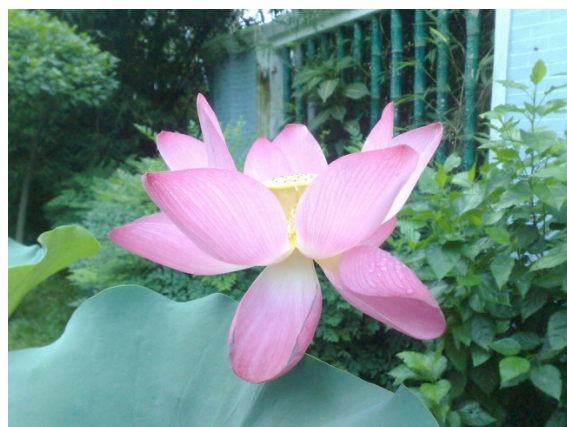




# Talking about smells in Cantonese

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# Sinitic Languages (“Chinese Dialects”)



(Lang atlas of China 1986)

Yue (e.g. Cantonese)

粵語

# Perception verbs

| Cantonese | Activity<br>(active perception; durative) | Experience<br>(achievement of perception; accomplishment) | Copulative<br>(passive perception) |
|-----------|-------------------------------------------|-----------------------------------------------------------|------------------------------------|
|           |                                           |                                                           |                                    |
|           |                                           |                                                           |                                    |
|           |                                           |                                                           |                                    |
|           |                                           |                                                           |                                    |
| smell     | 聞 man4                                    | 聞倒 man4-dou2                                              |                                    |

聞

耳 ‘ear’; 門 ‘door’

# Perception verbs

| Cantonese | Activity<br>(active perception; durative) | Experience<br>(achievement of perception; accomplishment) | Copulative<br>(passive perception) |
|-----------|-------------------------------------------|-----------------------------------------------------------|------------------------------------|
|           |                                           |                                                           |                                    |
| hearing   | 聽 teng1                                   | 聽倒 teng1-dou2<br>(arch.: 聽見 teng1 gin3)                   |                                    |
|           |                                           |                                                           |                                    |
|           |                                           |                                                           |                                    |
| smell     | 聞 man4                                    | 聞倒 man4-dou2                                              |                                    |

Old  
Chinese

聽 ‘listen’

聞 ‘hear’ → ‘knowledge/info’

Most [?]  
modern  
Sinitic  
languages

聽 ‘listen’

→ 聞 ‘smell’



# Perception verbs

| Cantonese | Activity<br>(active perception; durative) | Experience<br>(achievement of perception; accomplishment) | Copulative<br>(passive perception) |
|-----------|-------------------------------------------|-----------------------------------------------------------|------------------------------------|
| sight     | 睇 tai2<br>望 mong6                         | 見倒 gin3-dou2<br>(arch.: [睇/望]見 [tai2/mong6] gin3)         | [...]                              |
| hearing   | 聽 teng1                                   | 聽倒 teng1-dou2<br>(arch.: 聽見 teng1 gin3)                   | [...]                              |
| touch     | 掂 tim3<br>摩 mo2                           | 掂倒 tim3-dou2<br>摩倒 mo2-dou2                               | [...]                              |
| taste     | 試 si3 ‘try’                               | 食倒 sik6-ceot1 (eat-achieve)                               | 有味 jau5 mei6                       |
| smell     | 聞 man4                                    | 聞倒 man4-dou2                                              | 有味 jau5 mei6                       |

Table 4. Vietnamese

|         | Activity    | Experience                   | Copulative               |
|---------|-------------|------------------------------|--------------------------|
| sight   | xem         | xem thấy<br>look perceive    | trông                    |
| hearing | nghe        | nghe thấy<br>listen perceive | có giọng<br>have voice   |
| touch   | sờ<br>touch | cảm thấy<br>feel perceive    |                          |
| taste   | nếm         | nếm thấy<br>taste perceive   | có vị<br>have taste (N)  |
| smell   | ngửi        | ngửi thấy<br>smell perceive  | có mùi<br>have smell (N) |

Table 5. Chinese [Mandarin]

|         | Activity | Experience                      | Copulative                    |
|---------|----------|---------------------------------|-------------------------------|
| sight   | kàn      | kàn–jiàn<br>look–perceive       | yǒu yàngzi<br>have appearance |
| hearing | tīng     | tīng–dào<br>listen–reach        | paraphrase                    |
| touch   | mó       | gǎn–jué–dào<br>feel–think–reach | —                             |
| taste   | cháng    | cháng–dào<br>taste–reach        | yǒu weidao<br>have taste (N)  |
| smell   | wén      | wén–dào<br>smell–reach          | yǒu wèr<br>have smell         |

(Viberg 1984)

# Abstract smell terms

|                       | rough translations                                                   |
|-----------------------|----------------------------------------------------------------------|
| hoeng1                | fragrant                                                             |
| cau3                  | stinky                                                               |
| no2                   | unknown overheating smell                                            |
| jyun1                 | 1. strong rotting stink;<br>2. strongly unpleasant BO                |
| suk1                  | 1. sour smell of non-dry food<br>going off slightly;<br>2. sweaty BO |
| ngaat3                | urine/ ammonia smell                                                 |
| jik1                  | expired oil/fat smell                                                |
| hong2                 | old dry grain/wood smell                                             |
| sou1                  | 1. goat/ strong dairy smell<br>2. not too unpleasant BO              |
| seng1                 | 1. fishy smell;<br>2. metallic/blood smell                           |
| ngap1                 | damp/ not dried in time smell                                        |
| cing1/<br>cing1hoeng1 | light flowery fragrance                                              |



# Experiments on Cantonese speakers in Macau

## in March 2014

*(Pilot studies conducted in Hong Kong)*

*(Cantonese in urban Macau and Hong Kong are minimally different)*



# Participants

Native speakers of Cantonese in Macau

- fluent in Cantonese before puberty
- lived in Macau most of their lives (including most of their teenage years)

| n          | female (F) | male (M) |
|------------|------------|----------|
| junior (J) | 6          | 6        |
| senior (S) | 6          | 7        |

| average age | female (F) | male (M) |       |
|-------------|------------|----------|-------|
| junior (J)  | 24.28      | 25.01    | 24.65 |
| senior (S)  | 56.35      | 60.18    | 58    |



# Four tasks in Macau

- Free listing task
- Exemplar listing and semantic judgement task
- Sniffin' Sticks naming task
- Munsell colour chips naming task



# Free listing task

- Body parts
- Shapes
- Colours
- Odours

|                       | rough translations                                                   | junior | senior |
|-----------------------|----------------------------------------------------------------------|--------|--------|
| (nung1)               | visible/known burnt (smell)                                          | 3      | 4      |
| no3                   | unknown overheating smell                                            | 1      | 1      |
| jyun1                 | 1. strong rotting stink;<br>2. strongly unpleasant BO                | 0      | 1      |
| suk1                  | 1. sour smell of non-dry food<br>going off slightly;<br>2. sweaty BO | 3      | 1      |
| ngaat3                | urine/ ammonia smell                                                 | 2      | 2      |
| jik1                  | expired oil/fat smell                                                | 0      | 1      |
| hong2                 | old dry grain/wood smell                                             | 0      | 2      |
| sou1                  | 1. goat/ strong dairy smell<br>2. not too unpleasant BO              | 1      | 0      |
| seng1                 | 1. fishy smell;<br>2. metallic/blood smell                           | 5      | 3      |
| ngap1                 | damp/ not dried in time smell                                        | 4      | 1      |
| cing1/<br>cing1hoeng1 | light flowery fragrance                                              | 0      | 4      |

# Free-listing Odours

- Junior: average 18.25 responses
- Senior: average 19.08 responses

# Junior group

| responses   | N | %     | gloss                       |
|-------------|---|-------|-----------------------------|
| cau3        | 7 | 58.33 | stinky, stink               |
| hoeng1      | 6 | 50    | fragrant, fragrance         |
| syun1       | 6 | 50    | sour                        |
| faa1hoeng1  | 4 | 33.33 | flower fragrance            |
| ngap1       | 4 | 33.33 | not dried in time smell     |
| seng1       | 4 | 33.33 | fishy smell, metallic smell |
| tim4        | 4 | 33.33 | sweet                       |
| hoeng1seoi2 | 3 | 25    | perfume                     |
| hoi2seoi2   | 3 | 25    | sea water                   |
| ling4mung1  | 3 | 25    | lemon                       |
| nung1       | 3 | 25    | visible burnt               |

**11**  
odour  
terms  
given by  
3 or more  
(>20%)  
participants



| responses     | N  | %     | gloss                 |
|---------------|----|-------|-----------------------|
| cau3          | 11 | 84.62 | stinky, stink         |
| hoeng1        | 10 | 76.92 | fragrant, fragrance   |
| laat6         | 6  | 46.15 | piquance              |
| hoeng1ziu1    | 5  | 38.46 | banana                |
| syun1         | 5  | 38.46 | sour                  |
| tim4          | 5  | 38.46 | sweet                 |
|               |    |       | light flowery         |
| cing1hoeng1   | 4  | 30.77 | fragrance             |
| fu2           | 4  | 30.77 | bitter                |
| ping4gwo2     | 4  | 30.77 | apple                 |
| bo1lo4        | 3  | 23.08 | pineapple             |
| faa1hoeng1    | 3  | 23.08 | flower fragrance      |
| hoeng1seoi2   | 3  | 23.08 | sea water             |
| lau4lin4      | 3  | 23.08 | durian                |
| ling4mung1    | 3  | 23.08 | lemon                 |
| mui4gwai3faa1 | 3  | 23.08 | rose flower           |
| naai5         | 3  | 23.08 | milk                  |
| nung1         | 3  | 23.08 | visible burnt         |
|               |    |       | fishy smell, metallic |
| seng1         | 3  | 23.08 | smell                 |

Senior  
group

18

odour  
terms

given by

3 or more

(>20%)

participants

|                                                  | Body parts | Shapes            | Colours | Odours    |
|--------------------------------------------------|------------|-------------------|---------|-----------|
| <b>junior</b><br>average n<br>response           | 32.08      | 12.53             | 20.92   | 18.25     |
| <b>senior</b><br>average n<br>response           | 22.08      | 14.08<br>(10.58)! | 18.54   | 19.08     |
| <b>junior</b><br>terms given by<br>>20% of part. | 46         | 13                | 15      | <b>11</b> |
| <b>senior</b><br>terms given by<br>>20% of part. | 28         | 9                 | 12      | <b>18</b> |

!: Excluding one outlier.

# Exemplar listing and semantic judgement task

**10** 'possible' odour terms:

- do they use them to describe odour
- give exemplars
- (explain)

(nung1)  
no3  
jyun1  
suk1  
ngaat3  
jik1  
hong2  
sou1  
seng1  
ngap1  
cing1/  
cing1hoeng1

|                       |                                                                      | junior |       |       | senior |       |       |
|-----------------------|----------------------------------------------------------------------|--------|-------|-------|--------|-------|-------|
|                       | rough translations                                                   | % use  | % gv  | exmpl | % use  | % gv  | exmpl |
| (nung1)               | visible/known burnt (smell)                                          | 100    | 100   |       | 100    | 100   |       |
| no3                   | unknown overheating smell                                            | 83.33  | 83.33 |       | 100    | 100   |       |
| jyun1                 | 1. strong rotting stink;<br>2. strongly unpleasant BO                | 16.67  | 50    |       | 58.33  | 66.67 |       |
| suk1                  | 1. sour smell of non-dry<br>food going off slightly;<br>2. sweaty BO | 91.67  | 100   |       | 100    | 100   |       |
| ngaat3                | urine/ ammonia smell                                                 | 83.33  | 91.67 |       | 100    | 100   |       |
| jik1                  | expired oil/fat smell                                                | 25     | 50    |       | 100    | 100   |       |
| hong2                 | old dry grain/wood smell                                             | 0      | 0     |       | 83.33  | 91.67 |       |
| sou1                  | 1. goat/ strong dairy smell<br>2. not too unpleasant BO              | 83.33  | 91.67 |       | 91.67  | 91.67 |       |
| seng1                 | 1. fishy smell;<br>2. metallic/blood smell                           | 100    | 100   |       | 100    | 100   |       |
| ngap1                 | damp/ not dried in time<br>smell                                     | 75     | 83.33 |       | 91.67  | 100   |       |
| cing1/<br>cing1hoeng1 | light flowery fragrance                                              | 91.67  | 91.67 |       | 91.67  | 100   |       |
|                       |                                                                      | 68.18  | 76.52 |       | 92.42  | 95    |       |

|       | junior<br>response | Ngloss               | senior<br>response | N | gloss                           |
|-------|--------------------|----------------------|--------------------|---|---------------------------------|
|       | nung1 je5sik6      | 2 food               | siu1ziu1           | 5 | burn-burnt                      |
|       | siu1ziu1           | 2 burn-burnt         | bou1 nung1 faan6   | 3 | cook burnt rice                 |
|       |                    |                      | MORE INTS no3      | 3 | more instense than no3          |
|       |                    |                      | bou1 nung1 zuk1    | 2 | cook burnt congee               |
| no3   | bou1 gon1 seoi2    | 2 cook dry water     | din6hei3 dyun2lou6 | 3 | electric-appliace short-circuit |
|       | din6hei3           | 2 electric-appliance | din6zai3           | 2 | electric-switch                 |
|       |                    |                      | gaau1              | 2 | plastic                         |
|       |                    |                      | siu1zoek6 gaau1    | 2 | burn-achieve plastic            |
| jyun1 | cau3               | 3 stink              | cau3               | 3 | stink                           |
|       |                    |                      | fu6laan6           | 2 | decompose                       |
|       |                    |                      | hon6               | 2 | sweat                           |
|       |                    |                      | LESS PLSN suk1     | 2 | less pleasant than suk1         |
|       |                    |                      | sei2lou2syu2       | 2 | dead mouse                      |
|       |                    |                      | syun1              | 2 | sour                            |
| suk1  | hon6               | 4 sweat              | hon6               | 6 | sweat                           |
|       | sik6mat6           | 4 food               | syun1              | 5 | sour                            |
|       | syun1              | 4 sour               | sung3 waai6        | 2 | dish_food bad                   |
|       | bin3waai6          | 2 turn bad           |                    |   |                                 |
|       | cyu4jyu4           | 2 kitchen-waist      |                    |   |                                 |

| junior          |    |                        | senior        |    |                 |
|-----------------|----|------------------------|---------------|----|-----------------|
| response        | N  | gloss                  | response      | N  | gloss           |
| ngaats3 niu6    | 9  | urine                  | niu6          | 7  | urine           |
| MORE INTS suk1  | 2  | more intense than suk1 | siu2bin6      | 3  | urine           |
|                 |    |                        | aa3mo1nei4aa3 | 2  | amonia          |
|                 |    |                        | ci3so2        | 2  | toilet          |
|                 |    |                        | gau2niu6      | 2  | dog urine       |
|                 |    |                        | niu6jik6      | 2  | urine           |
| jik1 faa1sang1  | 4  | peanut                 | jau4          | 4  | oil             |
| jau4            | 2  | oil                    | faa1sang1     | 3  | peanut          |
|                 |    |                        | gwo2jan4      | 2  | nut             |
|                 |    |                        | hap6tou4      | 2  | walnut          |
|                 |    |                        | sik6mat6      | 2  | food            |
| hong2 (none)    |    |                        | bin3          | 2  | change          |
|                 |    |                        | gon1          | 2  | dry             |
|                 |    |                        | gon1cou2      | 2  | dry             |
|                 |    |                        | gon1hon2      | 2  | dry             |
|                 |    |                        | mai5          | 2  | dried_rice      |
|                 |    |                        | mai5 noi6     | 2  | rice long_time  |
| sou1 joeng4juk6 | 10 | goat/sheep meat        | joeng4juk6    | 10 | goat/sheep meat |
| bi4bi1          | 2  | baby                   | ngau4juk6     | 4  | beef            |
| joeng4          | 2  | goat/sheep             | joeng4        | 3  | goat/sheep      |
| ngau4juk6       | 2  | beaf                   | bi4bi1        | 2  | baby            |
|                 |    |                        | joeng4naai5   | 2  | goat/sheep milk |
|                 |    |                        | naai5         | 2  | milk            |



|                       | junior<br>response | N  | gloss        | senior<br>response | N  | gloss                    |
|-----------------------|--------------------|----|--------------|--------------------|----|--------------------------|
| seng1                 | jyu2               | 11 | fish         | jyu2               | 13 | fish                     |
|                       | hyut3              | 7  | blood        | hyut3              | 4  | blood                    |
|                       | hoi2sin1           | 5  | seafood      | cou2ceng1          | 2  | grass_fresh              |
|                       |                    |    |              | hoi2sin1           | 2  | seafood                  |
| ngap1                 | ciu4sap1           | 3  | humid        | ciu4sap1           | 8  | humid                    |
|                       | N tung1fung1       | 2  | not flow-air | faat3 mui4         | 3  | grow mould               |
|                       | saam1              | 2  | clothes      | saam1 N gon1       | 3  | clothes not dry          |
|                       | sap1               | 2  | wet          | mou1               | 2  | mould                    |
|                       |                    |    |              | saam1              | 2  | clothes                  |
| cing1/<br>cing1hoeng1 | faa1               | 5  | flower       | faa1               | 8  | flower                   |
|                       | caa4               | 2  | tea          | N nung4            | 4  | not concentrated/intense |
|                       | hoeng1seoi2        | 2  | perfume      | syu1fuk6           | 4  | comfortable              |
|                       | mut6lei2           | 2  | jasmin       | hoeng1seoi2        | 3  | perfume                  |
|                       | N nung4            | 2  | not intense  | jau1ngaa5          | 2  | elegant                  |
|                       | sik6mat6           | 2  | food         | N nung4lit6        | 2  | not concentrated/intense |

# Sniffin' Sticks naming task

participants asked to describe the odour of 38  
Sniffin' Sticks

# Sniffin' Sticks naming task: Junior

S: 60.3%

E: 1.82%

A: 24.2%

- AS FS: 8.98%

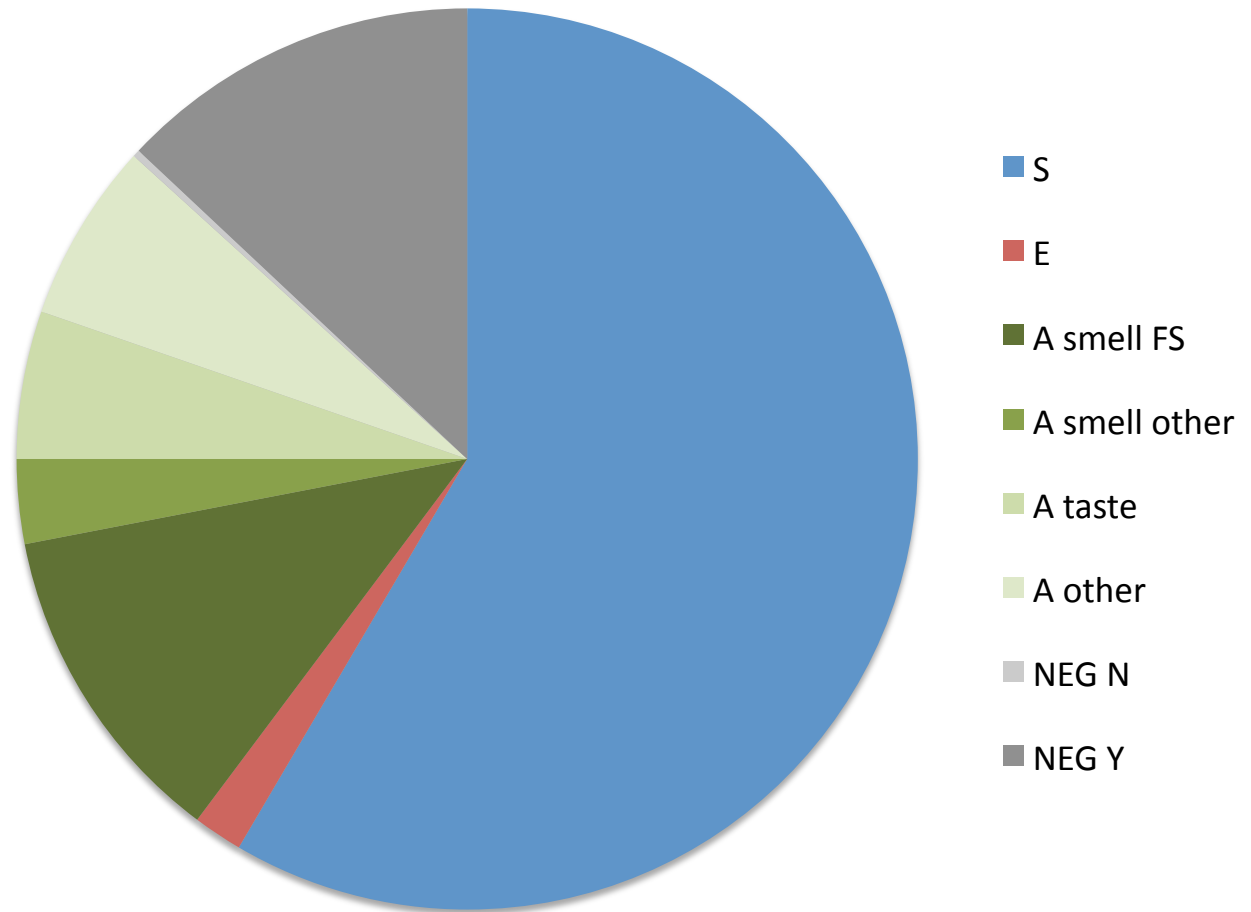
- **AS o: 3.13%**

- AT: 5.47%

- Ao: 6.64%

NEG N: 0.26%

NEG Y: 13.4%



# Sniffin' Sticks naming task: Senior

S: 50.4%

E: 1.56%

A: %

- AS FS: 6.78%

- **AS o: 2.22%**

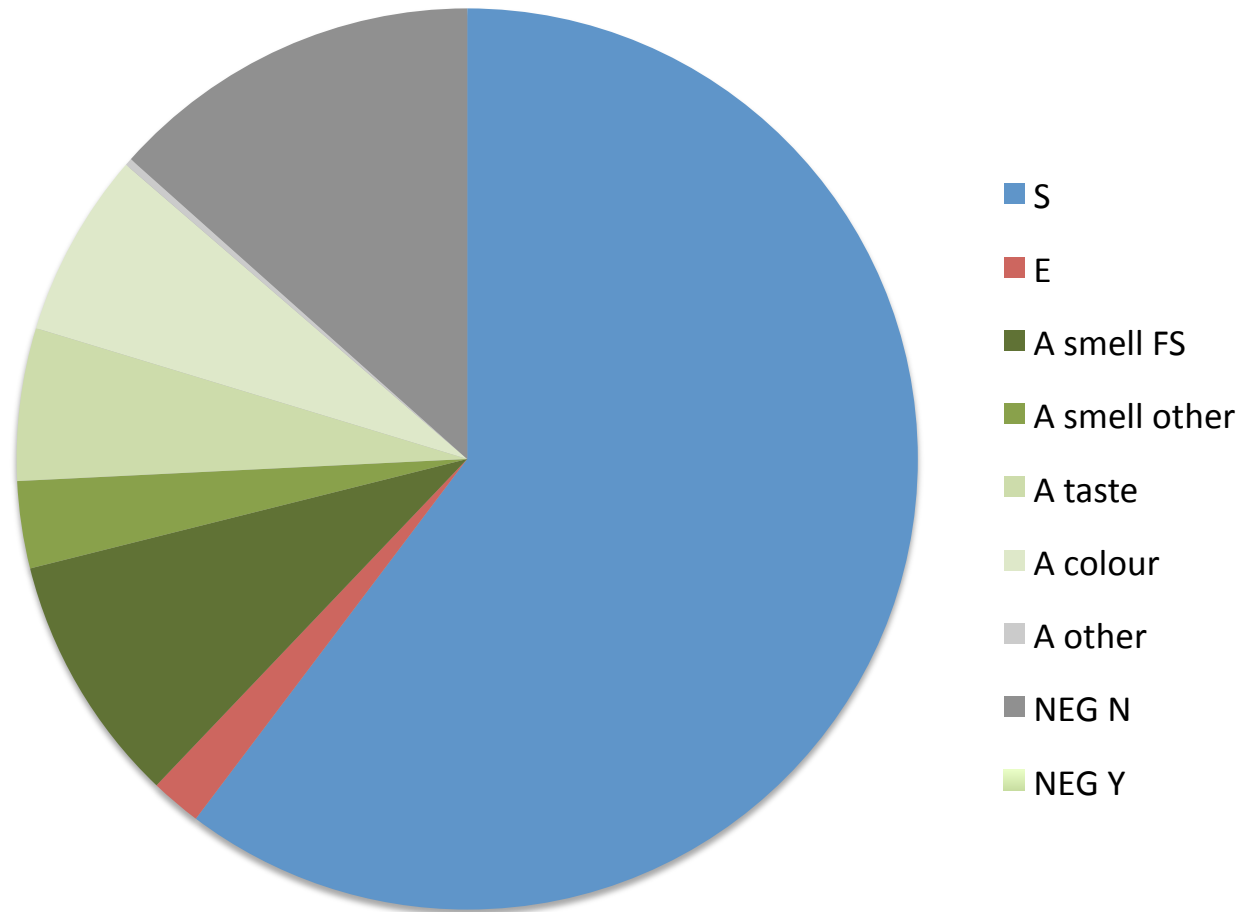
- AT: 4.67%

- AC: 0.11%

- Ao: 11.6%

NEG N: 0.44%

NEG Y: 22.2%



# Sniffin' Sticks naming task

Abstract smell responses:

- use of other abstract smell terms infrequent:
  - most Sniffin' Sticks were of *hoeng1* 'fragrant'-type, and most abstract smell terms describe unpleasant smells

Simpson's diversity index

Odour:

Junior 0.0675

Senior 0.0636

(Colour:

Junior 0.662

Senior 0.647)

[Statistics by Asifa Majid]

# Summary

Cantonese verb 'smell' < Old Chinese 'hear'

Cantonese noun 'smell' < Old Chinese 'taste'

Abstract smell terms in Cantonese:

- Mostly for malodours
- Knowledge of them is poor amongst younger speakers