

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

Part 3a

In the previous parts of this paper I've shown how beginners in the art of perfumery may undertake their apprenticeship in a simple and lively manner, which makes it possible for them to formulate well-balanced basic "Accords" at an early stage in their studies, and to modify such Accords with materials selected according to their own taste and imagination.

In the present paper, I intend to consider the problems involved in the search for modifiers and top notes. Of a more fugitive nature than base notes, these are indeed the materials that offer full scope to a perfumer's fancy and make it possible for him to impart to perfume formulations the original, unexpected and zestful character that will arouse the interest of potential users and eventually direct their choice.

It is quite apparent that here, again, all conceivable combinations are possible, or almost possible, since in perfumery, as in many other fields, everything is but a matter of discrimination, of selection, and, essentially, of proportions. Since the study of top notes and of modifiers will lead us to define more accurately the conditions under which floral notes and fast evaporating essential oils or chemicals should be used, we shall not limit our study to a discussion of perfumes alone, but shall also consider the broader aspects of the formulation of Colognes, which are more commonly and more readily used and possess the advantage of being less expensive.

Research into Modifiers

It is no easy matter to set forth absolute rules when dealing with a field where freedom of expression and individual preferences are the major factors contributing to the success of creations. This field, however, has certain limitations that are readily defined, easy to comply with and that merely have to be kept in mind to maintain control over immoderate flights of imagination. Indeed, while modifiers may have a rather noticeable effect on basic Accords, they should not modify the main character of the perfume. They should affect the transition between the top notes and the basic Accords. Therefore, it should be remembered that they should not exceed 20 to 25% of the total weight of the composition, since an excess could be detrimental to the so carefully established basic Accord and would severely interfere with its lasting character.

Within the above limitations, the use of such materials is unrestricted by absolute rules. One may employ either currently available materials such as essential oils or perfumery chemicals, or more elaborate products such as synthetic flower type perfumes, e.g. Jasmine, lilac, Lily of the Valley, Rose, Carnation, and the like, or any other type of compound, used singly or in combination. Freedom of choice. Freedom of expression.

However, while it may seem both difficult and undesirable to direct any research in this field into set channels, a suitable knowledge of the conditions under which the various classes of materials available can be used will greatly help the perfumer's choice.

In this connection, we should open a parenthesis with respect to synthetic perfumes* (the term "synthetic perfume" is here intended to refer to a compounded perfume such as Rose, Jasmine

or Muguet "synth." - and not of course to a straightforward perfumery synthetic - Editor, S.P.C Year Book.) *A given synthetic perfume may, according to circumstances, serve as a modifier or as base note.* The part played by it is dependent on the amount used in the formulation. Indeed: a synthetic perfume is a complete perfume, that is, containing its own top notes, modifiers and characteristic base notes. Therefore, and it is desired to impart a floral character too perfume, the synthetic Lily of the Valley, Lilac, Hyacinth, Rose or other perfumes selected should be used in large amounts in the formulation. On the other hand, when the same products are meant to play the role of modifiers, they should be present in more reduced amounts. The following examples are given for illustrative purposes.

This is a very simple suggestion for a formulation wherein the fundamental or basic character of the perfume is provided by Lilac and Muguet synthetic perfumes.

Top note Bergamot .

Modifiers geranium from Grasse
Ylang Nossi-Be extra
aldehyde C12 MNA

Base note Lilac 183
Muguet 113 or Muguet Invar JD
aldehyde C14
absolute Jasmine .
Musk ambrette

In the next formulation, Muguet Invar or Muguet 113 or used in the capacity of modifiers:

Top note Bergamot

Modifiers absolute Rose or synthetic Rose .
Ylang Nossi-Be extra
Muguet Invar or Muguet 113

Base note Althenol or Selvone
Acetivenol or vetiveryl acetate
oil Sandalwood extra
absolute Jasmine
musk ambrette

A somewhat special case one should mention here is that of Rose type synthetic perfumes. Because of the relatively volatile components used in such formulations, they are seldom employed as base notes , but play the role of modifiers in fancy perfumes.

It is apparent that any simple notes of suitable character for the desired perfume may be used as modifiers; but a large variety of tones can also be obtained by using synthetic perfumes in combination, as in the following examples:

- a) Jasmin 1103
Fleur d'Oranger 1103
- b) Oeillet 25
Rose d'Orient 2644
- c) Jasmin 1103
Muguet Invar
- d) Muguet Invar

- e) rose de Mai 68
Fleur d'Oranger 1103
Muguet 113
- f) Jasmin 1103
Lilac 183 etc. etc

Either one of these products being used in predominant proportion, or both products being used in equal parts.

It goes without saying that to such combinations of synthetic perfumes may be added various products selected from the group of modifiers tabulated under the appropriate heading in the table set forth previously, where perfumery raw materials are listed according to their rate of evaporation. (Part I)

Research into a head notes .

One will proceed as described with respect to basic Accords, with the advantage that the field of investigation is fairly large and that the fancy of each perfumer is given still wider scope since interesting results are most generally obtained. The very great ease with which raw materials belonging to this class or used is due to the fact that such products possess a fairly generally pleasant note, and are practically always mutually compatible. Hence, disastrous combinations are practically impossible!

One will merely refer to the table mentioned above, where perfumery materials are tabulated according to evaporation rates, to find suitable constituents for an extremely large variety of top notes. It is unnecessary to devote too much effort to the formulation of a top Accord compatible with the modifiers and the basic Accord already selected. The responsibility for such liaison work devolves on the modifier components. In this respect, the various tests effected with a satisfactorily established formulation show that the modifier components can be changed as desired , while maintaining the original top and basic Accords, and that most pleasant results will often be obtained thereby. Examples of such modifications were given in part one of the series of articles.

For illustrative purposes, some examples of studies for top notes are given in tabular form in the adjacent columns. (Below)

Combinations studied as top notes

Accords with two products

6 Lemon 4 Lavender	6 Sweet Orange 4 Petitgrain fr. Paraguay
8 Sweet Orange 2 Marjoram	8 Sweet Orange 2 Tarragon
6 Lavender 4 Petitgrain fr. Paraguay	4 6 Lavender 6 4 Tangerine
5 6 Sweet Orange 5 4 Lavender	6 7 Coriander 4 3 Sweet Orange
8 5 Bergamot 2 5 Sweet Fennel	7 2 Hyssop 3 8 Coriander
7 3 4 Hyssop 3 7 6 Verbena	8 7 3 Juniper berries 2 3 7 Bay
6 4 1 Bois de Rose	9 4 3 Bergamot

Lavender alone will be a suitable top note, and the perfume will exhibit increased lasting properties because of the reduced ratio of highly volatile head products.

The few examples set forth above are sufficient to show the extent to which the combinations of compounds may be varied, and to make when fully understand the great importance of top notes in perfumery. Indeed, the most volatile perfumery materials such as citrus oils or Lavender's, for example, are the first perfume components perceived by the users olfactory mucosa and often those components that are responsible for holding the attention of the potential purchaser, the effect produced being all the more favorable as fresh smelling and relatively evanescent materials are used.