



A Perfumer's Training

The Heart of the Art

Fragrance Books Inc. @ www.perfumerbook.com

Glen O. Brechbill

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Perfume Is

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Fragrance is

Fragrance is

- Perfume is a creation from mixture of fragrance ingredients that together create a harmonious blend.
- Perfume comes from sense of smell from Perfumer's memory & art.
- The term of perfume comes from the Latin “Per fumum” or “Pro fumum” that is, “ through smoke” or “for smoke”, supposed the oldest use of fragrance mixtures, as a religious offering of the smoke of incense



Fragrance Ingredients

The Language of Fragrance

| | |
|---------------------------|---|
| Adoxal | Sweet floral waxy rosy referred to as ozone like. |
| Alcohol C - 8 | Strong fresh, orange rose like waxy and sweet odor. |
| Alcohol C - 9 | Powerful oil floral fresh like, dilution - rosy. |
| Aldehyde C - 14 | Strong peach note. |
| Aldehyde C - 16 | Strawberry sweet fruity candy like. |
| Allyl Amyl Glycolate | Strong fruity pineapple |
| Alpha Damascone | Intensely fruity reminiscent of plums and roses. |
| Amyl Cinnamic Aldehyde | Herbaceous floral material suggestive of many types of flowers. |
| Amyl Salicylate | Sweet herbaceous green slightly floral |
| Anisyl Alcohol | Mildly floral sweet odor reminiscent of vanilla |
| Applinal | Strong, sweet with a warm woody balsamic background, apple. |
| Argumen Aldehyde | Floral aldehydic hyacinth type odor. |
| Aubepine | Intensely sweet floral odor reminiscent of hawthorne. |
| Benzaldehyde | Strong sweet odor of bitter almonds. |
| Benzophenone | Powdery geranium rose Like |
| Benzyl Acetate | Powerful thin sweet fresh fruity floral odor of jasmin & other flowers. |
| Benzyl Alcohol | Faint, non descript odor, rather sweet varies. |
| Benzyl Benzoate | Faintly sweet balsamic. |
| Benzyl Propionate | Fruity sweet. |
| Benzyl Salicylate | Very faint yet sweet and floral |
| Bergamot Eco Essence | A sweet fruity odor typical of the bergamot orange. |
| Birch Tar Oil | Powerful phenolic, tarry woody smoky, leathery. |
| Bois De Rose Oil | Floral odor reminiscent of rose orange. |
| Cashmeran | Diffusive musk. |
| Cedarwood Oil of Virginia | Oily woody almost sweet mild pleasant, cedar chest like odor. |
| Cinnamic Aldehyde | Warm spicy balsamic odor suggestive of cassia, cinnamon. |
| Citronellol Oil Coeur | Fresh rosy, floral rosy. |

Fragrance Ingredients - Natural

- **Natural:** *Obtained from Plants/ Expenssive. / About 200 items*

From Plants

Flowers: Jasmine, Rose, Hyacinth, Tuberose, Ylang-ylang, Orange Flower ..

Leaves: Peppermint, Geranium, Patchouli .

Peel: Lemon Lime Orange Grapefruit, Mandarin Bergamot .

Trees: Sandalwood, Cedarwood .

Fruits : Anise, Coriander, Nutmeg

Roots: Vertiver, Orris, .

Resin: Glabanum, Myrrh, Oribanum, Balsam

From Animals

Musk , Civet, Castoreum, Ambergris ...

How can we get the Natural Ingredients?

Expression: is used exclusively for obtaining citrus oil, which is easily damaged by heat- called Cold-pressed . Orange oil, Lemon oil, Bergamot oil, Mandarin oil, Grapefruit oil.

Extraction: is proceeded by which aromatic substances are drawn or leached out of the raw material by means of solvent(petroleum, hexane, ethanol .) Included Enfleurage.

➡ **Absolute or Concrete**

Distillation: is in other words evaporation and subsequent condensation of liquid.

➡ **Essential Oil**

Fragrance Ingredients - Chemical

- *Chemical:*

Aroma Chemicals can be produced from natural as well as synthetic raw materials. Obtained from Petroleum and Coal.

Cheap & Easy available

For examples, Aldehyde, Galaxolide, Iso E Super, Calone 1951.



Fragrance Visualization

Costing Out a Fragrance

The Formula - Converting Pounds into Kilos

100 Lbs. Divided by 2.2046 = 45.36 Divided by 1,000 = .0453

.0453 x Parts = Grams Per Item = 1,000 Parts

Pine Fragrance - All Purpose Cleaner

| Parts | Aroma | Price Per Pound | Raw Material Impact |
|-------|---------------------------|-----------------|---------------------|
| 291 | Pine Oil Yarmor 302 | 1.03 | .300 |
| 167 | Iso Bornyl Acetate | 1.35 | .225 |
| 39 | Alpha Pinene | 2.25 | .088 |
| 18 | Eucalyptol | 5.76 | .104 |
| 3 | Camphor Powder | 2.00 | .006 |
| 27 | Galaxolide 50 | 8.75 | .236 |
| 52 | Alpha Terpineol | 1.22 | .063 |
| 26 | Benzyl Salicylate | 4.05 | .105 |
| 24 | Benzyl Benzoate | 1.60 | .038 |
| 23 | Ionone Beta Pure | 17.10 | .393 |
| 3 | Patchwood | 1.60 | .038 |
| 11 | Vertenex | 2.45 | .026 |
| 34 | Di Ethyl Phthalate | .860 | .029 |
| 19 | Hexyl Cinnamic Aldehyde | 3.00 | .057 |
| 28 | Cedarwood Oil of Virginia | 6.20 | .174 |
| 1 | Piconia | 12.80 | .012 |
| 12 | Fir Needle Canadian | 10.75 | .132 |
| 17 | Coumarin | 7.50 | .128 |
| 20 | Santalex T - Sandela | 6.50 | .130 |
| 152 | Di Propylene Glycol | .64 | .097 |
| 33 | Terpinyl Acetate | 1.80 | .033 |

1,000

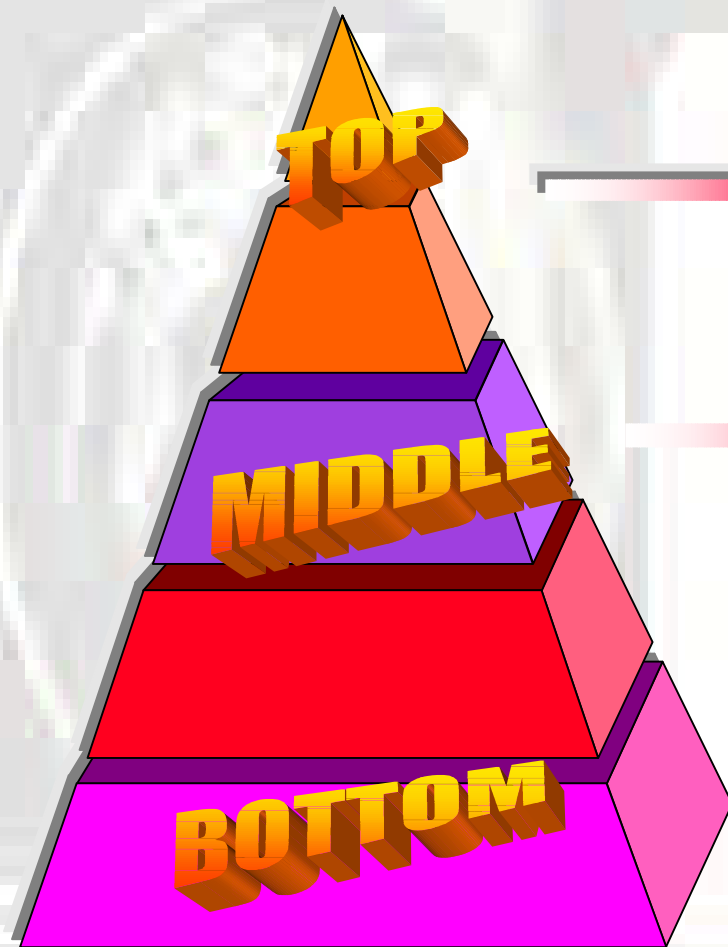
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The Composition - Pine Fragrance

| | |
|-----|-------------------------------------|
| 291 | Pine Oil Yarmor 302 |
| 167 | Iso Bornyl Acetate |
| 39 | Alpha Pinene |
| 18 | Eucalyptol |
| 3 | Camphor Powder |
| 27 | Galaxolide 50 |
| 52 | Alpha Terpineol |
| 26 | Benzyl Salicylate |
| 24 | Benzyl Benzoate |
| 23 | Ionone Beta Pure |
| 3 | Patchwood - Pfw - Fragrance Contest |
| 11 | Vertenex |
| 34 | Di Ethyl Phthalate |
| 19 | Hexyl Cinnamic Aldehyde |
| 28 | Cedarwood Oil of Virginia |
| 1 | Piconia |
| 12 | Fir Needle Canadian |
| 17 | Coumarin |
| 20 | Santalex T - Sandela |
| 152 | Di Propylene Glycol |
| 36 | Terpinyl Acetate |

1,000

Fragrance Visualization



Top note : *First Impression in Perfume.
High Volatile.
Citrus, Fresh, Green notes ..*

Middle note : *Heart of fragrance .
Intermediate Volatile
Floral, Aldehydic notes ..*

Base note : *Basic of fragrance .
(Bottom) Low Volatile
Woody, Powdery, Musky ..*



Basic Fragrance Families

Basic Fragrance Families

- *Aldehydic*

- *Chypre*

- *Citrus*

- *Floral*

- *Fougere*

- *Oriental*

- *Spicy*

- *Gourmand*

- ***Citrus notes***  ***Citrus + Floral***

Representative Ingredients

Natural : Lemon Oil, Bergamote, Lime .

Chemical : Citral, Dihydro Myrcenol .

Eau Savage
Eau Savage



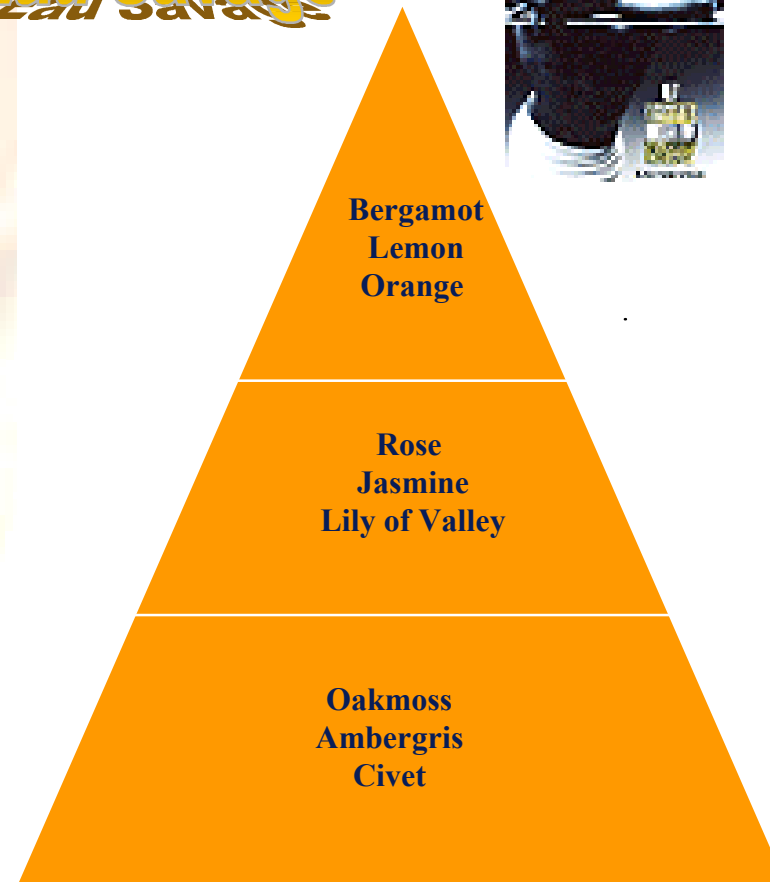
Representative Fine Fragrance

O de Lancome (1975. Lancome) 

Bulgari Eau Parfume (1992. Bulgari) 

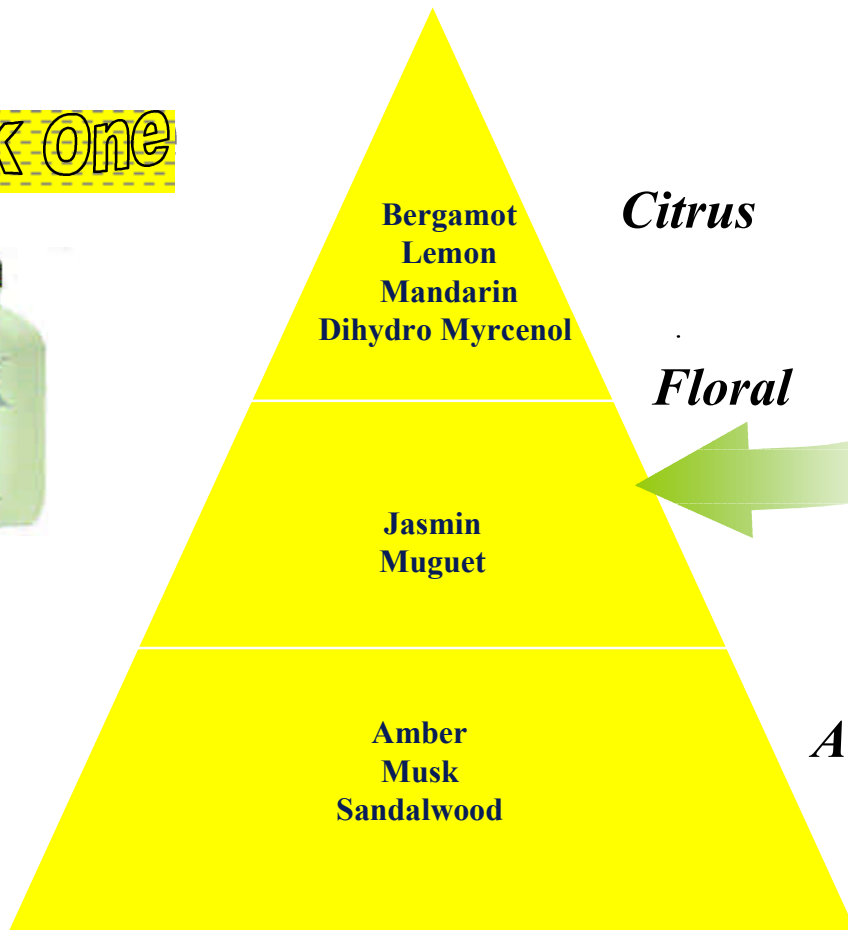
CK one (1994. C.Klein) 

Eau Savage (1966.C.Dior)



- *Citrus notes*

CK One



Green



• **Floral notes** → **Floral + Floral**

Representative Ingredients

Natural : Jasmin Abs, Ylang-Ylang, Rose Abs. T

Chemical : Hedione, Benzyl Acetate

Representative Fine Fragrance

Joy (1935. Jean Patou) ▶

Diorissimo (1956.C.Dior) ▶

Anais Anais (1979. Cacharel) ▶

Paris (1983. YSL)

Beautiful (1985. E. Lauder) ▶



- *Aldehydic notes* → *Floral + Aldehydic*

Representative Ingredients

Natural: Not available

Chemical: Aldehyde C-11, Aldehyde C-12.

Representative Fine Fragrance

Chanel No. 5 (1921. Chanel) ▶

Calandre (1969. 1969. Rabanne)

First (1976. Van Cleef & Arpels)

Chanel No. 5



• *Spicy notes*



Floral + Spicy

Representative Ingredients

Natural: Clove Buds oil, Pepper oil, Cinnamon oil.

Carnation

Chemical: Eugenol, Cinnamic Aldehyde

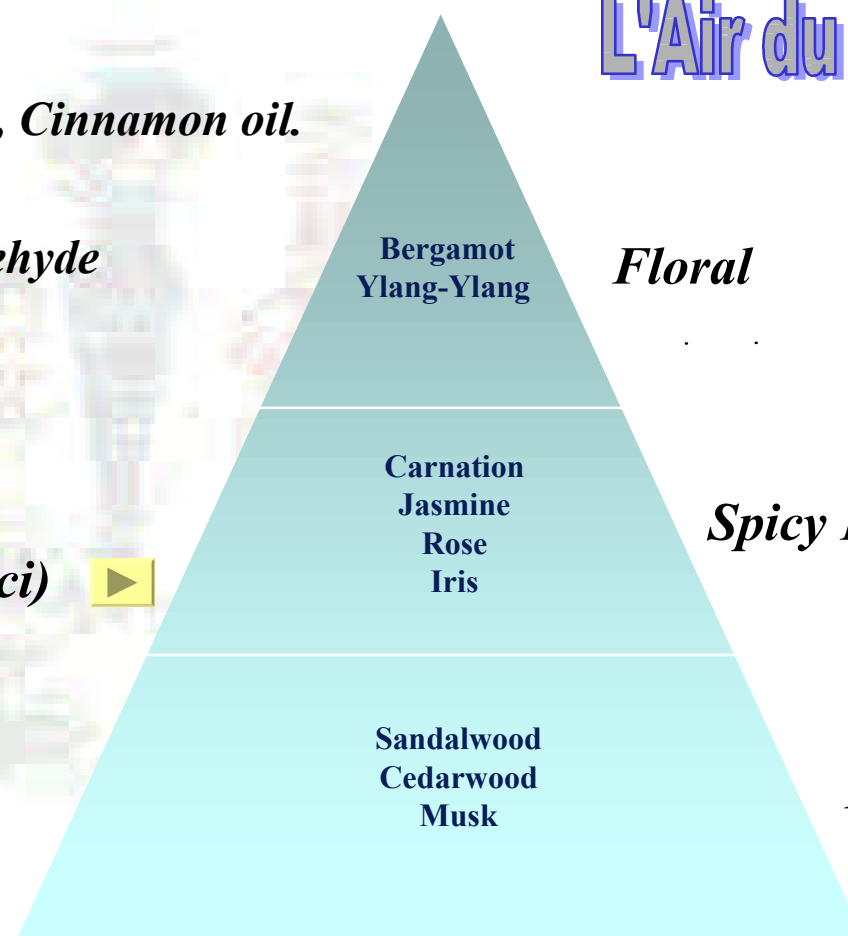
Representative Fine Fragrance

L'air du Temps (1948. Nina Ricci) ▶

Fidji (1966. Guy Laroche)

Egoist (1990. Chanel) ▶

L'Air du temps



Floral

Spicy Floral

Woody

Musk



What is Chypre .?

• *Chypre notes*

Representative Ingredients

*Natural : Oak moss Abs. Vertiver, Patchouli oil
Galbanum Cederwood, Sandalwood*

Chemical: Veramoss, Iso E Super.

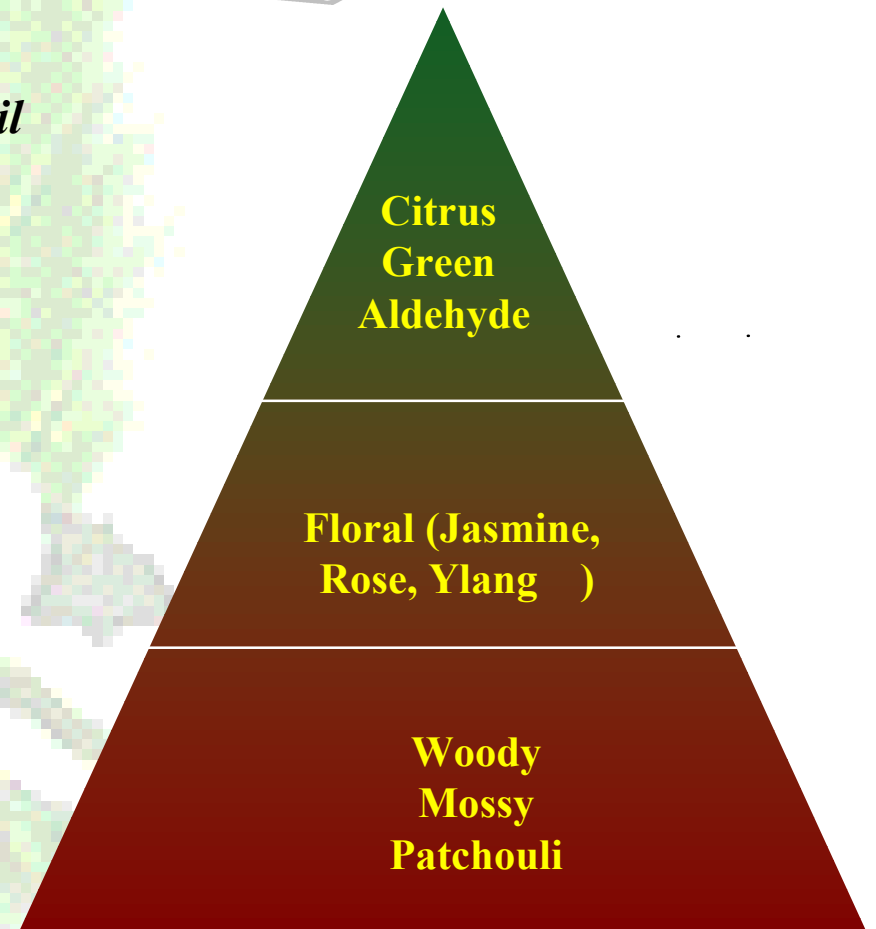
Representative Fine Fragrance

Mitsouko (1919. Guerlain)

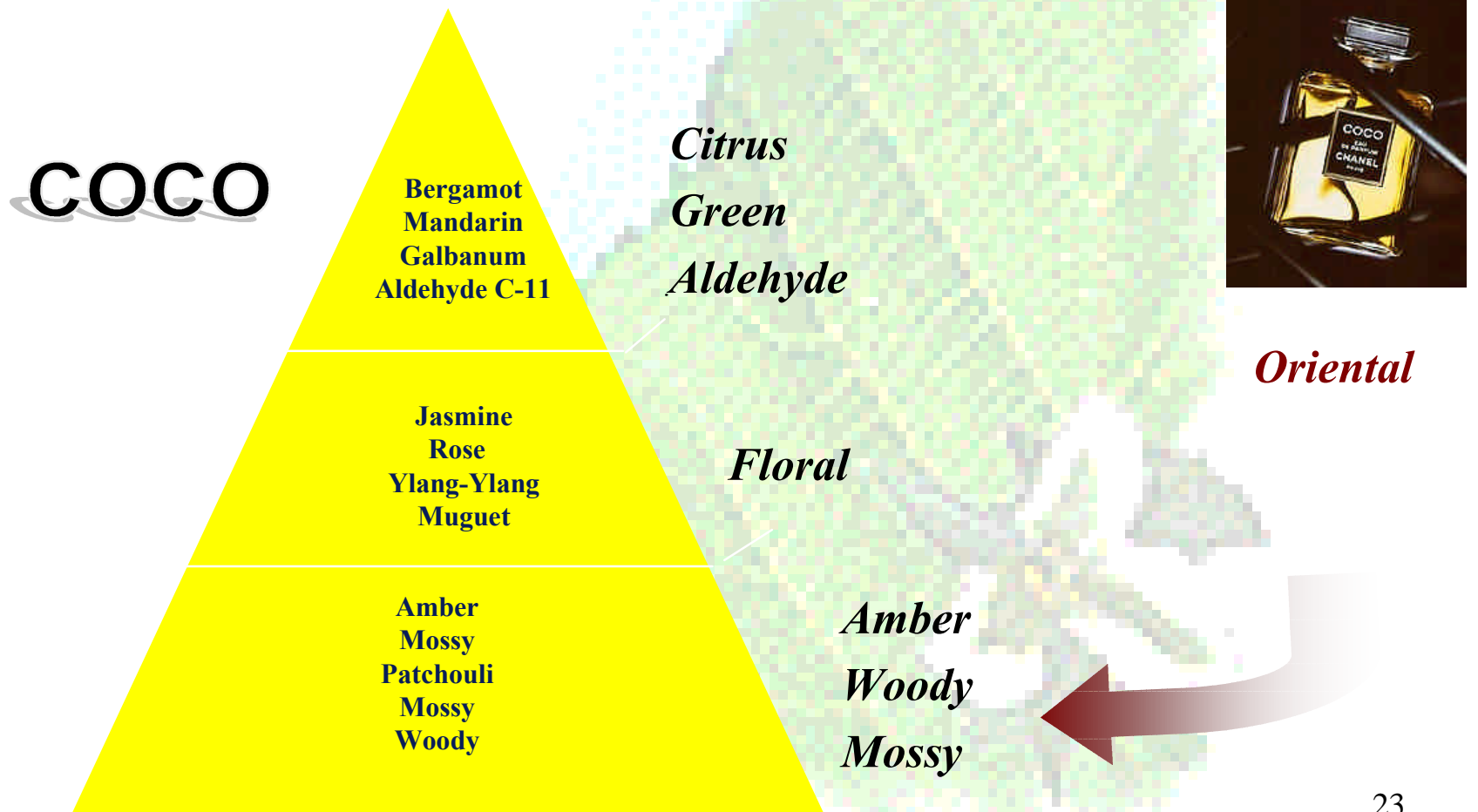
Miss Dior (1947. Christian Dior) ▶

Coco (1984. Chanel) ▶

Ysatis (1984. Givenchy) ▶



- *Chypre notes - Fine Fragrance*



What is Oriental?

• *Oriental notes*

Representative Ingredients

Natural: Vanilla, Tolu Balsam, Mandarin, Cinnamon

Chemical: Vanillin, Galaxolide.

Representative Fine Fragrance

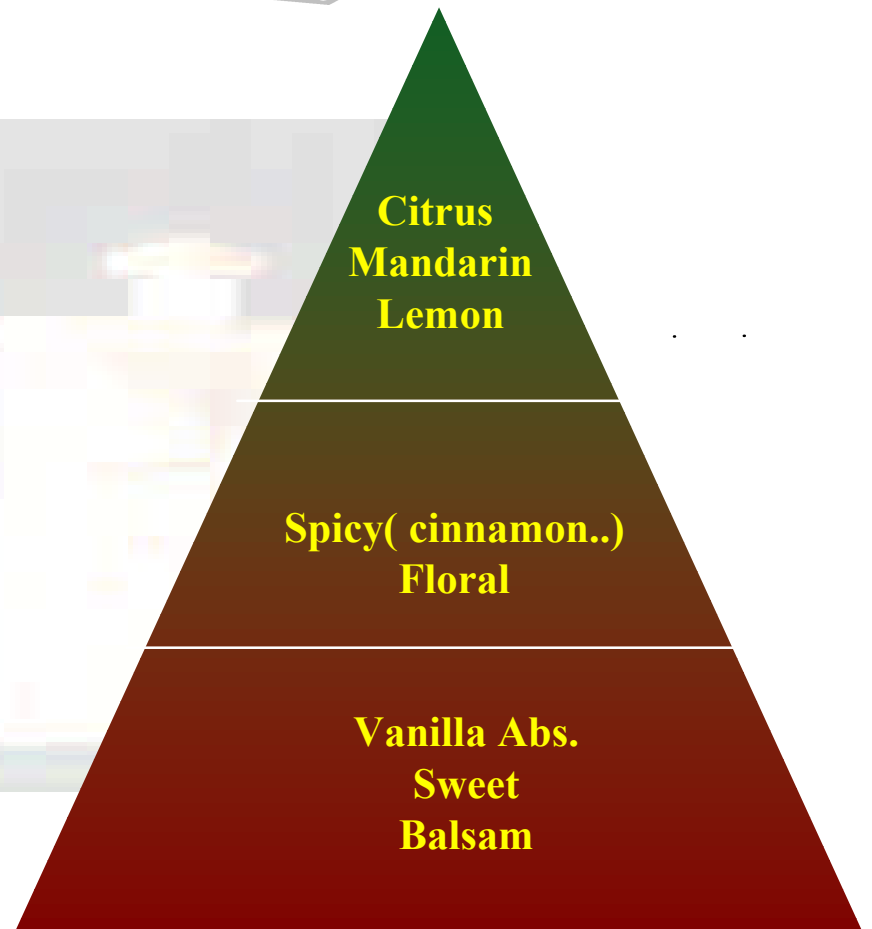
Shalimar (1925. Guerlain) ▶

Obsession (1984. Calvin Klein) ▶

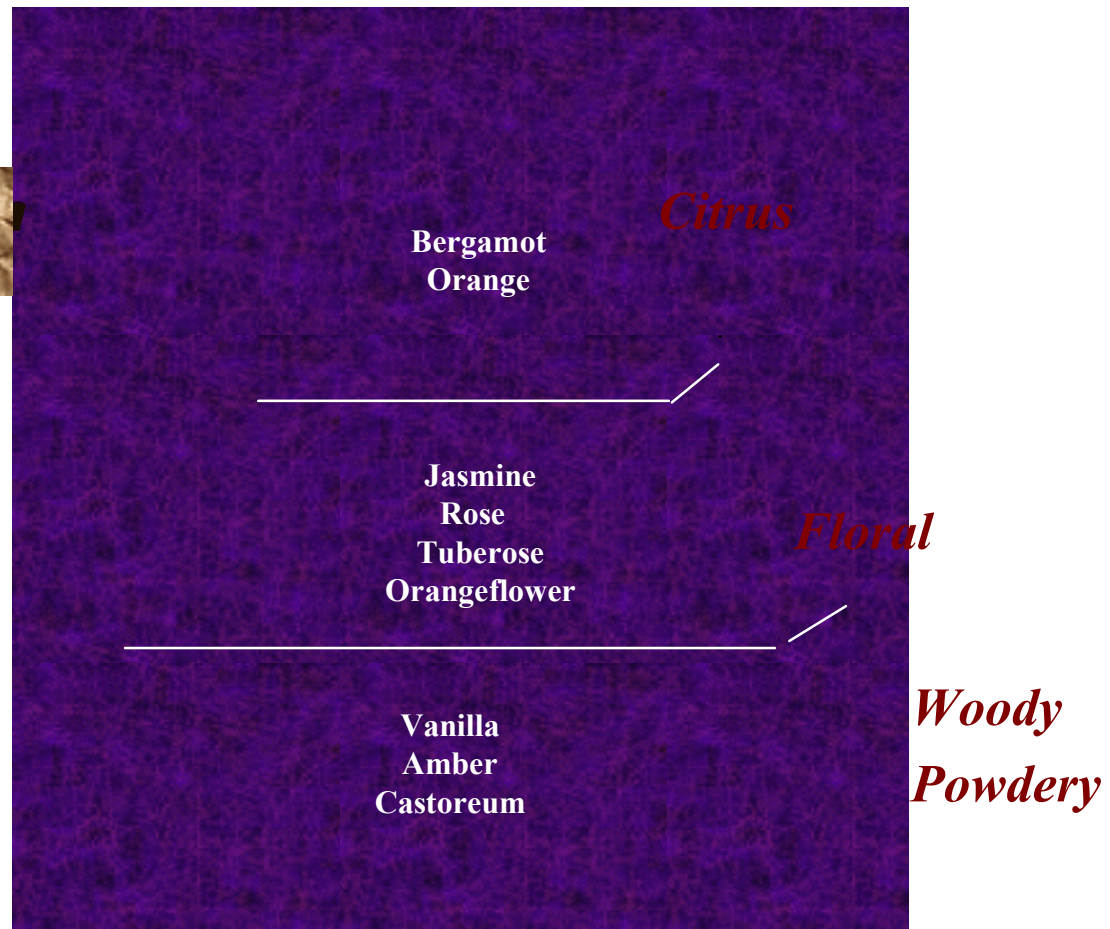
Opium (1977. YSL) ▶

Samsara (1989. Guerlain) ▶

Jean Paul Gaultier (1993. J.P. Gaultier)



- ***Oriental notes - Fine Fragrance***



What is Fougere?

• *Fougere notes*

Representative Ingredients

Natural: Lavender, Lavandin, Eucalyptus

Chemical: Lavender Spike Oil, Carvone-L.. .

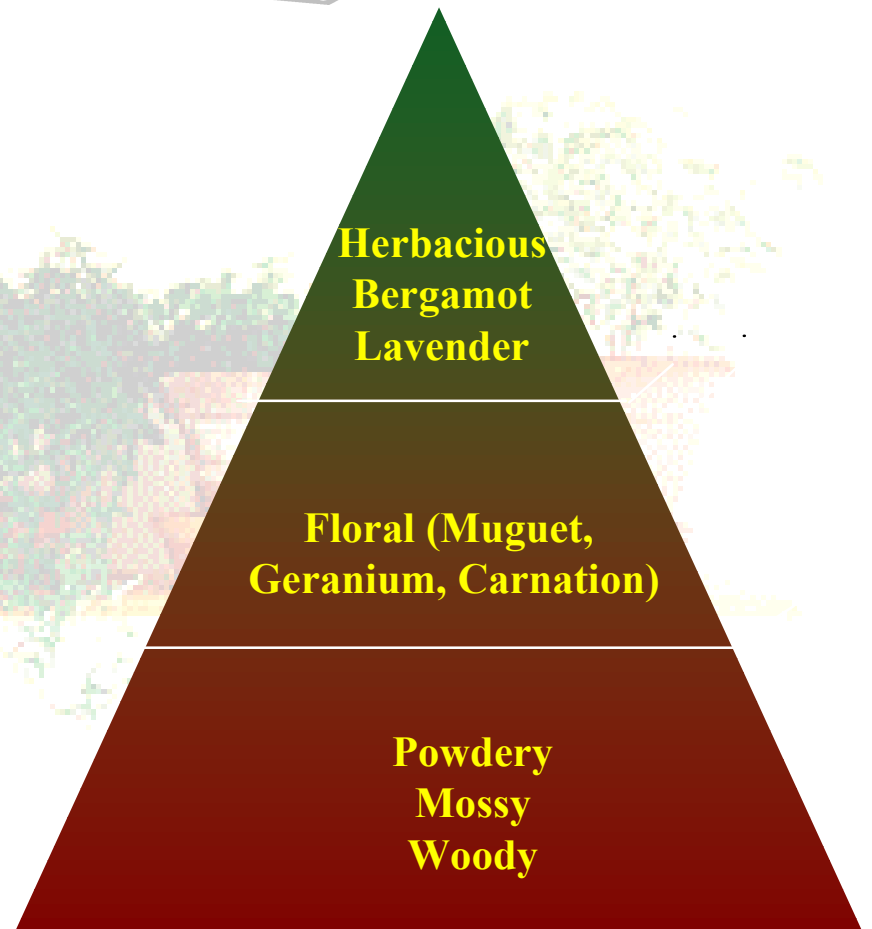
Representative Fine Fragrance

Brut (1964. Faberge)

Drakkar Noir (1982. Guy Laroche) ▶

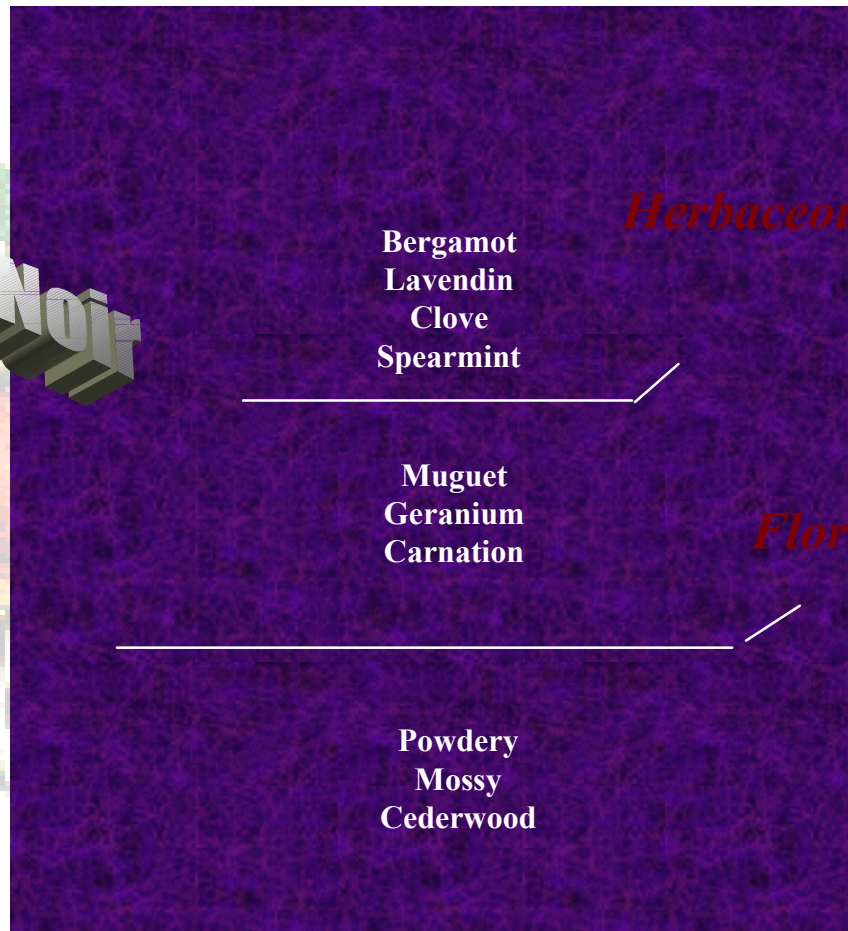
Paco Rabanne (1973. Paco Rabanne) ▶

Cool Water (1988. Davidoff) ▶



• *Fougere notes - Fine Fragrance*

Drakkar Noir



The Balanced Fragrance

(IFRA)

***Advertising, Analytical, Chemistry,
Creative Directors, Customer Service,
Evaluation, Laboratory
Management, Marketing
Public Relations, Purchasing
Sales, Test Panels***

& of course

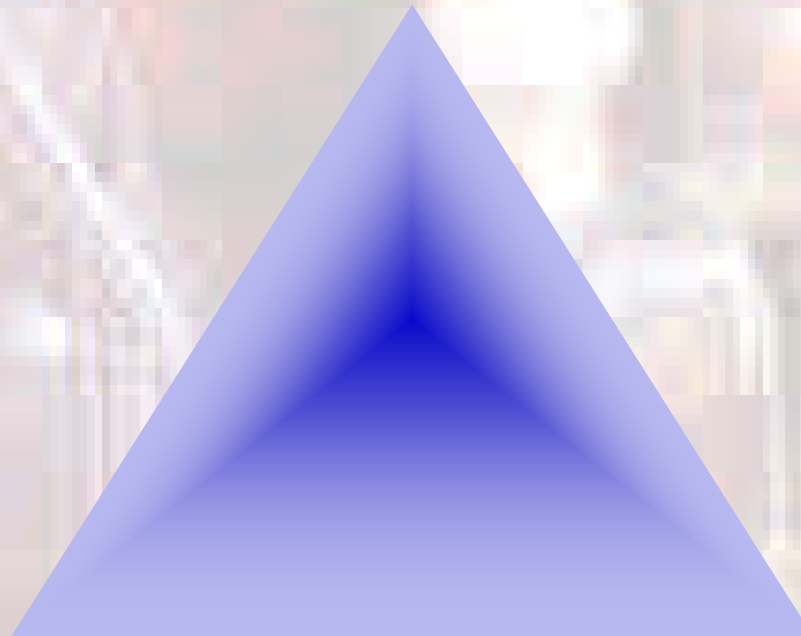
The Artist - Perfumer (Nose)

- *The Balanced fragrance for Evaluation*

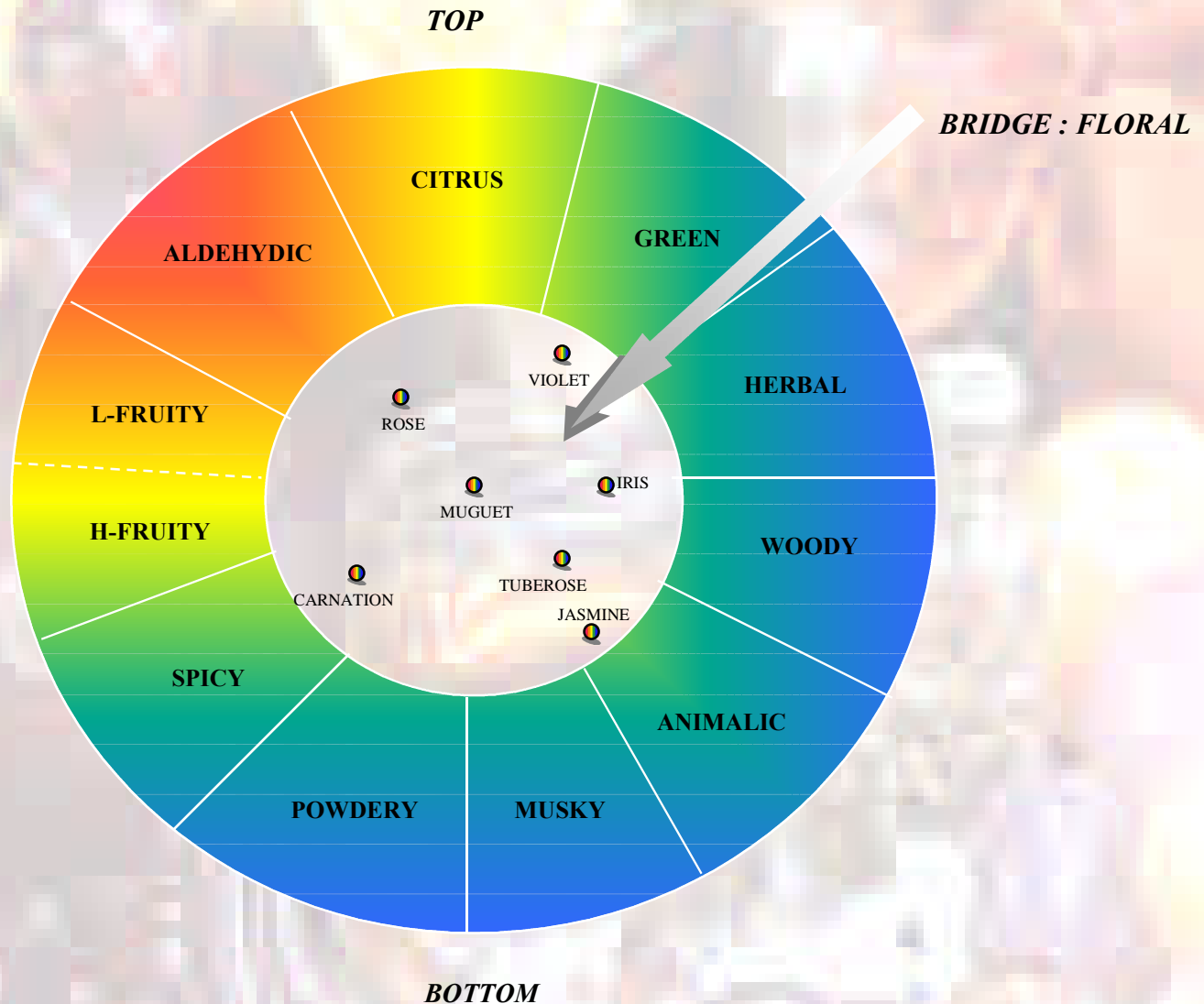
ECONOMY

ART

SCIENCE



- The Balanced fragrance for Evaluation*



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