study of chypre notes in part one, I am now giving, as an example, a table relating to such notes; although incomplete, it is illustrative of the method and can be used by students as a starting basis for a similar table of their own, established according to their personal tastes, since I have limited my own choice to substantially conventional materials.

This table includes a number of accessory products , which will be used eventually for varying the chypre note, according to the inspiration of the student perfumer. When I mentioned "accessory products" I referred to a wide variety of products from which can be selected the material which will usefully change the character of a basic accord, the constituents of which enter in high proportions in the overall perfume formulation , but which, owing to its character, cannot be used in large amounts. As is generally the case, there are exceptions to this rule, as previously illustrated. But no one would even consider formulating a basic accord proper, that is in accord between constituents at concentrations of the same order of magnitude, by using, for example, absolute oak moss in association with caraway, cascarilla, aldehyde C 14 or Galbanum. But, when used in reasonable amounts, the latter products can, as the case may be, become extremely useful for the purpose of imparting a specific character to creations. As a matter of fact, most accessory products belong to the series of modifier products, except a number of materials such as celery, cistus, aldehyde C 14 etc. that come under the base notes heading. To this table any available specialties that are apt to impart interesting modifications may be added.

Chypre

Top Notes	Modifiers	Base Notes
Sweet orange	Absolute rose	Absolute oak Moss
Bergamot	Bulgarian rose	Patchouli
Linalyl acetate	geranium	Vetiver and derivatives
Geranyl acetate	Neroli, petitgrain	Acetivenol
Rhodol acetate	Absolute civet, 10% solution	Sandalwood
Geraniol	Absolute orange flowers	Absolute cistus colorless
Linalool	Rhodol	Ambergris 162B
Lemon	Rhodinol	Amber Liquid
Bois de rose	Phenyl ethyl alcohol	Methyl Eugenol
Etc.	Phenyl ethyl acetate	Olibanum
	Cinnamic alcohol	Orris concrete
	Pine, maritime, Sylvester	Ionones, Methyl ionones
	Styrax	Clary sage
	Coriander	Absolute ambrette
	Argeol	Absolute jasmine
	Ylang	Ambrette oil
	Cassia	Musks
	Cinnamon	Etc.
	Uguet 133 or Invar	
	Jasmin 1103	
	Cloves, Eugenol, Isoeugenol	
	Etc.	

Accessory products	Bases or specialties
Caraway	Althenol, Selvone or Corona
Galbanum	Bouvardia 198
Costus	Corional
Juniper berries	Cuir de Russie 18-167
Laurel noble	Daltonia 1096
Angelica seeds	Tobacco flower
Hyssop	Myrisia
Aldehydes C9, C10,C11,C12,C14	Mousse 32, Mousse 1026 etc.
Celery etc.	Mousse Sylvestre Mousse de Chypre
	Mousse Poivree Mousse JD Base
	Mousse R

	Pimonal 44 etc.
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The table given above relates to conventional chypre perfumes, but the utilisable constituents may be varied ad infinitum, provided the standard chypre characteristics are maintained. It will be noted that coumarin was not mentioned among the base notes tabulated above; this is an intentional omission, to prevent the student from wandering away from the chypre note and creating a fougere type perfume. Lavender was omitted from the head notes for the same reason.

While on the subject, it should be mentioned that students in perfumery are very seldom capable of explaining clearly the difference there is in the formulation of conventional chypre, fougere, foin and trefle notes. The chief characteristics of such notes are summarized below for the purpose of preventing potential errors.

Chypre	Fougere	Foin	Trefle
Bergamot sweet orange	Bergamot Lavender	Bergamot	Bergamot
Rose	Geranium	Geranium	Anisic aldehyde Eugenol
Absolute oak Moss Amber misc. musks	Absolute oak Moss Vetiver absolute Tonka beans coumarin	Absolute oak Moss Patchouli Amyl salicylate Coumarin	Absolute oak Moss Amyl salicylate Patchouli musk ambrette Coumarin

It is apparent that the above working formulation is most incomplete, but it is a sound starting basis for the study of such notes and will give full scope to the students imagination and fantasy. The distinction between the four notes being fully established, we shall proceed with our study of the chypre note.

In the previously published paper only a few simple accords were given with an absolute oak moss basis. For the purpose of facilitating research work, a number of accords selected by our own students are given by way of examples on the next page. Although they are not particularly outstanding, such accords will permit a better understanding of the procedure previously set forth and can be used as a starting basis for fancy chypre notes, since conventional chypre perfumes were already discussed.

We shall proceed systematically, as previously, successively studying accords with 2, 3 and 4 products in addition to the artificial musk that cannot be dispensed with in any chypre note. It will be readily apparent that some of the accords given in the table are economically impractical because of the high cost of the various absolutes, but they should be mentioned so that their effect can be studied.

Quite obviously, such accords are endless. But many can be eliminated and the students choice limited to those he considers really worthwhile. In the above examples, we have interrupted the illustration of the method with accords containing four products, but the study could be carried on with 5, 6, 7 products or more with highly surprising and pleasant results.

How should one proceed? As far as I am concerned, I always carry out such tests volumetrically, in milliliters, using a graduated test tube, all products except the artificial musk being in 10%

alcohol solution; thus, I can work very rapidly. Since the musks used are not soluble at 10% concentration, they are used, exceptionally, in 1% alcohol solution; thus, when actually testing the formulation indicating musk ketone: 1, one should read; 10. This procedure permits very rapid evaluation of the olfactory character of an accord.

Accords for Fantasy Chypres

Simple Accords with Two Products	
8 Absolute oak Moss	6 Absolute oak Moss
2 concrete ambrette seeds	4 absolute orange flowers
1 musk ketone	1 musk ketone
8 absolute oak Moss	7 absolute oak Moss
2 absolute rose	3 absolute violet leaves
1 musk ketone	1 musk ketone
8 7 6 absolute oak Moss	6 4 absolute oak Moss
2 3 4 patchouli	4 5 Vetiver bourbon
1 1 1 musk ketone	1 1 musk ketone or ambrette
9 8 7 absolute oak Moss	7 absolute oak Moss
1 2 3 Irisantheme	3 Absolute Cistus colorless
1 1 1 musk ketone	1 musk ketone
Accords with 3 Products	
6 3 absolute oak Moss	6 absolute oak Moss
2 3 patchouli	2 patchouli
2 3 absolute orange flowers	2 absolute jasmine
1 1 musk ketone	1 musk ketone
6 3 Absolute Oakmoss	
2 3 absolute rose	
2 3 patchouli	
1 1 musk ketone	
3 absolute oak Moss	3 absolute oak Moss
3 Vetiver	3 Vetiver
3 Absolute Jasmin	3 Absolute Orange Flowers to the
1 Musk ketone	1 Musk ketone
6 absolute oak Moss	3 absolute oak Moss
2 Vetiver	3 Vetiver
3 Absolute rose	3 concrete ambrette seeds
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 Sandalwood	3 Irisantheme
3 absolute orange flowers	3 absolute orange flowers
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 absolute Jasmin	3 Eugenol
3 Irisantheme	3 absolute jasmine

1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 Irisantheme	3 Irisantheme
3 absolute rose	3 Eugenol
1 Musk ketone	1 Musk ketone
Accords with four products	
3 absolute oak Moss	3 absolute oak Moss
3 patchouli	3 patchouli
3 Vetiver	3 Vetiver
3 absolute jasmine	3 absolute rose
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 Vetiver	3 patchouli
3 Sandalwood	3 Sandalwood
3 absolute orange flowers	3 absolute jasmine
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 Irisantheme	3 Irisantheme
3 Vetiver	3 patchouli
3 absolute orange flowers	3 absolute jasmine
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	6 absolute oak Moss
3 patchouli	2 Absolute cistus colorless
3 eugenol	2 Irisantheme
3 Absolute Rose	2 Vetiver
1 Musk ketone	1 Musk ketone
3 absolute oak Moss	3 absolute oak Moss
3 Vetiver	3 absolute orange flowers
3 absolute jasmine	3 patchouli
3 Absolute cistus colorless	3 Vetiver
1 Musk ketone or ambrette	1 Musk ketone or ambrette

Space spray testing .

How should the actual smelling test be carried out? Although such a question may seem quite bizarre, it is nevertheless most important. Above all, do not use a smelling strip. Why? Because when smelling a perfume or some accord from the smelling strip, one does not in the least obtain even an approximation of the *true scent* of the perfume. The following anecdote will explain why I abandoned the use of the smelling strip for appraising new perfumes. I happened to be visiting Lisbon, some 30 years ago, and was lunching out with our agent and his wife. I felt intrigued by the excellent scent of her perfume and finally asked for its name since I had no recollection of it. She laughed and answered this was a sample of one of my latest creations I had given her husband during my last visit. Paradoxically, I had not recognized "my own" perfume, being unfamiliar with its true full scent since I had always appraised it from the smelling strip. This served to make me understand clearly that the smelling strip can in no way be used for effecting an overall evaluation of the perfume's true full scent. I became quite concerned with the problem

and, when backing in Grasse, inquired about the sales of the product I had just discovered. And found out that sales orders represented substantial amounts. From this time on, I gave up using smelling strips for the evaluation of my own creations and henceforth used *vaporization*.

.How should one vaporize a perfume undergoing olfactory evaluation? Many suitable devices are available, but I obtain the best results with a very simple cheap spraying device of the type commonly used by artists for spraying a very thin coating of clear varnish on charcoal or sanguine drawings. Thus, the perfume is vaporized for 5 to 7 seconds, in the center of a room, care being taken not to direct the perfume cloud onto the walls. The room has been closed, and the experimenter returns to it after 2 or 3 minutes and can then effect olfactory evaluation of the resulting scented atmosphere. *The immediate and precise sensation produced by the character of the perfume and especially by its fully developed scent*, as it will be released under actual use conditions, is thus obtained; this achievement would not have been possible with a smelling strip. In addition to this significant advantage, the perfumer will gain precious time with such tests, in contrast to the long hours necessary for full development of the perfume on the smelling strip , and which will have to elapse before a perfumer can properly appraise the main character of his new creation. Such vaporization produces the true fully developed scent, without any possible error, and permits immediate rearrangement of working formulas. A large number of olfactory evaluations are thus made possible, in contrast to the slow results obtained with the smelling strip. I have found this procedure fully satisfactory for almost 35 years.

On the other hand, it goes without saying that the smelling strip is indispensable and irreplaceable for the olfactory evaluation of perfumery brought materials.

This means of carrying out olfactory evaluations also has another advantage: I found out that certain perfumes offered to a potential buyer were sometimes rejected when smelled from a smelling strip , whereas vaporization of the same perfumes resulted in a sale. I wish to insist that student perfumers carry out this experiment when evaluating their creations. Surprising results will probably ensue, and many will be disappointed by perfumes they had rated as good when using a smelling strip and which appear rather indifferent on vaporization; but the contrary will also occur.

Perfumes and sales appeal

It should always be kept in mind that it is the true fully developed scent of a perfume , which is responsible for its sales appeal and which is the best of all advertising means for your creations. It is because of it that a woman purchases of perfume. As a matter of fact, *perfumes are not selected but adopted by women* various reasons can be found for this attitude. One of the chief reasons , a woman buys a specific perfume is because it is "all the rage", being the latest creation of the fashionable couturier, and because, thus, she will be able to answer any inquiry with "it is X's new perfume!". But should no one react to her new perfume, should it be disregarded by her husband, her friends or her hairdresser, then she will promptly discarded for good. If, in contrast, from the day of the purchase, all complement her on her good taste in asked for the name of the perfume, she will feel flattered and will make it hers. Women will also adopt a perfume they have smelled on a friend, having been able to appreciate its scented trail, or a perfume which has long been held in high repute.

I have seen women refuse a high-grade perfume offered to them by the sales girl at the perfumery counter of a department store, and returned to purchase the same perfume a few minutes later. What are the reasons for such sudden change of opinion?

1. They may have evaluated the perfume on opening the perfume bottle. This was a gross error, since they could only smelled the very volatile top notes , which permitted in no way to detect the principal character of the perfume and: they remained ignorant of its fully developed scent.

2. They may have evaluated the perfume by casting a drop onto their ungloved hand, just as they would have tested a cream or lipstick, omitting to take into account the order due to their skin, or that imparted by the glove. This too rapid evaluation, carried out under poor conditions, has not made possible the perception of the scent characteristic of the perfume.

3. They have smelled the perfume on some friend, and this has settled their choice, having appreciated its true character. Such cases are very frequent.

Limitations of "panel" testing

As a matter of fact, I have often remarked how incapable a woman was to pass judgment on the perfume. Early in my career, I used to make the gross mistake of giving samples of my newly created perfumes to women chosen among the more fashionable and clever of my friends and of requesting their advice on the olfactory value of my gift. As a result, I often had to listen to utterly senseless criticism. Faced by such incompetence, I decided to stop asking for advice on the value of my creations. I merely offered a bottle of my new perfume and quietly waited for any reactions that might come unsolicited. If, after a few days, nothing came of it, I decided my perfume was a "Frost" and merely wrote it off. But if, on the contrary, as soon as the perfume was "tried on", I was told, "my dear, this perfume is wonderful, sensational, they are all asking for its name" then I felt sure my perfume was good and could become a success. And 99 times out of 100 it was a success. *Vox populi*. This is the reason I am entirely opposed to panel tests, which are so extensively used in the United States when a perfume is to be evaluated. The panel tests, just as the smelling strip, should be used only for the evaluation of raw materials. My conclusion will be the following: never ask a woman for her opinion on the perfume you have just created. She will feel embarrassed and you will lead yourself open to great disappointments. At the early stages of my career, I was full of great illusions and firmly believed all my wishes would come true. Far too often was I sure of having created wonders, which, in fact, were nothing to speak of. The only sure guide is vaporization, which will provide true information on the olfactory value of perfumes.

New horizons

I hope the few illustrative examples given above will help my young colleagues to find an answer to their questions, and make them the more eager to go on with their research without restricting their work to mere imitations, which will not help them progress rapidly in their chosen art of creative perfumery. I have set forth some of the discoveries I made in the course of my long career. My young friends will arrive at the same discoveries by dint of hard work and olfactory research and will, every time, feel elevated at finding new horizons for future creative work; such discoveries will sustain their young enthusiasm which will make of them excellent creative perfumers.