Comparing Notes: Formulating with Coumarin, Sandalwood and Ethyl Linalool

An extended conversation with fine fragrance perfumers Kevin Verspoor and Pierre Gueros

This month's Comparing Notes is the latest in a continuing series in which perfumers exchange insights into raw materials, formulation techniques, finished fragrances and their experiences in the fragrance industry.

Coumarin is present in a wide variety of natural sources, from grass to hay to citrus peel, says perfumer Kevin Verspoor, seated in drom's New York fragrance studio. Its character, he adds, is such that even synthetic coumarin imparts a natural effect. As Verspoor talks, he passes around blotters of coumarin. "It's one of the great, premier fragrance materials of all time," he says. "It works so well in almost any construction. Not only is it the backbone of the fougère [fragrance family], but it's also used in chypres, orientals, florals and citrus blends. It's really almost a universal material that lends itself to all fragrance constructions."

Verspoor's colleague, perfumer Pierre Gueros, adds, "It's a bit like patchouli for me," noting that the material's addition or subtraction in a formula has huge hedonic consequences. "If you add a hint of vanilla to a fragrance, it would be a twist, but you will recognize the fragrance. But if you add coumarin, most of the time it [becomes] another fragrance."

"Not only does it push citrus notes," says Verspoor, "it wraps floral notes, it gives more density and thickness to the smell of a fragrance. It has multiple functions: pushing, suppressing, giving more fullness. You can really use it for whatever you want it to be."

Gueros adds, "The combination of methyl anthranilate, which is a floral note, and coumarin, which is a powdery note or almost an edible almond note … makes a combination that is extremely masculine. Think of Jean Paul Gaultier's *Le Mâle* [by perfumer Francis Kurkdjian] or many other fougère in that category, like *Joop Homme* [by perfumer Michel Almairac]."

"*Joop Homme* is a little more oriental," says Verspoor, "but it still does the same thing."

Gueros continues, "So you have that flower combined with that powder—the methyl anthranilate plus coumarin—which makes an accord that is strangely masculine when you [would] expect it to be one of the most feminine accords. That's exciting." (See **Beyond Unisex: Genderless Fragrances**.) Gueros adds that he's currently working on a fragrance pairing coumarin with musk in an attempt to find an ideal powdery combination.

"In the classical days of perfumery when *Fougère Royal* was created by Houbigant [perfumer Paul Parquet]," says Verspoor, "the coumarin backed the lavender. ... Then you think of feminine fragrances, the floral oriental type. They have huge doses of coumarin with heliotropine and vanillin, which then modulates the orange blossom spice accords in those fragrances. But then if you look at something like Coty's *Chypre* [by François Coty], which came out in 1917, the coumarin, [which constitutes] a huge amount of that fragrance, tempers the civet absolute, which is another interesting accord, classically. There's an effect that coumarin has on the animal notes, primarily civet and castoreum."

Materials Mentioned

- Castoreum
- Civet
- Coumarin
- Ethyl linalool
- Heliotropine
- Methyl anthranilate

Fragrances Mentioned

- *Blush*
- *Chance*
- *Chanel No 5*
- *Chanel Pour Monsieur*
- *Chypre*
- *Fierce*
- *Fougère Royal*
- *Jicky*
- *Joop Hommes*
- *L'Air du Temps*
- *Le Mâle*
- *Mouchoir de Monsieur*
- *Pour Un Homme*
- *Tabac Blond*

Kevin Verspoor and Pierre Gueros

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>
> —Kevin Verspoor

Meet the Perfumers

Pierre Gueros never dreamed of being perfumer. Stumbling across ISIPCA as a student, he eventually interned at Synarome before joining drom. Gueros sees his training as unique in that the majority of his mentors were women—including colleague Valerie Garnuch—which he believes has shaped his perfumery. While his entrée into the world of fragrance was a happy accident of sorts, he says his nature fits that of any perfumer: "You like to travel, you're very open to the world and you're very sensitive to beauty."

Kevin Verspoor grew up improvising perfume compositions with his sister, mixing his mother's castoff perfumes and berries from the family's yard. These concoctions, he admits, were at least on one occasion applied to the family pets. A born perfumer, Verspoor and his sister even held blindfolded "name the perfume" smelling contests. An aroma molecule class in high school led Verspoor to studies at the Aveda Institute where perfumer Koichi Shiozawa encouraged Verspoor's development. The young perfumer explored every facet of the industry, from essential oils to product development. Attending FIT for a time, Verspoor interned at IFF and Manheimer and eventually took a position at Haarmann & Reimer, where he was mentored by Steve Orson, Harold Wiggins and Joachim Correll. He trained further under Steve DeMarcado at Fragrance Resources before joining drom.

Gueros believes that it can take five or seven years of experiments to learn the ways in which a formula can be twisted and changed without having to smell or how bold cuts can be made. He adds, "Being able to interpret what people say about your perfume and then to translate it—that takes a long time."

Verspoor adds, "The understanding—knowing what the customer is saying, what they want and are trying to do—that takes time." And, he says, with maturity comes the confidence "to make really big steps in your fragrances. As a younger perfumer you have a tendency to say [for example], 'It's too aldehydic,' and so you reduce the aldehydes by one-tenth, but really you should just take them out."

"You have almost a feeling that you are not allowed to go so far," Gueros notes.

"In reality," says Verspoor, "it's just a bottle of perfume that can be … started over again."

Indian Sandalwood Oil

For largely ethical reasons, drom does not formulate with Indian sandalwood oil. Still, Verspoor says, "I love the smell of sandalwood. To me it smells like a complete perfume. You can wear it straight. It can be used in almost every type of fragrance, from a fruity floral to a chypre or oriental. It has an ability to smooth and push and round [out] and make a fragrance more full and long-lasting."

In addition, he notes, sandalwood's gentle character means it is difficult to overdose. "The formula could be 20% sandalwood and it would still smell fantastic." Gueros adds, "When you think about perfumes created for the Middle East or Indian [markets], they have a high content of sandalwood."

Ethyl Linalool

Gueros' affection for white florals, particularly green-white flowers like linden blossom or gardenia, makes ethyl linalool a key ingredient. "I couldn't live without it," he says, "but I could imagine it's not the most exciting raw material for most perfumers. It's a bit like coumarin [in that] ethyl linalool smells very natural because it's in the same family as linalool which is contained in so many essential oils."

The material's versatility is a particular asset. "I can use it almost everywhere," Gueros explains. "There's an aromatic note … like coriander. There's a tea note, floral notes and I try to use the anisic [note] more and more, which is almost a licorice, basil note. I'm working with it to make a feminine basil note. It's something I use more and more. I find even more qualities, facets to it each year."

"I absolutely love this material," Verspoor adds. "When I was training as a perfumer and I smelled ethyl linalool, compared to linalool, I said, 'Why would you use linalool?' It has a certain density and intensity that linalool doesn't." He notes that the material's price has fallen over the years, making it a more accessible option for perfumers. In addition, it can be applied at higher levels in allergen-free fragrances than can linalool.

"We always try to achieve that modern white floral bouquet," says Gueros. "Ethyl linalool is a key element because it's transparent in a way. It's very fresh. It has that

natural greenness. When you think about honeysuckle or linden blossom, for me ethyl linalool smells like that. With that [material] you can create a modern jasmine as well, far away from the clovey and animalic parts. If you add the ethyl linalool you have a hint of that jasmine character."

Verspoor adds, "It's so important to so many modern great fragrances, like *Chance* [formulated by Jacques Polge for Chanel]. They're using ethyl linalool as well as ethyl linalyl acetate in it. One fragrance that really made masterful use of ethyl linalool was Marc Jacobs *Blush* [formulated by perfumer Steve DeMarcado]. It probably has the largest dose of ethyl linalool of any fragrance on the market."

Confessions of a Drydown Junkie

"I primarily wear only what I make so that I [can] evolve those fragrances better and more quickly [and see] how it wears on skin," says Verspoor. A student of perfumery's history, he says he found himself buying contemporary scents that he never finished, perhaps getting a third of the way through a bottle and never making a repeat purchase. "I find a lot of the newer fragrances are designed to hook you with that top note impact, but they all have this kind of boring, same drydown." Pierre Gueros describes this effect as blandly "clean, musky."

"The drydowns don't have hooks," Verspoor adds. "I'm a drydown junkie. If a fragrance doesn't have a good drydown, it's not going to get a second purchase out of me, nor is it going to get a second purchase from someone out on the market. Why do you think people have been buying *Chanel No 5* [formulated by Ernest Beaux] since the 1920s? Not only does it have an explosively beautiful top note of aldehydes and floral absolutes, it also has a lasting hook in the drydown of smooth woods and musk; this is a fragrance that has a hook from top to the bottom. So does *L'Air du Temps* [formulated by Francis Fabron in 1948]. The greatest fragrances have not only a signature in the top note; they have an incredible signature in their base note."

Gueros—a fan of *Chanel Pour Monsieur*, formulated by Henri Robert in 1955; and *Fierce* by Abercrombie & Fitch, formulated by Christophe Laudamiel in 2002—observes that this change may be due to the fact that in the past consumers spent more time going to shops and "living with" a fragrance as opposed to many of today's split-second purchases based on micro impressions from top notes. "Now you have to grab people with the top note," he says. "A lot of vanilla, a lot of musk makes everybody like a fragrance [drydown]. It's overused."

Meanwhile, Verspoor says excess linearity of a fragrance can cheat consumers' noses out of compelling facets, leaving them bored: "You're left with an uninteresting background."

Jicky

Years before he became a perfumer, Verspoor first smelled *Jicky*, which was formulated by Aimé Guerlain in 1889. As he puts it, "It chose me."

"The first time I smelled it at Marshall Fields in Chicago, I said, 'Wow, I've never smelled anything like that.' It smelled so comforting and familiar, but at the same time it doesn't smell like anything else—everything else smells like it. It's the first true oriental fragrance. There are so many fragrances that stem back to it, especially the Guerlain stable of fragrances. I find it to be a fascinating fragrance. It's one of the few fragrances I've worn through many bottles in all forms—EDT, EDP, parfum, soap, lotion. It's really best smelled in its perfume form. It gives you the best interpretation of what it smells like.

"For me, the description of the fragrance is oriental, but it has an incredible dichotomy between freshness and sensuality. It's almost an eau de cologne with an oriental background—it has so much citrus. There's this huge amount of bergamot and rosewood and mandarin and orange and herbal notes, which give it a very pronounced freshness. But then it also has a good amount of coumarin, sandalwood, patchouli, vanillin and civet absolute, which give this warm, textural, soft oriental quality to the background. Its signature is that of being oriental. It's equally almost juicy and mouthwatering when you smell the top notes. At the same time it's very dry and perfumistic and sweet in its drydown."

When Gueros comments that the scent is essentially genderless, Verspoor points out that *Jicky* was originally a failure as a women's fragrance launch and first became popular among men. "There are certain qualities that are masculine in all three parts of its drydown. It's a really intriguing fragrance."

Guerlain, says Verspoor, made its greatest fragrances by twisting *Jicky*—with *Shalimar*, created by Jacques Guerlain in 1925, being the prime example. *L'Heure Bleue* and *Mitsuoko* also fall under its olfactive lineage. "Its structure can be used in so many fragrance types."

Pour Un Homme

Gueros finds a similar combination of freshness and sensuality that Verspoor identified in *Jicky* in Caron's *Pour Un Homme*, which was formulated by Ernest Daltroff in 1934. "It's a very simple perfume," says Gueros. "It's not a very sophisticated, complex perfume. It's pure—you smell two things: lavender and vanilla. Of course there are many more materials [in the formula] than that. I loved this perfume the first time I wore it, because I thought it was masculine without being macho—exactly what I liked about *Le Mâle* when I first wore it."

Gueros describes the fragrance construction as sweet, soft and simple, characterized by the simultaneously masculine and homey character of lavender. The vanilla impression, he adds, contributes "motherly" and sensual effects. "This [pure] impression is something I try to have in the things I create," he says. "I often use that lavender–vanilla accord with an ambery background that you find in *Pour Un Homme* in many products from shower gels to fine fragrances. It creates for me a very primal impression."

Beyond Unisex: Genderless Fragrances

Thanks to comments by Karl Lagerfeld and Sarah Jessica Parker and the launch of scents from innovative houses such as Bond No. 9, the profile of so-called genderless fragrance is on the upswing.

"The concept of giving a gender to a [fragrance] raw material is very strange in a way," says Pierre Gueros, who says he is currently developing a genderless fragrance. "We [as perfumers] talk a lot about the gender of materials—is it masculine, is it feminine. It's true that coumarin isn't unisex, but [instead] totally masculine and totally feminine at the same time. You can't construct a fougère without coumarin. [Coumarin is] transgendered—it's a great quality for a raw material."

Asked to differentiate genderless scents from unisex fragrances, Gueros notes, "Unisex fragrances were, most of the time, masculine fragrances that were not *too masculine*—a kind of sheer masculine fragrance. The next step is probably to go the reverse way, to take more feminine raw materials and to try to make them more genderless."

Verspoor also wore the fragrance at one time. "Historically … it was one of the first fragrances designated for a man. Guerlain did do *Mouchoir de Monsieur* [formulated in 1904 by Guerlain], but *Pour Un Homme* had a much bigger impact. It's said that Ernest Daltroff always smelled of *Tabac Blond* [which he formulated in 1919] and *Pour Un Homme* at the same time. He always wore the two together. Because *Tabac Blond* is another classic genderless perfume."

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