

Module 4



The Perfume Artisan

PRESERVATIVES AND FIXATIVES
AGING AND MATURATION
INCREASING YOUR SCENT SENSITIVITY

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Module 4

The Perfume Artisan: A Course on Perfume Making From Beginning to the End and Beyond

Now that you've explored the building blocks of fragrance and begun experimenting with blends, it's time to go a little further.

We'll cover:

- Working with Additives: When and why we should add preservatives and fixatives to our perfume.
- Aging: Should you and how to age perfumes.
- Sense of Smell: How to increase your scent sensitivity.

Get ready to take your perfume journey to the next level!

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Module 4: After the Blend

Preservatives and Fixatives

Preservatives:

Preservatives prevent spoilage by protecting perfumes from bacterial or microbial growth, ensuring they stay fresh and safe to use.

- **Alcohol's Role:** Perfumer's alcohol itself acts as a preservative, which is why traditional perfumes often have greater longevity.
- **Added Protection:** In water-based perfumes or those with delicate natural ingredients, additional preservatives may be necessary.
- **Choosing Wisely:** Opt for broad-spectrum, fragrance-friendly preservatives at appropriate concentrations.

Here's a list of preservatives suitable for perfume, focusing on their popularity and potential impact on the fragrance:

- **Phenoxyethanol:** Top choice for its versatility and broad-spectrum protection. Generally has minimal impact on the fragrance itself.
- **Benzoic Acid & Sodium Benzoate:** Often used in perfumes, especially those with a focus on natural ingredients. Can have a very subtle, slightly sweet and balsamic scent.
- **Potassium Sorbate:** Less common as a standalone preservative in perfumes, but can be found in combination with others. Typically has no noticeable scent impact.

- **Ethylhexylglycerin:** Sometimes included in perfume blends as a preservative booster or to enhance skin feel. Typically has very little to no scent impact.

Considerations for Perfume Formulation:

- **Alcohol as Preservative:** High-proof alcohol in traditional perfumes is the primary preservative. Additional preservatives are mainly needed in water-based scents or those with delicate natural ingredients.
- **Scent Impact:** Most perfumery-grade preservatives are chosen for their minimal effect on the fragrance. However, if used at high concentrations, some might contribute a faint odor.
- **Natural Preservative Challenges:** Options like grapefruit seed extract exist, but their effectiveness can be less reliable compared to synthetics.

Fixatives:

Fixatives are ingredients in perfumes that help to slow down the evaporation rate of lighter, more volatile fragrance materials. Fixatives have the following effects:

- **Increases Longevity:** Makes the scent of a fragrance last longer on the skin.
- **Anchors Top & Heart Notes:** Provides a stable foundation for the brighter top and heart notes, preventing them from disappearing too quickly.
- **Enhances Overall Character:** Allows the full complexity of the perfume to develop over time, instead of fading away prematurely.

Most Popular Fixatives:

- *Synthetic Musks*: Extremely versatile and widely used. Modern musks provide a soft, clean and skin-like warmth that anchors other notes without a heavy animalic scent. They enhance the overall smoothness and longevity of a fragrance.
- *Ambers*: Can be natural resins like labdanum or synthetic accords. They offer warmth, sweetness and a slightly powdery quality that extends the depth and richness of perfumes, particularly oriental styles.
- *Resins like Benzoin & Frankincense*: Offer vanilla-like sweetness (benzoin) or a balsamic and subtly spicy character (frankincense). They add complexity and longevity, especially in the base notes, giving the fragrance a long and rich dry-down.
- *Sandalwood*: A classic fixative with a creamy, woody warmth. It blends seamlessly with a wide range of scents, adding depth and subtle sweetness while extending their presence on the skin.

Less Common (But Still Significant):

- *Heavy Florals (Ylang-Ylang, Tuberose)*: Some intense florals have fixative qualities, adding both richness to the heart and a long-lasting sweetness in the base of a perfume.
- *Vanilla (especially Vanillin)*: Sweet, comforting and long-lasting. Vanilla often doubles as both a heart note and a fixative, boosting the gourmand qualities of many perfumes.
- *Oakmoss*: Traditionally used for its earthy and forest-like scent, it has strong fixative properties. Modernly, it's often used in restricted amounts within blends due to potential allergens.

Integration & Experimentation:

- **The Art of Balance:** A well-formulated fragrance has just the right amount of fixative. Too much can dull the vibrancy of the top and heart notes, while too little makes the scent disappear quickly.
- **Base Note Backbone:** Fixatives often form a significant part of a perfume's base, offering a solid platform for the lighter notes to dance upon.
- **Understanding Evaporation Rates:** Successful use of fixatives requires knowing which of your fragrance materials are most volatile and need the most support.
- **No Hard Rules:** The amount of fixative needed depends on the fragrance's overall composition and desired effect. Some light, citrusy perfumes may need less, while rich orientals often benefit from more.

The Joy of Experimentation:

- **Start with Small Batches:** Experiment with adding fixatives incrementally until you achieve the desired longevity and scent evolution.
- **Compare Blends Side-by-Side:** Create versions of the same fragrance with different fixative levels to understand their impact.
- **Observe Over Time:** Evaluate how your perfume develops over several hours or even days to see how the fixative affects its lifespan.
- **Take Notes:** Track your experiments meticulously. Note the fixatives used, percentages, and your observations on the scent.

Additional Tips:

- **Pre-Made Blends:** For beginners, using pre-made fixative blends simplifies this aspect of formulation. Later you can try creating your own custom fixative accords.
- **Blending with Intention:** Choose fixatives that complement the overall theme of your fragrance. A warm amber fixative might suit an oriental perfume, while a light musk blend could enhance a delicate floral.

Aging and Maturation of Perfumes

Aging and maturing are crucial steps that elevate a perfume from a simple blend of ingredients into a complex and captivating fragrance. Similar to the way fine wines and spirits develop complexity over time, perfumes undergo chemical reactions and interactions that enhance their overall character.

Harmonization & Integration:

- *Melding of Notes:* Initially, individual notes in a freshly blended perfume might stand out distinctly. Aging allows them to mingle and create a seamless olfactory experience.
- *Smoothing Harsh Edges:* Any sharp alcohol smell softens over time integrating more smoothly into the heart.

Enhancing the Base Notes:

- *Depth and Richness:* Resinous, woody and balsamic base notes often benefit the most from a rest period. They become richer, warmer and more complex as they fully integrate with the heart.
- *Extended Longevity:* As the base notes become more prominent, the overall longevity of the scent can improve, giving you longer-lasting enjoyment.

Revealing Nuances:

- *Hidden Complexity:* Some fragrance materials possess subtle facets that only emerge with time. Aging can uncover these hidden depths and delightful surprises.
- *Maturation of Naturals:* Blends using essential oils often become more nuanced over time, revealing their true character that might be less apparent initially.

Overall Quality Enhancement:

- **Polished Finish:** Aging can be like the final brushstroke on a painting. It elevates a good fragrance to a beautifully blended masterpiece.
- **Understanding Development:** Appreciating how a fragrance changes over time deepens your understanding of perfumery as an art form.

Important Notes:

- **Not All Perfumes Age Equally:** Light citrus scents or simple linear structures might not change much over time.
- **Personal Preference Reigns:** The "perfect" aging time is subjective. Ultimately, the "right" aging time is what smells best to you. Some individuals might enjoy the vibrancy of a fresh blend, while others prefer the mellowness of an aged perfume.
- **Different Resting Periods:** Perfumes made with perfumer's alcohol need more of a resting period than perfumes made with carrier oils.
- **Record-Keeping:** Note initial blend dates and your observations during aging for learning and future reference.

Aging Carrier Oil Blends and Alcohol Blends:

Alcohol-Based Perfumes:

- **Focus of the Process:** In alcohol-based fragrances, aging primarily works to harmonize the fragrance materials with the alcohol and smooth out any initial harshness. It also allows base notes to develop fully.
- **Duration:** Alcohol-based perfumes can benefit from aging periods ranging from a few weeks to several months, even years.

- Considerations: Lighter fragrances like citrus scents might change minimally, while heavier, resinous perfumes often show the most dramatic improvement.

Carrier Oil Blends:

- Less Changing: While carrier oils don't have the same complex chemical reactions as alcohol, some volatile compounds in essential oils may still evaporate over time. This can soften any harsh or sharp notes, resulting in a smoother and more balanced fragrance.
- Reduced skin irritation: Essential oils can be potent and aging helps to make it easier to use on the skin with less problems for people with skin sensitivity.
- Improved stability: The fragrance becomes more consistent over time.
- Settling and Clarification: After mixing a concentration with carrier oil, some particles or sediment may settle to the bottom. Aging allows this to happen, resulting in a clearer and more visually appealing product.

Similarities:

- Storage Matters: Both alcohol and carrier oil-based blends need to be stored in a cool, dark place for optimal results.
- Periodic Evaluations: You need to smell and test your blends over time, whether it's an alcohol fragrance or a carrier oil mix.

Examples of Perfumes and Aging:

- Spicy (Oriental): The iconic fragrance “Shalimar by Guerlain” features notes of vanilla, tonka bean, iris and incense. It benefits from 6-12

months of aging to mellow the vanilla and allow the base notes to develop fully.

- **Florals:** This iconic floral fragrance “Chanel No. 5 by Chanel” features notes of jasmine, rose and aldehydes. While it doesn't require extensive aging, 3-6 months can help to mellow the aldehydes and create a smoother scent.
- **Fresh:** A popular aquatic fragrance “Acqua di Gio by Giorgio Armani” with sea notes, citrus and herbs doesn't typically require aging. They will sometimes age up to 6 months to mellow the citrus notes more.
- **Resinous & Woody Perfumes:** A complex woody fragrance “Wonderwood by Comme des Garçons” has notes of cedar, sandalwood, vetiver and pepper. It can be aged for 1-2 years to allow the notes to meld and create a more nuanced scent.
- **Animalic:** This bold and sensual fragrance “Musc Ravageur by Frederic Malle” features notes of musk, amber, vanilla and cinnamon. It is known for its warmth and slightly animalistic character. Aging this perfume for 6-12 months can help to mellow the musk and create a smoother, more alluring scent.

Additional Notes:

- **"Green" fragrances:** Aging can vary depending on the greenery used. Fresh-cut grass notes might fade, while richer green notes like galbanum may evolve in interesting ways.
- **Fragrances with Delicate Naturals:** Blends using very delicate natural materials might sometimes degrade with extended aging. It's best to test and evaluate.

Increasing Your Scent Sensitivity

A perfumer's sense of smell is their most vital tool, akin to a painter's brush or a composer's ear. It's the gateway to a world of scents, the foundation upon which their artistry is built. A finely tuned nose is essential for discerning the subtle nuances of individual ingredients, for recognizing how different notes interact and evolve, and for crafting harmonious and evocative fragrances.

The olfactory system is incredibly complex, capable of distinguishing thousands of different scents and triggering powerful emotions and memories. For a perfumer, this means the ability to not only identify individual notes but also to understand how they combine to create a unique olfactory experience. It's about recognizing the delicate balance between freshness and warmth, sweetness and spice, light and dark.

Here are some ways that you can develop your sense of smell.

Regular Smell Training: Just like any muscle, your olfactory senses need regular exercise. Dedicate time each day to consciously smell different scents, trying to identify and distinguish individual notes. You can use a dedicated smell training kit or simply explore the aromas of everyday objects, spices or essential oils.

Keep a Scent Journal: Maintain a journal to record your olfactory experiences. Write down descriptions of scents you encounter, including their intensity, character and associations. This practice helps you develop a better vocabulary for describing fragrance and enhances your memory for scents.

Expand Your Scent Palette: Explore different fragrance families and ingredients. Experiment with natural materials like flowers, herbs, spices, woods and resins, as well as synthetic aroma compounds. The more scents you expose yourself to, the better equipped you'll be to recognize and understand them.

Practice Blind Smelling: Challenge yourself by trying to identify scents without visual cues. You can use blind smelling kits or simply ask a friend to

present you with different fragrance samples. This exercise sharpens your olfactory focus and helps you develop a more analytical approach to scent.

Maintain a Healthy Lifestyle: A healthy body often translates to a healthier sense of smell. Avoid smoking, limit alcohol consumption and stay hydrated. A balanced diet rich in antioxidants and essential nutrients can also support olfactory function.

Be Patient and Persistent: Developing a keen sense of smell takes time and dedication. Don't get discouraged if you don't see immediate results. Keep practicing, experimenting and exploring the world of scent and you'll gradually enhance your olfactory abilities.