

PERFUMERY

Introduction: Perfumery, Ritual and Yoga

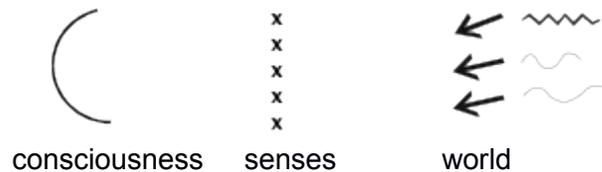
In the overall scheme of Notebook #8, we place perfumery within the ritual crafts. These are in turn connected with Our Yoga, which as we know has to do with the human being's energy.

And so we can ask: what is the relationship between perfume, ritual and energy? Let's see.

We perceive the world through the senses. These senses act as the receptors of the world's different "vibratory ranges" (to give them a name). So we can perceive the same object through sight, smell, hearing, taste or touch.

We understand that the eye is able to capture a certain vibratory range (the visible range), and the sense of smell another, and so on. Although we also know that between a range and a "detectable" range there are dark or silent areas for our sensory system.

We find then that human senses act as filters or intermediaries between consciousness and the world. Thus:



In turn, consciousness gives compensatory responses to the stimulus that arrives through the senses, structuring the "world" object. So, if we could change the senses in some way we would modify that compensating act.

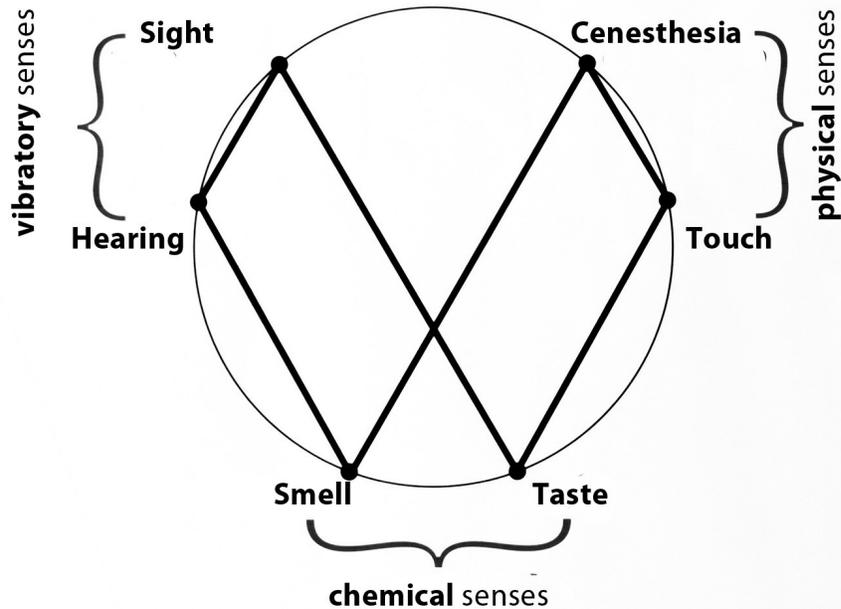
In perfumery, we do not work by modifying the sense of smell, but rather we extend it, extending the range of perceptible sensations. Moreover, we incorporate it as a sense as developed as those of hearing and sight. And consequently we will have another way of structuring situations (consciousness).

If we proportion the stimulus-fragrance (world) harmoniously, by resonance we would awaken that harmonious proportion within us, although when working in the craft my attention isn't placed there (in the resonance).

Looking at the enneagram of the senses, we can locate the ones we will use in perfumery:

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Let's see what happens when a particular fragrance appears.

In front of that stimulus, what happens often is that we remember. And more than remember, it's almost as if we "find" ourselves in situations that we experienced in the past.

Just saying, "it transports us to situations" gives an idea of the synthetic action that it produces in us.

This characteristic of placing us into certain situations that fragrances and, logically, the sense of smell have, is what we say is related to ritual. Through them we can create appropriate ambits, appropriate internal energetic tones, in order to produce certain mobilizations of energy.

Moreover, we can recognize both in animals and in humans that smell and ritual play an important role in relationships.

Changing level, now at the level of being able to manage fragrances, we notice as its main characteristic its intangibility, its ability to change. Here again we find similarity with the problem of energy.

Of course we could describe many other relationships between perfumery, ritual and Our Yoga, but they would remain mere theory. If we want to understand the relationship we will surely do so by practicing the Craft and the Discipline, even if only in its mechanical part. In doing so, we'll see that more than a dependency or a tight theoretical fit, the connection between the two is given in the operator as a structure of related or contiguous "thought".

In any case, it's clear to us that the point of practicing the Craft is not to search for those relationships. It is very clear to us that the point here is what we know of as permanence, care and tone.

Care, permanence and tone

Let's see what we mean by care in perfumery. By care, we mean deodorizing, cleaning and order. We must always deodorize and thus clean environments, tubes, test tubes, our own hands, etc. If we don't, we will ruin the fragrances that we are interested in mixing. If we are not orderly in the sense of labelling each substance, we won't know what we have and do not have.

And so the craft itself, the material that you work with in the craft itself obliges you to take that kind of care.

What do we mean by permanence? We distinguish two types of permanence. One is a tactical permanence, in the short-term, and the other is a strategic, long-term permanence.

Tactical permanence has to do with formulating and implementing a plan of work. So before starting a day's work in the craft, I formulate my plan of work, I project what I will do and how I will do it. If I deviate from that plan, I don't have permanence. The main thing is not so much to do everything that I have proposed. The main thing here is the deviation. How does this deviation occur? Through the alteration of the person working. When I get altered and I let myself get taken by what the substance, the object suggests to me, looking for good results, then I deviate from the plan, and like that I have no permanence. What should I do in this case? Simply take note of the new possibility and plan it for another day.

Strategic permanence has to do with a general plan. Logically, this should be much more flexible and comprehensive. I can not formulate a strategic plan for myself without having a certain mastery of the craft, or rather I should formulate that point as a plan for myself.

As for permanence as the constant and enduring practice of the craft, we can understand this the way we understand permanence in the work of self-observation or consciousness of self. We don't acquire crafts in one "push", nor can we say, "I do crafts every Wednesday". It's more a kind of permanence in line with my own cycles and rhythms and consistent with the cycles and rhythms of the substance.

For example: A preparation, a fermentation, has its own cycle. If I want to carry out that work I will have to adapt myself to that cycle, but that adaptation is not absolutely determined, there are margins so as to be able to work with it in moments that are good for me, with liking.

Neither is it correct to isolate and lock yourself away while practicing the craft. That would be disproportionate and would produce internal imbalance and disproportion.

The point then is to practice the craft with that characteristic cyclical continuity that we are familiar with, where I take up the craft, and then I act as if I'm leaving it, forgetting it, but I do not forget, I come back to it, and so on, with ease.

Let us see what we mean by tone.

By tone, we mean measure and proportion. What do we measure and what do we proportion? Fragrances.

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The biggest enemy in the case of tone is improvisation and epochal taste. To measure and proportion demands some effort. It is easier to mix by eye and get quick results in line with the current fashion. If we do that, we are working without tone.

In our perfumistic case, it is very interesting to have a sense that we could say is "raw". So it is very interesting from the beginning to educate it in working with the proportions that we know.

To work with measurement and proportion, I measure and proportion fragrances (we'll see how) and I don't worry about including strange mental acts in that proportion. I simply measure and proportion the substance. The internal metric develops on its own, along with it.

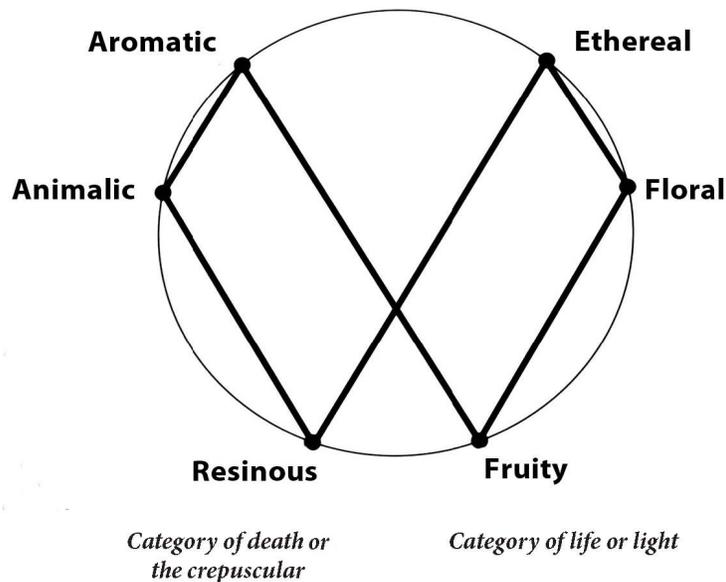
FRAGRANCES-ENNEAGRAM OF PERCEPTIONS AND SENSATIONS

Let us now turn to the theme of fragrances (objects of different genres of perception are brought).

When we smell this grapefruit we say, "it smells like grapefruit." What is presented to me as "grapefruit smell" is already a set of fragrances structured in my consciousness as "perception."

We will distinguish six basic genres of perception:

ENNEAGRAM OF PERCEPTIONS



Although at first we don't distinguish them simply by smell, we can distinguish them by their origin.

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(EXAMPLES OF EACH GENRE ARE GIVEN)

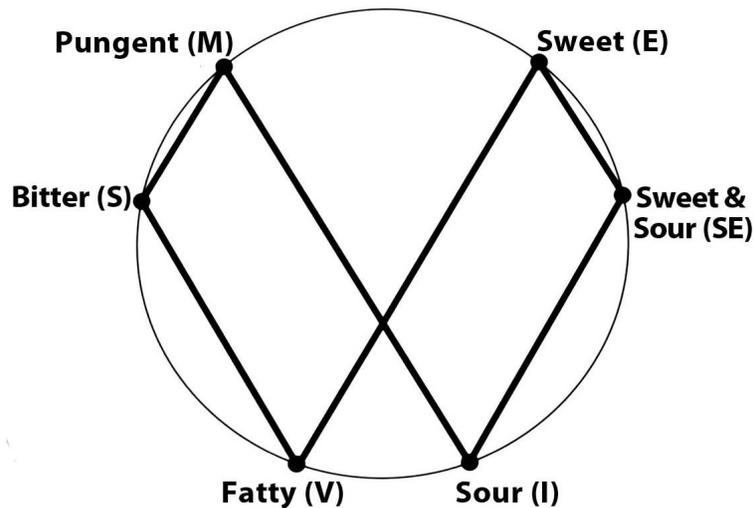
In general, ethereal = hospital smell: alcohol, camphor, menthol, ether, ozone, etc. Floral = smell of flowers: jasmine, carnation, rose, etc. Fruity = smell of fruit: banana, orange, apple, etc. Resinous = smell of resins: frankincense, myrrh, pine, etc. Animalic = generally nitrogenous or animal odors: cheese, fish, burned ambergris, etc. Aromatic = smell of spices in general: nutmeg, cloves, cinnamon, etc.

Of course, there will be some fragrant substances that will be found along the border between one genre and another, but these are exceptions.

However, it seems that this first classification is not sufficient. There is something that differentiates the fragrance of an orange from that of a banana or lemon. What makes them different is studied by us in the enneagram of sensations. Each genre of perception has an enneagram of sensations.

We see that each fragrant sensation also has an internal "image" that allows it to be recognized, a correlate of physical energetic mobilization.

Enneagram of Sensations



Let's see, with examples:

Sweet goes to the chest.

Sour to the head.

Fatty is unctuous and sits in the stomach.

Bitter mobilizes certain areas of the jaw.

Pungent stays in the nose.

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Sweet-and-sour fluctuates – sometimes it goes to the nape, sometimes to the neck, but in any case it's the area between sweet and sour.

We also say that each sensation "mobilizes" or "activates" a given center.

So it is clear that:

Sweet resonates with the emotional center (anise, banana, vanilla).

Sour with the intellectual (lemon, acetic, orange blossom, sour milk).

Fatty with the vegetative (french fries, poppy, geranium, awful-smelling flowers).

Pungent with the motor (smelling salts, menthol, nutmeg, pepper).

It's not so obvious but this is how we place them:

Bitter resonates in the sexual c. (lavender, coffee, apple seed).

Sweet-and-sour resonates with the S.E. center (orange, mandarin).

In the enneagram of sensations we can see that the outer scale, which has to do with vibratoriness, goes from the least vibratory (sweet) to the most vibratory (sour). It is broken and then resumes, from the less vibratory (fatty) to the most vibratory (pungent). And so like this the most vibratory oppose or complement each other, as well as the least vibratory and the ones in between.

As for the reaction rates of smell, we notice that sour and pungent produce swift reactions, sweet and fatty are perceived more slowly (path length). We cannot then confuse intensity or concentration of a fragrance with reaction rate. Fatty and sweet will always be slow to perceive. We said that every genre of perception has its enneagram of sensations. So there will be a sweet ethereal, a sweet floral, a sweet fruity, etc. A sweet-and-sour for each genre. In short, a full enneagram of sensations in every genre of perception.

Let's see how this enneagram works in perfumery and in the case of sensations:

3 sweet + 5 sour = sweet-and-sour

3 pungent + 5 fatty = bitter

That's all in terms of producing a third by mixing two.

The system of complements or opposites in our case will take place as "killed" or "neutralized." This neutralization amounts to gray or brown (neutrals) in the enneagram of colors.

So the same enneagram indicates:

3 fatty + 5 sweet = neutral

3 sour + 5 pungent = neutral

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3 bitter + 3 sweet-and-sour = neutral (by halves).

Therefore, I can neutralize a fatty with a sweet, and vice versa. What proportion should I use? Whatever the enneagram tells me. What does 3, 5 mean? More on that later.

I can do all this always within one genre of perception. If I try to combine a sweet floral with a resinous sour, I won't be able to produce a sweet-and-sour. Both sensations will stay separate. While this appears to be a disadvantage, in the end it is a great advantage. If I want to produce a perfume that hits the S.E. center and the S. center simultaneously (sweet-and-sour, and bitter), I must then use two different genres of perception. If I used the same genre of perception the sweet-and-sour would neutralize the bitter (or vice versa). What genre of perception should I use for one case or another? Well, that needs to be studied. As a support, we know that aromatic, animalic, and resinous perceptions are within the category of "death" or "the crepuscular", and that ethereal, floral and fruity perceptions are within the category of "life" or "light".

In any case, what should be clear is that we can combine and neutralize sensations always within the same perception. We can keep sensations that otherwise would combine or neutralize separate by using sensations of different genres of perception. In general, "master's touches" usually use sensations from another genre of perception.

In a complete fragrance that we produce, sensations of more than one genre of perception would be involved.

Our abc, however, will be the work of combining, proportioning, neutralizing, etc. sensations within one genre of perception. Then we can begin to complicate things, working among genres. For that you have to be quite clever. But to understand the basic workings of the little machine won't be difficult.

Now, back to our substances:

We have here a grapefruit and a lemon. Both are fruit, both are sour, and nevertheless they are different. Related, but different. We discover, then, that their fragrance-sensation is not pure, that they both have secondary and tertiary fragrance-sensations. In Nature, virtually all fragrances are composites. Apart from the main fragrance (the most intense), there are secondary fragrances and sometimes tertiary or even quaternary ones. So to make our combinations and compensations we will have to take into account these secondary and tertiary fragrances that we will add to the proposed formula. In some cases we will take advantage of them and in others, we will try to neutralize them.

We will return to this problem.

Although it does not have strictly to do with smell in terms of tone (measure and proportion of fragrance), let us now consider something that will be the basic skeleton we build upon.

How do we get the fragrances that we want to combine?

How do I concentrate or how do I separate from the grapefruit that which makes it fragrant?

In what substance is fragrance more concentrated? Etc.

First things first.

Extraction techniques

In general, the substances with higher concentrations of fragrance are essential oils and resins. Essential oils have the characteristic of having the appearance of oils and the volatility of alcohols. It is thanks to precisely this volatility that they are so fragrant, and thanks to their oil quality that they are able to accumulate and retain such a concentration of fragrances.

We could concentrate many essential oils further, even to the point of transforming them into crystals (menthol, camphor, etc.). Or we could evaporate and dry them, and transform them into gums or resins.

Certain parts of a plant or fruit, for example, have a greater amount of essential oils than others, and this can be distinguished sensorially.

Resins flow like gums when incisions are made in the bark of the tree. They appear mixed with the wood.

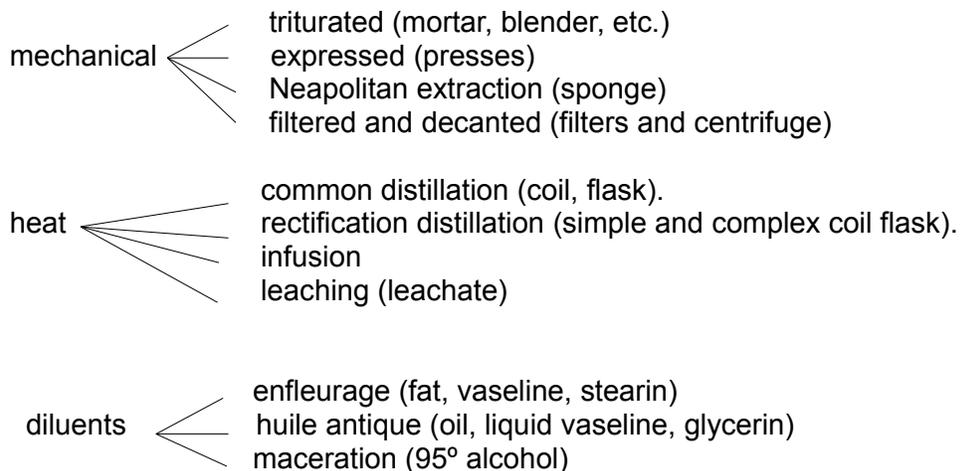
Many animalic fragrances are extracted from certain glands.

In any case, we will generally call the substances that have a high concentration of fragrance, essences.

Usually, the amount of essence that we extract from the raw material is low. So we need a lot of raw material to extract amounts of essence that are very small but very concentrated.

If we could buy representative essences of each genre of perception with its full enneagram of sensations, that would be the best. But we can't. Or if we could, many of them would be artificial, derived from benzene (petroleum) with its peculiar characteristic that is different from a natural essence. So we have to know how to get our own essences.

Here are the basic extraction techniques:



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(Dyes, chlorophyll)

For each substance there corresponds an ideal extraction technique, or combination of techniques. Before using any of these techniques, we will separate the parts that are most fragrant from the animal or plant, etc., and work on them.

The mechanical techniques use the principle of breaking or tearing the selected raw material. These techniques are often used as a prior step to the use of other techniques. For that we will use mechanical principles, in which neither heat nor chemical activity is involved.

Basing ourselves further on mechanical principles, we separate substances thanks to their different densities, thicknesses, etc. We either leave them to decant or accelerate the process by centrifuge or filtration.

In the techniques using heat and in distillation, we work in particular based on the volatility of the essential oils which, after evaporating, will be condensed and collected. We use certain carriers which work by carrying the oils, but mainly through the action of heat rather than chemical action. With rectification, we use the different evaporation temperatures and the different condensation points of these vapors, allowing us to separate two or more substances, concentrating and purifying the one that interests us.

Heat is also involved in infusions (e.g. making tea) and in leaching (e.g. brewing coffee). Both techniques are used practically in natural medicine. Anyway, in our case they must be done very carefully because fragrances escape, they evaporate with heat.

In techniques with diluents we take advantage of the property that fats and oils have of absorbing, concentrating fragrances. In the case of alcohol, it dilutes and carries the essential oils and resins.

Let's see this in practice:

Trituration: we will crush star anise to distill it later.

Expression: we will press finely chopped lemon peel. We will let the liquid we obtain decant and see how the essential oils separate from the other liquids.

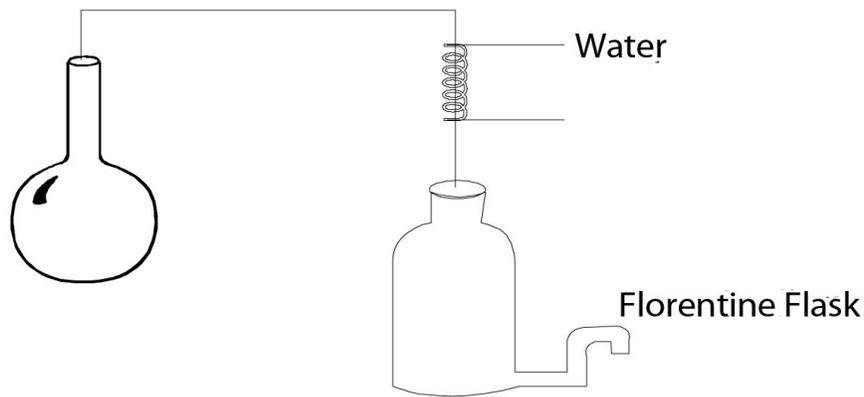
Neapolitan extraction: we will squeeze mandarin peels on a small and very porous sponge. Once the sponge is saturated, we'll wring it out and obtain a bit of liquid. Leaving that to decant, as in the case of lemon, it will have several layers. The oils are supernatant.

Distillation: we half fill a flask with water, put the crushed anise in sachets made of gauze and not let them touch the water, place the flask over the heat, with the cooling coil. The water vapor carries the vapors of the essential oil of anise and when they condense, they will be collected in the Florentine flask. There, the oils will float and the water will go to the bottom.

The Florentine flask allows us to make several successive distillations without needing to pour the liquid into another container.

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When distilling anise, we could mix it directly with the water instead of putting it in little sachets, but the quality of the oil obtained decreases when it is subjected to higher temperatures.

Infusions and leachings: practiced in natural medicine.

Enfleurage: thin layers of deodorized fat (vaseline, stearin, etc.) are placed in a shallow box that can be sealed airtight. The flowers whose fragrance we wish to obtain are placed on these layers. The box is sealed airtight. The flowers should be changed every two or three days: like this, the fat will become more perfumed every day. The more we repeat the operation, the higher the concentration of the fragrance will be.

Then, we can recover the fragrance from that fat by using alcohol. We dilute part of the scented fat with a double boiler, add alcohol and stir it vigorously. Let it cool and notice that the fat separates from the alcohol; we recover the alcohol that carried along some of the fragrance and to get a higher concentration we repeat the operation using new fat but the same alcohol. If we wanted to concentrate the fragrance even further we would need to rectify that alcohol by means of complex distillations similar to those used in the distillation of petroleum to obtain gasoline, kerosene, naphta, etc.

There are various models of rectifiers. Some are more complex than others, some are more specific than others. It is interesting to investigate the matter since small rectifiers will eventually be needed in our laboratory. And then our glassmaker friend will need to get involved.

Huile antique: instead of fat we use deodorized oil (olive, castor, etc.) Normally, deodorized oils are the finest. Instead of boxes we use jars. With oils, we usually do not change the substance whose fragrance we want to obtain as often as in enfleurage (we would soon run out of oil). We'll do a huile antique of vanilla in castor oil.

Maceration: With macerations, we use the substance and 95° alcohol. A maceration is normally ready in 15 days, one or two months, depending on the substance. We can then repeat the process using the liquid obtained with a new substance. We will macerate orange peels in cane alcohol (rubbing alcohol).

We'll work in three teams. One in mechanical techniques; another with heat techniques and the last team with diluents. Then we'll exchange experiences.

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Chlorophyll (the first team that is free extracts chlorophyll).

Crushed spinach (mortar or blender). Squeezed in a sachet. Add about 3% sodium bicarbonate and 10% alcohol to the juice that is obtained. Allow it to decant or centrifuge it. The precipitate (green) is recovered and dried in a crystallizing dish. The powder obtained can be washed with water to get rid of the excess bicarbonate and other impurities. Another decanting and drying of the precipitate. The resulting powder can be added to detergent or if mixed with alcohol it can be vaporized and used to deodorize rooms. Mixed with gum arabic it can be used like a roll to deodorize the hands.

This method for obtaining chlorophyll is the simplest. There are other complex methods (using alcohol, hydrochloric acid and diethyl ether) through which more purified chlorophyll is obtained. It is understood that chlorophyll in the perfumery laboratory is in essence a tool that we use to deodorize pipettes, the area, hands, etc.

Dyes: these will be very useful later, for the presentation of fragrances (in lotions, soaps, etc.). If we want, we can obtain them ourselves. The team that is free extracts red: place red sandalwood in a test tube, add alcohol, stir well, decant (centrifuge), the alcohol becomes colored. Like this you can also get, for example, saffron yellow. These dyes should be exposed to light in translucent bottles in order to verify their durability. We will also need to bear in mind that they do not alter the fragrance of, for example, the lotion they are added to.

Conservation: in enflourages as in oils, macerations, etc. we should avoid the decomposition of the substances that are vegetable or animal in origin (the same goes for the conservation of the essences). For this, we will use small amounts of boric acid that we will add to the preparation (stabilizer).

We will also try to avoid the alteration that light produces in some fragrances by using dark containers.

Also, when saving essences or preparing macerations, etc. we will fill the bottles as much as possible, avoiding contact with air which also alters the product. Of course, tight lids are essential.

To summarize: We have seen various extraction techniques practically applied to obtain essences. We have also extracted chlorophyll and a dye, which have nothing to do with essences but whose usefulness we understand well. Strictly speaking, this whole extraction system does not have to do with the craft, the heart of which is the proportionate combination of fragrances, but evidently it is the skeleton upon which we base ourselves. If we do not have suitable essences we can't combine anything.

Besides the fragrant essences, we need a carrier for them. Let's see this:

Carriers: in the carriers we will dilute, extend our essences (crystals, oils, gums or resins) to a greater or lesser extent. The carriers must be able to accept the essence and not alter its fragrance. For example, distilled water would be ideal because it is odorless, but what happens is that often it does not physically accept oils, it does not dilute them. Alcohol dilutes essences and many resins, but the problem is that it has its own fragrance. We will try, then, to choose the lesser evil.

Let's see what the basic carriers are and how to obtain them.

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Distilled water, alcohol, oil, fat, wood.

Distilled water: this is used quite a lot, added to alcohols to lower their degree without making them cloudy. Also in complex carriers such as creams, soaps, etc. We'll obtain it by distilling plain water and re-distilling it two or three more times (double or triple distilled).

Alcohols: rubbing alcohol derived from sugar cane is well known to us. But let's compare it with this lemon alcohol. We'll see that they are different. If we wanted to prepare a citrus lotion, my most appropriate carrier would be lemon alcohol to which we would add the appropriate essences.

We can get many alcohols that are not available in the market. Alcohols are the result of the transformation of sugars through the process known as fermentation. It's very simple. So we can obtain them from those substances (usually fruit) that are sweet.

How was this lemon alcohol made?

Squeeze lemons. The juice goes in a bowl. As we want fragrant alcohol we add the peel to the juice. Since lemon does not have much sugar but does have a lot of acidity, we add quite a few tablespoons of table sugar to help the process along. We leave it at room temperature (20-25° C). In two days, we will see it bubbling and the bubbling increases on the third day, at which point we can say that it is fermented. When the bubbling decreases, we can begin to distill the juice (strainer). If we left it there it could turn into vinegar with its characteristic fragrance, unless we use sulfur dioxide (bactericidal gas) to prevent this degeneration. In any case, if we are careful and start the distillation on time we can avoid the vinegar without using sulfur dioxide.

So, we distill the fermented juice. This juice has a percentage of alcohol (10, 15, 30%, depending on the fruit), the rest is water, etc. We would then distill it under low heat so that the alcohols, which evaporate at lower temperatures, rise first. And of course we would stop the distillation when about half of the juice has evaporated. It's best to do a first distillation of the entire bowl before rectifying what is obtained.

When we redistill what we've obtained, we have to take care to throw away the "head" (the first part of the distillation, not much), as it is methyl alcohol and it is poisonous. The next alcohol will be ethyl alcohol, which is interesting, and the "tail" is the last of the liquid remaining in the flask. We throw this away, too, because it is basically water. This distillation should be performed in a double boiler making sure that the water does not boil away with the alcohol. To increase the spread of evaporation points, we first add salt to increase the density of the water.

To determine the density of the alcohol obtained we use the alcohol meter.

With this system we can obtain alcohols of about 75 or 80°.

Oils: the simplest oil to obtain is olive oil. We crush the olives well, let the pulp settle and the oil is supernatant. We recover this oil to purify and deodorize it. We have to filter it very well. The more refined, purified an oil is, the more deodorized it will be. In perfumery, castor oil (vegetable) is used a lot, which has the property of having a great capacity to accumulate fragrances.

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Fat: in a butcher shop we buy tallow. Cut into little chunks, we melt it in a double boiler with pieces of apple (this helps produce an initial deodorization). While hot, we strain it and to deodorize it further we treat it with alcohol (mixing alcohol in when it's in the double boiler, stirring it vigorously and letting it cool. Once cooled we discard the alcohol. Repeat again with new alcohol).

Wood: we get wood such as red sandalwood in drugstores and herbal stores. We can also use local wood in the form of sawdust from sawmills. To deodorize it, we use the same procedure used with fats and alcohol, and repeat it. Like this, we extract the resins the wood might have and consequently, its fragrance. We should note that we use wood as a carrier for burned incense, so to test the degree of deodorization it will have to be burned.

To summarize: if we can get the scents, dyes, chlorophyll or carriers that we need in the market, then we buy them. Whatever we can't get, we make.

We work these materials with our hands. We have assembled the basic skeleton that will allow us to work in the central part of the craft that, as we mentioned, has to do with the proportionate and harmonious combination of fragrances.

EXTENSION (intensity and volume)

Returning to the enneagram of sensations.

Suppose we want to obtain a sweet-and-sour starting with a sweet and a sour (3 and 5).

We have essence of banana and lemon.

We know that some essences are more concentrated than others, essences that support higher dilutions than others. For example: if I put a drop of essence of banana in one liter of alcohol, the smell of bananas can be perceived. But if I put a drop of lemon in a liter of alcohol, only the smell of alcohol is perceived, not the lemon. So we conclude that a drop of essence of banana does not have the same fragrance intensity as a drop of essence of lemon; they are not equivalent in the intensity of their fragrance. It would be wrong then to mix 3 drops of essence of banana with 5 drops of essence of lemon in order to obtain a sweet-and-sour. We should first make them equivalent (difference in intensity relative to volume).

We resolve this problem of the different concentration of fragrances and their equalization by a process we call extension.

The extension technique allows us not only to know the fragrance intensity of an essence, but also to determine which fragrance is primary, which is secondary and tertiary, with their corresponding intensities.

Let's first consider this technique theoretically.

To extend an essence we need a carrier. We said that water has the problem of not accepting oil. We could use castor oil, which would add a fatty odor; or glycerin (idem.), or 80° alcohol, which would add a sweet pungent smell if it was from sugarcane. Each carrier will have its advantages and disadvantages. If we use oil or glycerin, their density will prevent us from doing quick mixes. So today we will use alcohol.

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Once working in the craft, in order to have comparatively valid essences, we must always use the same carrier.

Let's take the two scents of banana and lemon.

We extend:

<u>Banana:</u>	<u>Lemon:</u>
1/10 sweet	1/10 sour – bitter – pungent
1/100 sweet	1/100 sour – bitter –
1/1000 sweet	1/1000 sour –
1/3000 sweet	1/3000 –
1/5000 sweet	
1/7000 sweet	

We see then that the last fragrance to disappear is the primary scent, the penultimate is the secondary, and the first (in this case) is the tertiary. We see that the essence of banana is stronger, supporting a dilution of 1/5000 (approx.), while lemon withstands only 1/1000 (approx.). We also see that we can determine the intensity of the primary, secondary and tertiary fragrances.

We now know how much banana essence and lemon essence we need to add to have the sweet-and-sour; as follows:

Allowable Dilution:	banana	1/5000	lemon	1/1000
Theoretical combination:	sweet	3	acid	5
Actual combination:	banana	3 ml	lemon	25 ml

Only now can we harmoniously combine the fragrances.

There remains the problem of the secondary and tertiary fragrances which we should, following the same system, try to neutralize or enhance according to the perfume formula we have proposed for ourselves.

When we implement this technique we encounter the difficulty of the lack of development of our sense of smell. As well as the problem of the rapid saturation of this sense (1.5 minutes). In any case, this difficulty will at first hamper our ability to distinguish precisely which fragrances disappear, but at least we will be able to measure the overall intensity of the essence, and define its primary fragrance.

We extend (synthetic) essence of lavender in 80 proof alcohol. First, we lower the 95 proof alcohol by adding distilled water and measuring with the Gay-Lussac alcohol meter.

We put 1/10 ml of essence in 9/10 ml of alcohol. A 1/10 dilution .

From the 1/10 dilution we take 1/10 ml and in another tube we put it in 9/10 of alcohol. We have a dilution of 1/100.

From the 1/100 dilution we take 1/10 ml and put it in another tube in 9/10 of alcohol. A dilution of 1/1000, etc.

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We will see that at a certain moment the primary fragrance disappears – the bitter – and the sweet and pungent of the alcohol predominates.

We can use several methods to smell and compare. Depending on the method used, the essence will withstand more or less dilution.

Example: If we smell the extensions in tall tubes, we'll distinguish only the most intense fragrances. If we smell them in cups, things will be distinguished better. If we let the alcohol evaporate (placing a droplet of the dilution on glass), even greater extensions will be possible (with this latter method we must be sure to always put the same amount of liquid in an equal area, over the same surface) .

We can choose any of these methods, we can use the carrier we think is best, but in order to have comparable scales we must always use the same method, the same carrier, and not have a cold when we do extensions.

If we want to extend resins for incense, we'll use deodorized wood as a carrier. We extend a gram of resin in 9 grams of wood, mix it well in a mortar and continue with the same procedure. It's tested by burning.

One of the basic works of perfumery will be to have essences (liquid or solid) that are representative of all the sensations of all the genres of perception, or as many as possible.

Each of these essences should have a little label indicating what extension is possible for their primary, secondary and tertiary fragrances.

So, as a working method, each time we get an essence, we should extend it and label it. Like this we learn to work with this thing of measure.

We should know that many highly concentrated essences are repulsive, but once properly extended they change and are very useful. So do not discard anything until it has been extended.

And so we understand that when we want to produce a complex perfume, if we have our essences properly extended (studied), the combinations will be mathematical.

Now let's see how we present our fragrances.

This theme is known as treatments and presentation.

TREATMENT: Waters, Lotions, Extracts.

Extracts are the most intense liquid perfumes, the strongest. For us they would practically be combinations of essential oils. Sometimes they are diluted in a very small amount of alcohol or liquid vaseline.

Lotions are essences diluted in a greater proportion of alcohol, 80°, 70°, or 60°, as the case may be. In the case of the lavender that we extended, it would correspond to a dilution of approximately 1/200.

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Waters are further extended with a lower alcohol content. In the case of the lavender it would correspond to a dilution of 1/700 (approx.).

Whether we present our fragrances as extracts, lotions or waters, we must proportion them harmonically (in the case of a simple perfume using 8 of the primary fragrance, 5 of the secondary and 3 of the tertiary; in the case of a complex combination, as well as the sensations, the genres of perception must also be combined harmonically).

Here is where the "master's touch" comes into play, which is generally a touch (a small amount) of another genre of perception that is added which "lifts" the perfume, or "lowers" it, or enhances one aspect of it, as the case may be.

In all three cases, we must "age" the perfume. We have to leave it alone for a long time so the mixed fragrances form one whole body. We can accelerate this by whisking or stirring. We also help this process along by the "rounding off" we give it with a small amount of liquid glycerin.

Besides the "master's touch" and the "rounding off", we need to "fix" the fragrances. By fixing the perfumes, we prevent the fragrances from volatilizing rapidly upon contact with air. We fix with substances such as musk, ambergris, storax, etc. We must prepare the fixatives in the form of tinctures and then add them to the perfume so long as the fragrance of the fixative itself does not alter the perfume (at its limit).

Tincture: A tincture is a saturated solution of a substance, generally in alcohol.

Pomades, creams, unguents, balms: For us this is a scale of complex carriers whose preparation has more to do with cosmetics. A balm is practically an oil to which we add our fragrances (it is used quite a lot in medicine). An unguent is an oil to which cocoa butter and vaseline, etc. has been added. A cream is thicker and with a creamy consistency as well (we'll give a formula to get the idea). And then a pomade is something very hard. Obviously this is a scale of densities.

Cream Base:

Distilled water	60 cm ³
Glycerin 31°	15 cm ³
Potassium carbonate	1 cm ³
Stearin	10 cm ³

Essences and dye.

Everything is put into a double boiler (except the essences and the dye) and stirred for 20 minutes with a glass or wooden rod. If we want to use menthol as an essence, we have to add it and stir it while it's still hot, so that the crystals can dissolve. Other essences and dyes are added cold.

Soaps: Their preparation is also the subject of cosmetics. In any case we can find plenty of recipes for their preparation. So we'll explain the general principles: making soap basically involves fat (sometimes also almond, olive or coconut oil, etc.) which transforms into soap with the addition of sodium hydroxide and potassium hydroxide, depending on the kind of soap.

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Soap recipes indicate the degrees Baumé needed for the lye (hydroxide solution in distilled water). We can measure it using a hydrometer (much like an alcohol meter) and add more water or hydroxide as needed, to obtain the degree required.

Incense: By incense we mean not only those presentations that are burned but in general those that are used in environments and that use the air as a carrier, unlike those for personal use. From the point of view of ritual, incense is very interesting for us.

Armenian paper: Absorbent (blotting) paper is immersed in the combination of liquid essences of interest to us. It should be left submerged for a few days. Once dry, it is fixed with a fixative tincture. This paper is not burned, it is left out in a warm place. The paper then gently emits its fragrance.

Spanish skin: A chamois is immersed in a complex perfume and is left there for a few months. Then it is allowed to dry, fixing it repeatedly with a fixative tincture (musk, storax, etc.), before it is dry. This skin is then left at room temperature and it gently emits its fragrance. It lasts for years.

Cones and rods: The fragrant substances we usually use in these cases are resins. We can, however, use previously scented wood and other elements like dried rose petals, or dried and crushed apple seeds, for example.

To make cones and rods, we have to respect certain proportions for some of the elements so that it will be possible to bind them and so that they will burn. For combustion, we'll use potassium nitrate or potassium chlorate mixed with charcoal. To bind it all use gum arabic with water.

Ten percent of the total material used should be fuel (7% charcoal and 3% potassium chlorate). If we use potassium nitrate, which is weaker than potassium chlorate, the proportion should be greater. Forty percent of the total should be wood, which in addition to serving as a carrier, will be useful as fuel.

To bind it all together, we'll prepare a kind of light paste with gum arabic and water. We add it little by little and knead the mixture to form cones or rods. We can make the rods with a wooden "soul" – a stick in the middle. This will further help combustion.

Sachets: These are little gauze bags which sometimes contain lavender, dried rose petals, perfumed and powdered pumice, etc. They are often used in closets (old lady things).

Candles: The best are made with beeswax. We can also add paraffin to that wax in different proportions. To make them, we melt the wax or the paraffin-wax mixture, we add the essences that interest us (essential oils or resin tinctures) and a dye which can be diluted in a fat (oil, for example). While hot, we pour it into a mold where we have previously set (with a drop of wax) a wick. We can make candles with different stages of perfumes and colors, with different forms depending on the mold, etc.

Salts (for the bath): There are different types of salts. We must make sure that they are not harmful to the skin. The most primitive kind of bath salt is made with common cooking salt, sprinkled with essences and colors.

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Dyes and deodorizers: In terms of dyes, we have already mentioned how to extract them. The color will have a great psychological influence on the presentation of the fragrance. In general, the primary fragrance of the perfume coincides with the colors that we use in the enneagram – sweet: pink (red); sour: yellow, etc.

As a deodorizer, we have seen the simplest kind of chlorophyll preparation. (Note, not as a deodorant). If a good deodorizer came out on the market that did not act by "hiding", i.e. "covering up" unpleasant smells with other pleasant smells, but rather that acted by absorbing, obliterating fragrances, that would be very useful for us.

PRESENTATION: As we know the sense of smell is not highly developed in humans, so clearly the presentation will influence the product. The same extract presented in a beautiful bottle is more "pleasant" than one presented in a disgusting bottle. The volume of the container will correspond to the intensity of the fragrance, like this: extracts in vials, lotions in medium-sized bottles, and waters (eaux) in 1-liter bottles.

For our practical work, we will divide into three teams. One team will prepare a lotion with the palette of artificial essences that we have. They will work on that lotion by combining the essences according to the formula that they propose (2-5, for example), and assume that they all have the same possible extension. It is best to propose the formula with a primary and a secondary only, applying the golden ratio to them, 5 and 3 respectively. They will use a 1/300 dilution. It will be rounded off, given the "master's touch" and then it will be fixed and colored.

Another team will work on making a Spanish skin, skipping the ageing part. They should prepare resin tinctures in order to combine the fragrances before proposing the formula. After soaking the chamois, they will fix it with a musk tincture saturated in alcohol in the double boiler and, while hot, pour it over the "skin" with a brush.

The third team will produce cones and rods. They should propose a formula after studying the resins and other elements that are available in the laboratory. In addition to combining fragrances according to the formula, they should prepare and proportion the mixture so that it can be burned, and bind it with gum arabic. We will dry the cones and rods in the muffle furnace (where the temperature does not exceed 100°, so that the substances do not burn).

To make the proposed formula, the ratio we use for the primary, secondary and tertiary will always be golden. For example, we propose a sour (primary), bitter (secondary), fatty (tertiary). We have to put 8 sour, 5 bitter and 3 fatty (always speaking in terms of fragrance intensity, not volume of substances).

SUMMARY: We have seen how perfumery connects theoretically with Our Yoga. This becomes more clear when we practice the discipline.

We have seen how to assemble the necessary structure to enter fully into the Craft (essence extraction techniques and carriers), how to equalize the intensities of the different essences through extension, how we can combine and neutralize sensations of one genre of perception, how to broaden and deepen a perfume using various genres of perception, and finally how to treat and present fragrances.

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Of course, we have worked as we should not. That is, we have worked without tone, with little carefulness and with relative permanence as our aim was rather to study this craft in a theoretical-practical way.

We see that to develop this craft, we do not need a special laboratory. For a laboratory, all we need is a closet where we can keep our tools and substances and the stove that we can quickly assemble and disassemble. As a place to "test" our fragrances, for extensions, etc. any other room can serve. The equipment is not so complicated and we can acquire it bit by bit.

That's it.

English translation:
August 2014 by Roberto V.
Hudson Valley Park of Study and Reflection