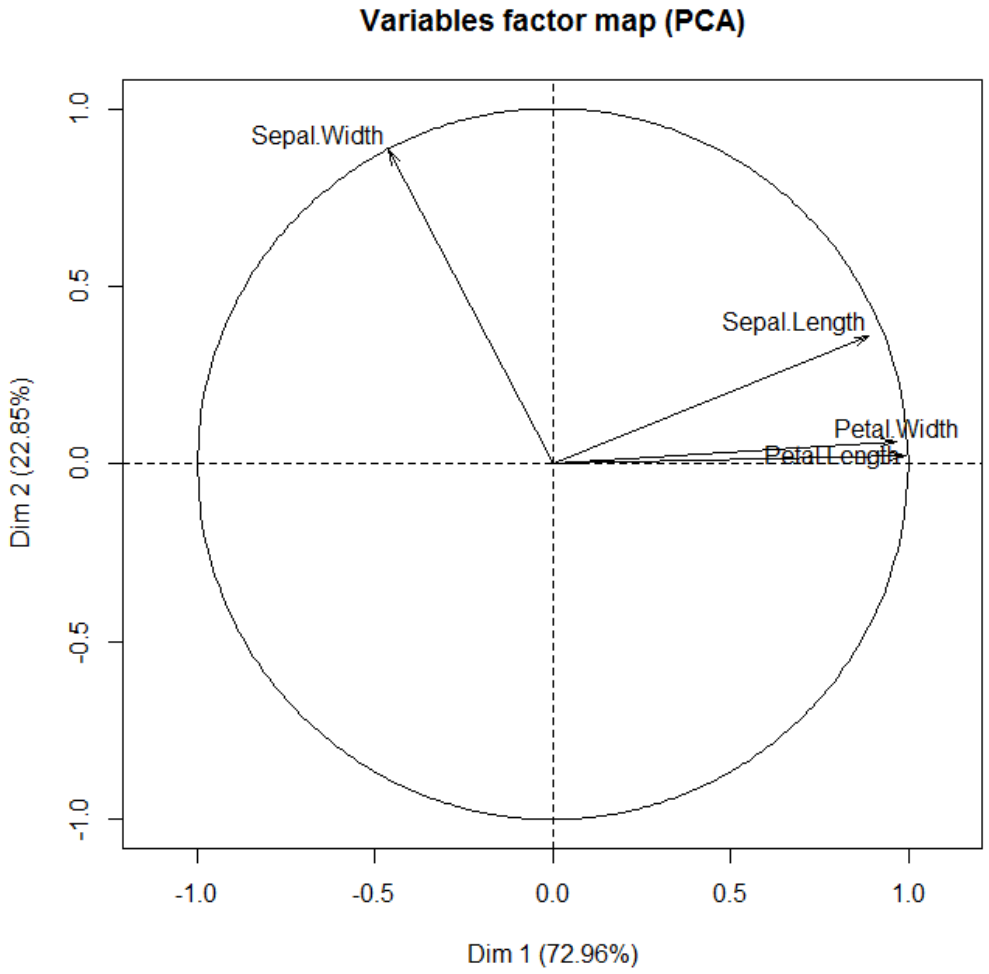
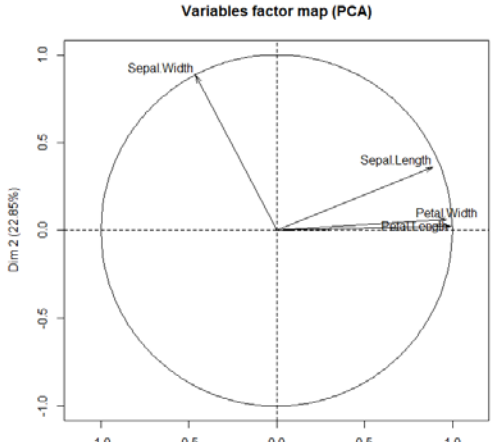
Iris: 150 flowers (3 species)
"Sepal.Length", "Sepal.Width", "Petal.Length", "Petal.Width"

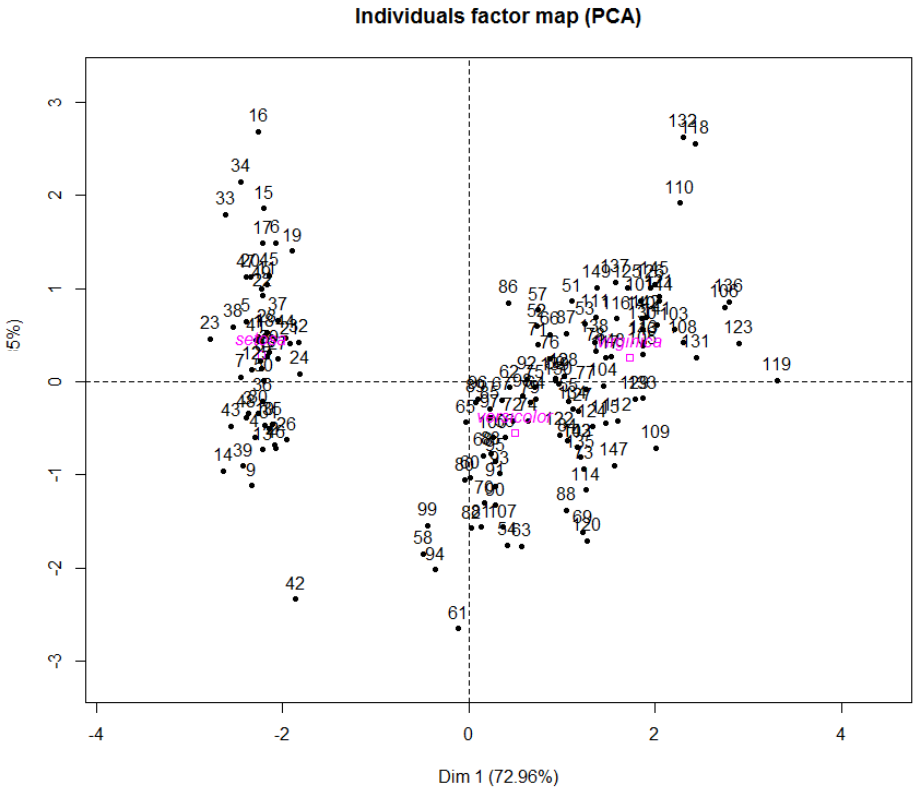
Eigenvalues

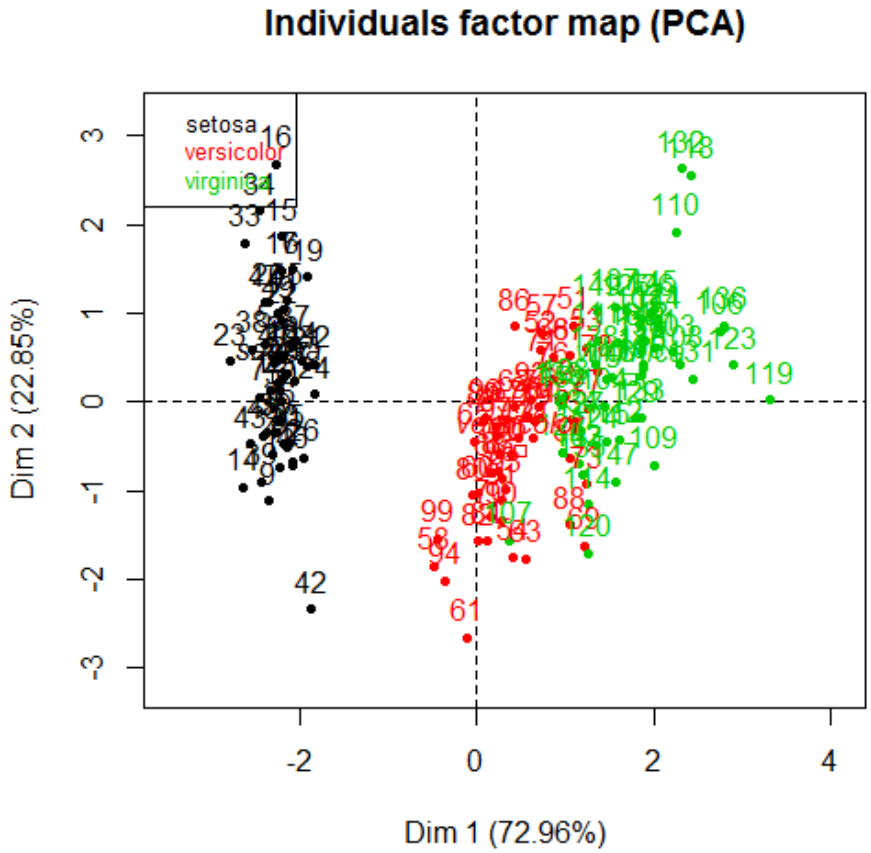
	Dim.1	Dim.2	Dim.3	Dim.4
Variance	2.918	0.914	0.147	0.021
% of var.	72.962	22.851	3.669	0.518
Cumulative % of var.	72.962	95.813	99.482	100.000



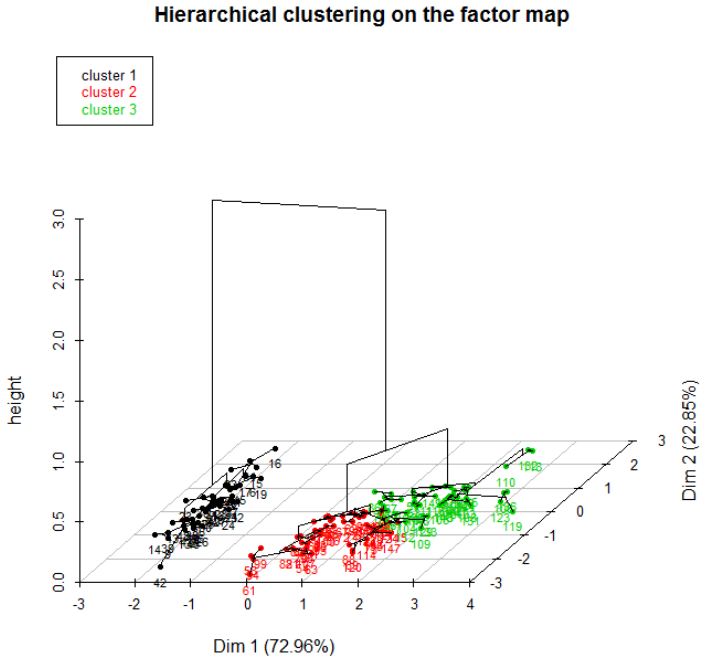
Iris

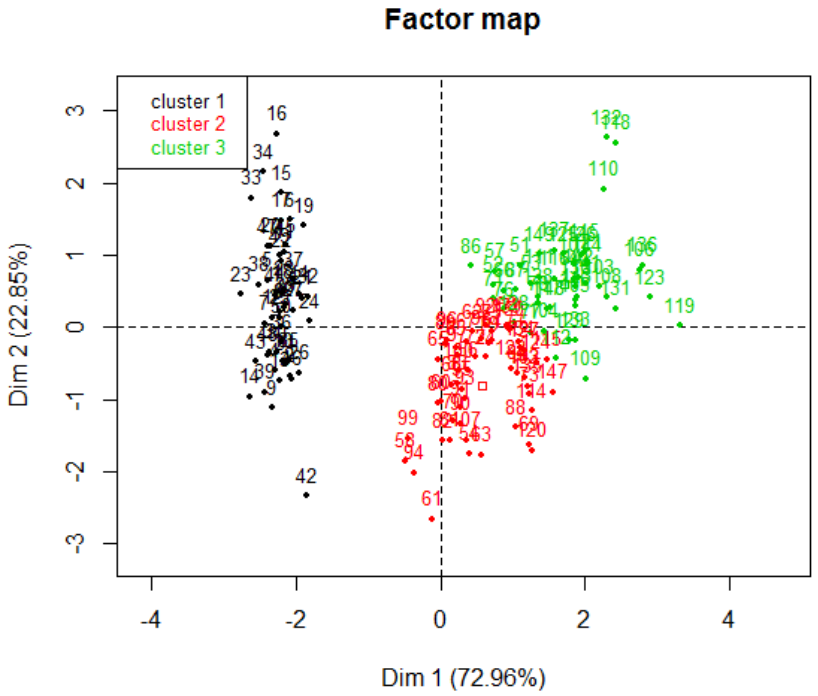

Variables factor map (PCA)
Sepal.Width
Sepal.Length
Petal.Width
Petal.Length
Dim 2 (22.85%)


Individuals factor map (PCA)
Dim 1 (72.96%)


Individuals factor map (PCA)
setosa
versicolor
virginica
Dim 2 (22.85%)
Dim 1 (72.96%)

Iris



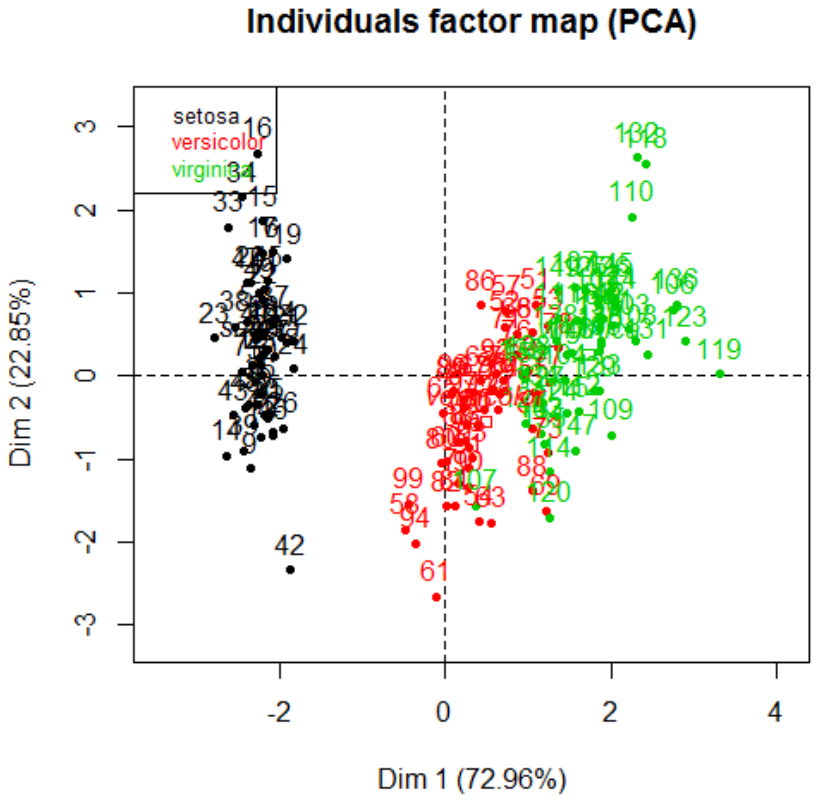


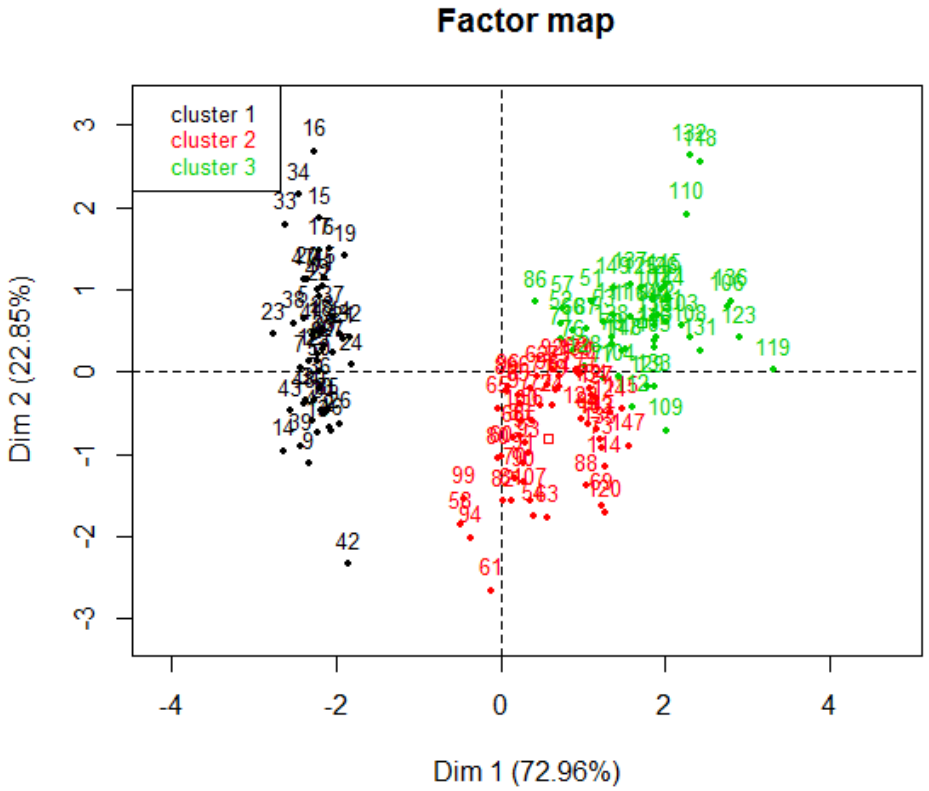

```
$category$`1`
                 Cla/Mod Mod/Cla   Global      p.value    v.test
Species=setosa       100     100 33.33333 4.968040e-41 13.414570
Species=virginica      0       0 33.33333 5.012323e-12 -6.905227
Species=versicolor     0       0 33.33333 5.012323e-12 -6.905227

$category$`2`
                 Cla/Mod  Mod/Cla   Global      p.value    v.test
Species=versicolor      78 73.58491 33.33333 1.297000e-14  7.706121
Species=setosa           0  0.00000 33.33333 6.075543e-13 -7.198776

$category$`3`
                Cla/Mod  Mod/Cla   Global      p.value    v.test
Species=virginica      72 76.59574 33.33333 6.526248e-14  7.497065
Species=setosa          0  0.00000 33.33333 3.783976e-11 -6.612299
```

Iris

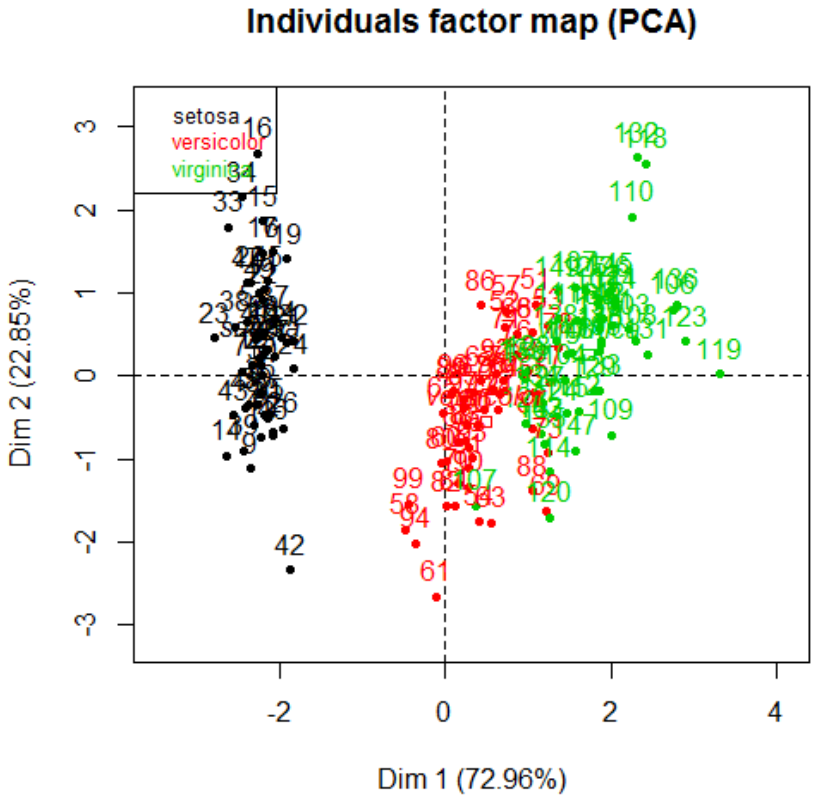


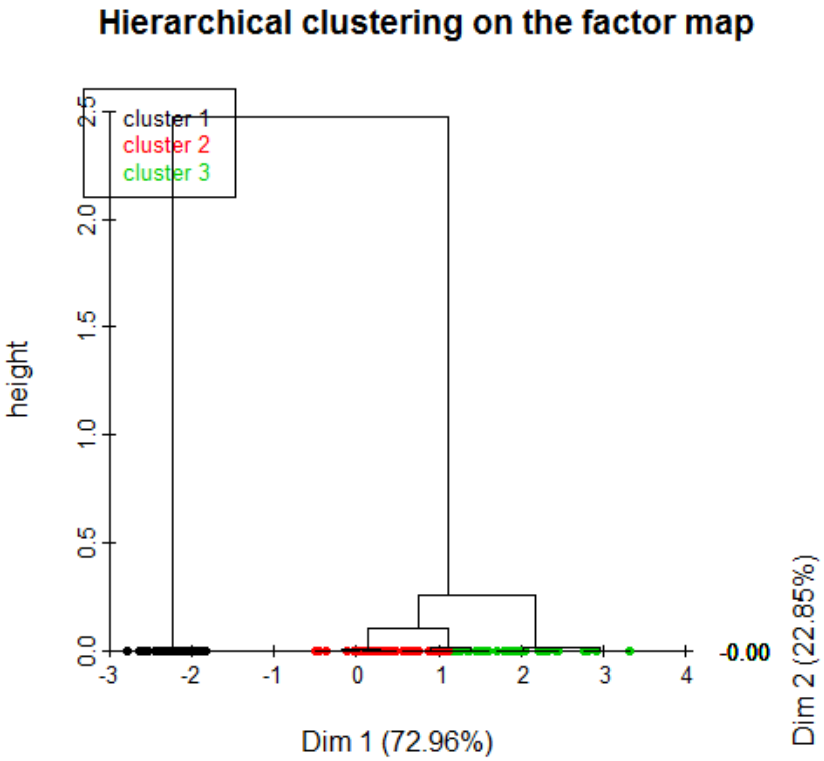


	setosa	versicolor	virginica
1	50	0	0
2	0	39	14
3	0	11	36

((50+39+36)/150 -> 83.3%)

Iris

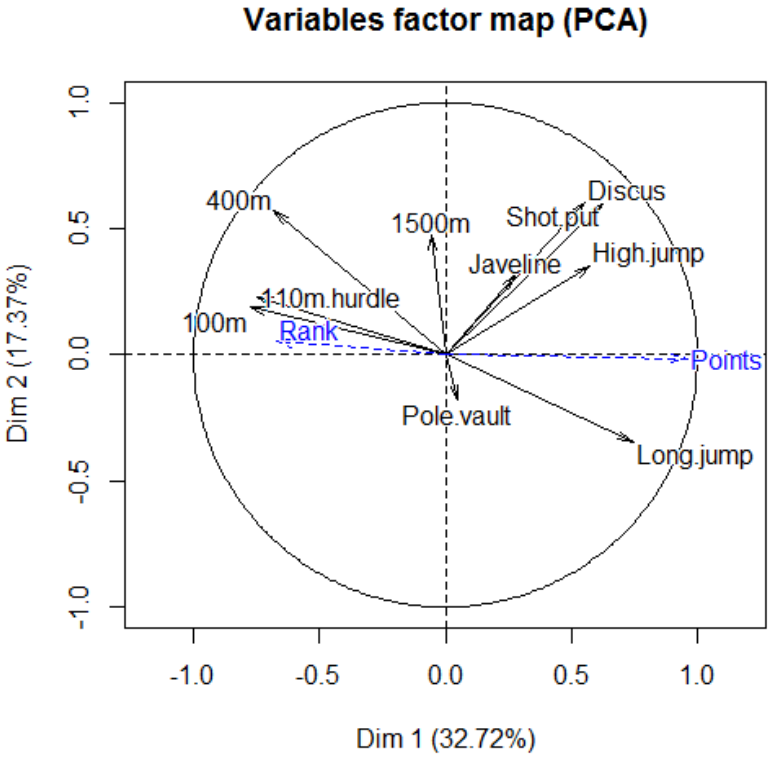


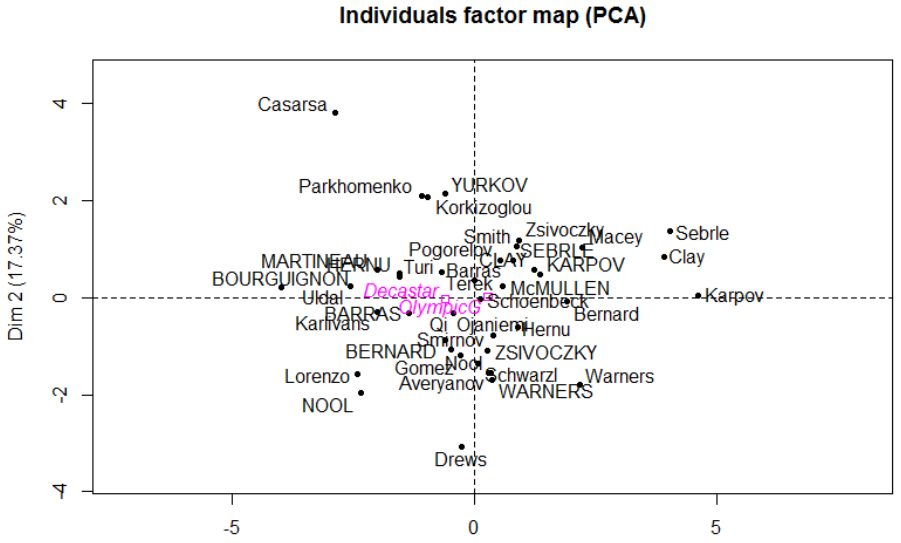


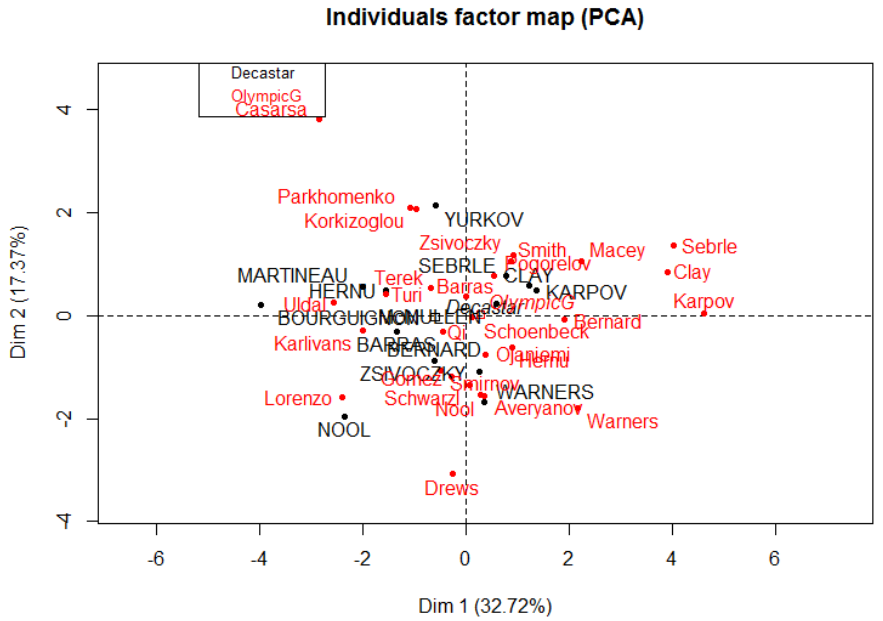
	setosa	versicolor	virginica
1	50	0	0
2	0	45	6
3	0	5	44

((50+45+44)/150 -> 92.6%)

Decathlon
41 individuals described by 13 variables

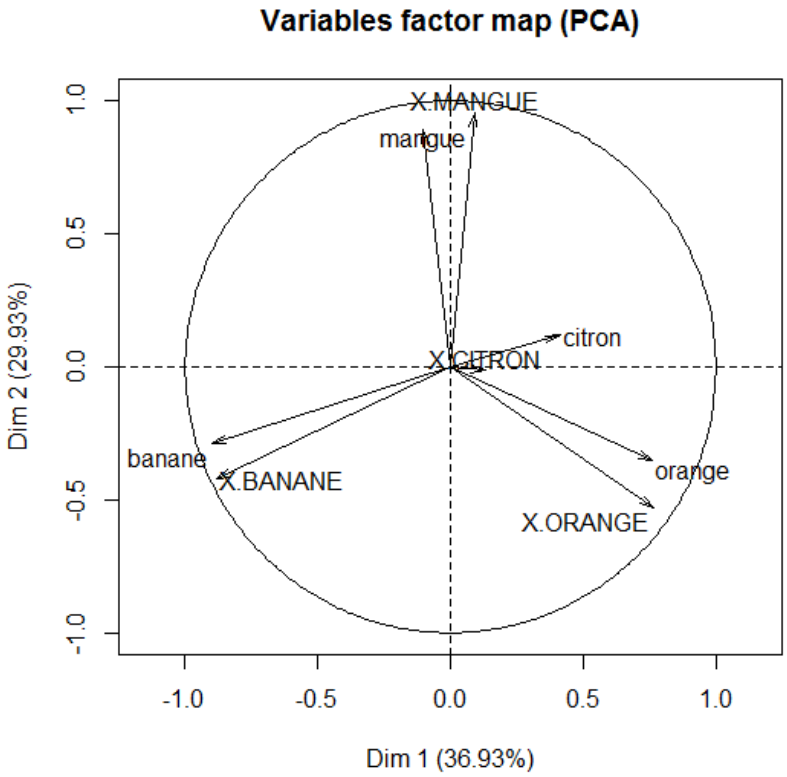




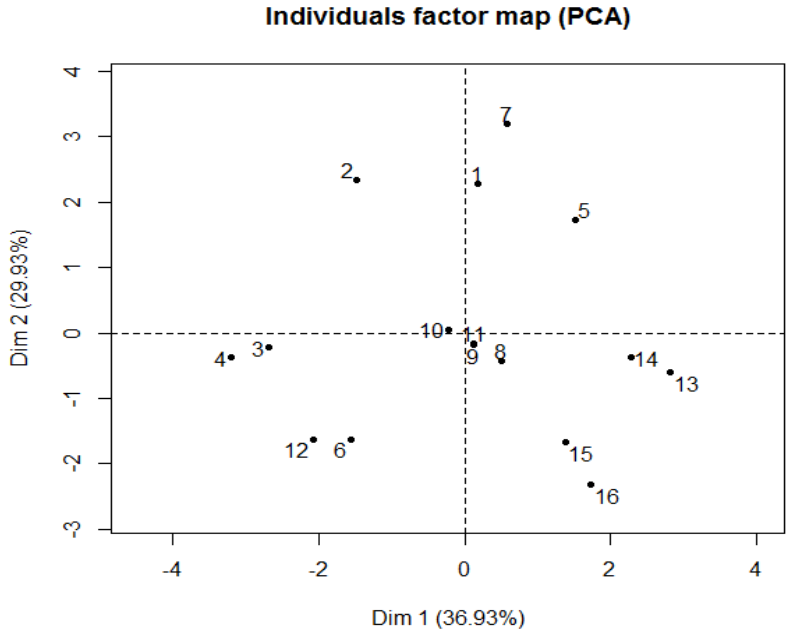


Cocktails

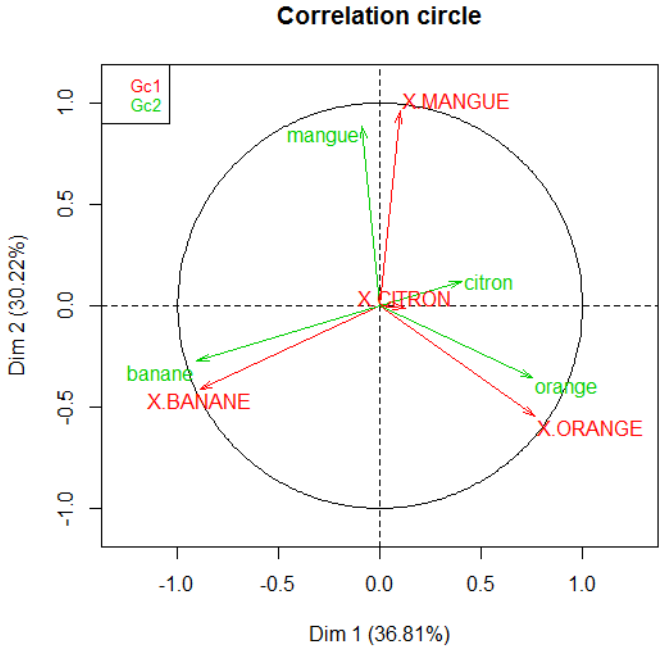
16 “cocktails” described by 4 flavours (4 % and 4 punctuations each)




```
> res$eig
        eigenvalue      % of variance     cumulative %
comp 1  2.954523e+00     3.693154e+01     36.93154
comp 2  2.394697e+00     2.993371e+01     66.86525
comp 3  1.733496e+00     2.166870e+01     88.53395
comp 4  4.431151e-01     5.538939e+00     94.07288
comp 5  2.505489e-01     3.131861e+00     97.20475
comp 6  1.144812e-01     1.431015e+00     98.63576
comp 7  1.091388e-01     1.364235e+00     99.99999
comp 8  4.085377e-07     5.106721e-06     00.00000
```

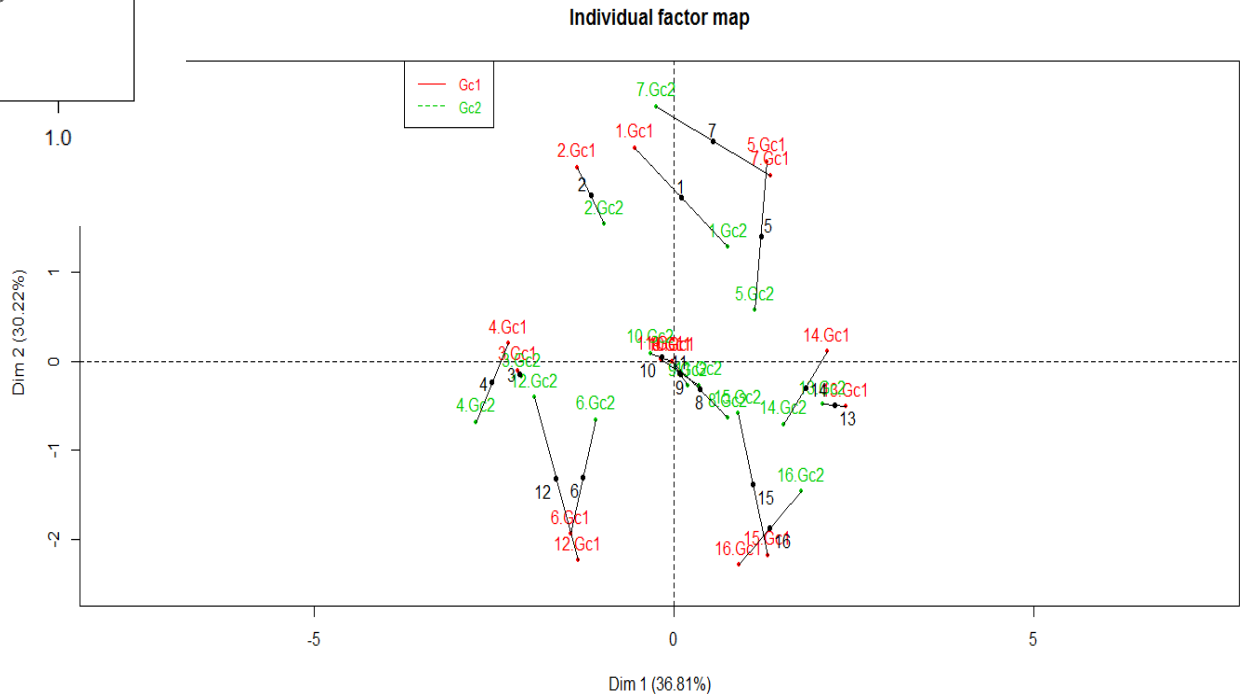


Cocktails
16 “cocktails” described by 4 flavours (4 % and 4 punctuations each)

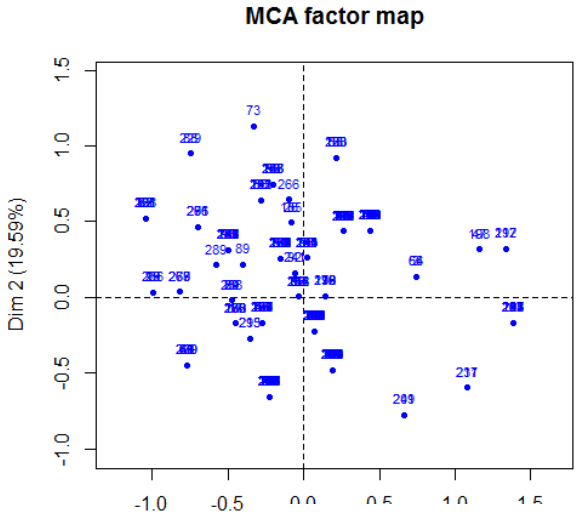


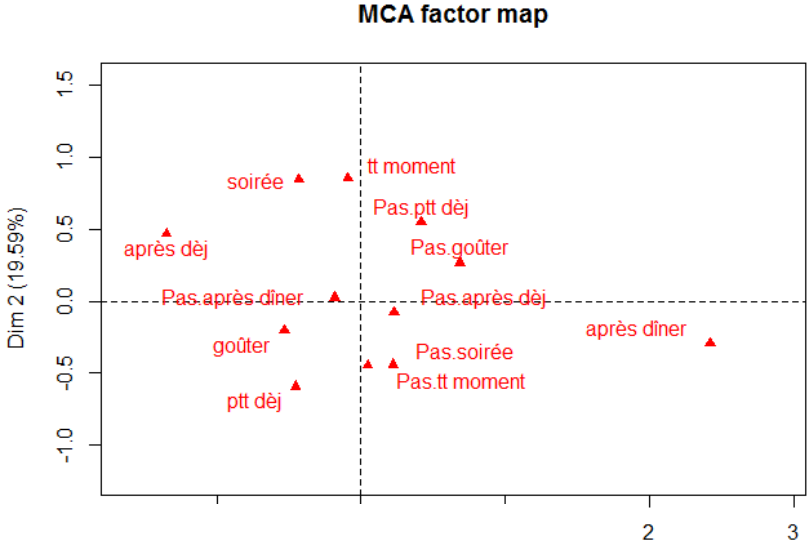
res$eig

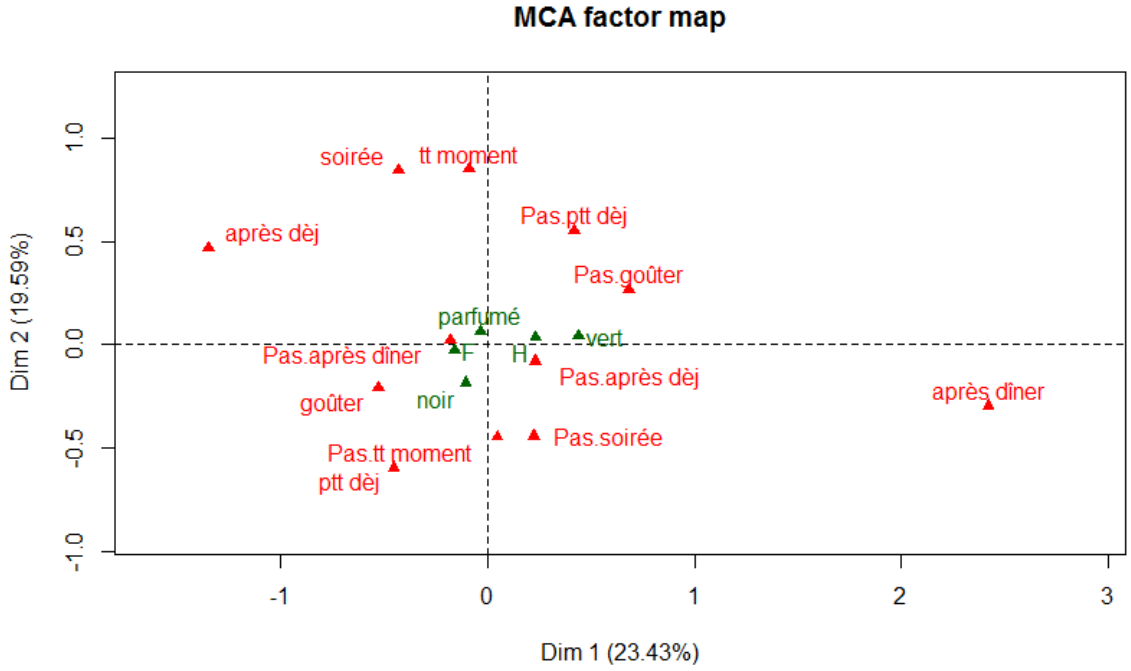
	eigenvalue	% of variance	cumulative %
comp 1	1.860626e+00	3.680501e+01	36.80501
comp 2	1.527518e+00	3.021581e+01	67.02083
comp 3	1.097766e+00	2.171490e+01	88.73573
comp 4	2.751779e-01	5.443290e+00	94.17902
comp 5	1.565782e-01	3.097271e+00	97.27629
comp 6	7.186186e-02	1.421498e+00	98.69779
comp 7	6.583130e-02	1.302208e+00	99.99999
comp 8	2.738259e-07	5.416546e-06	100.00000



Tea
300 answers to 36 questions about teas



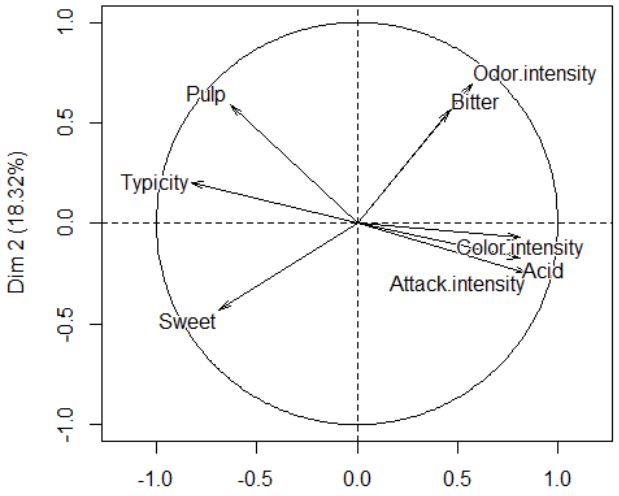




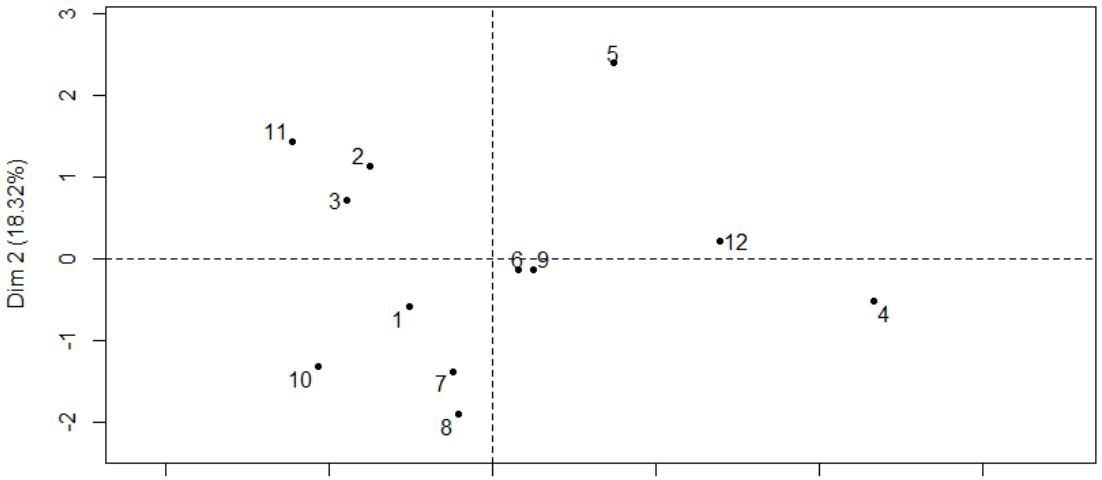
Orange

12 oranges described by 8 characteristics (with missing values / after imputation)

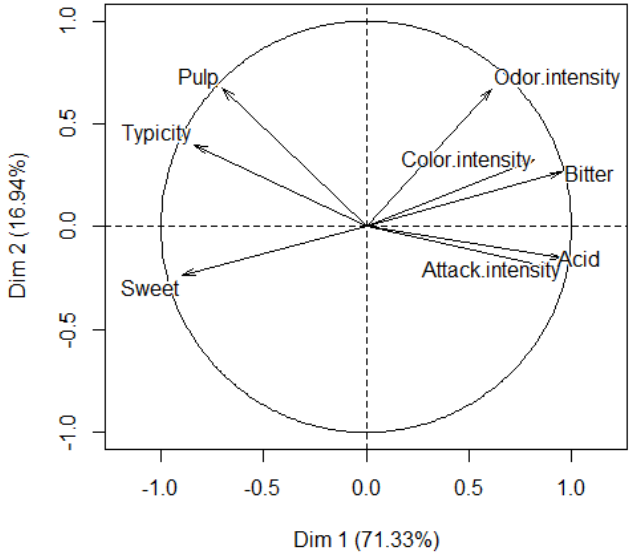
Variables factor map (PCA)



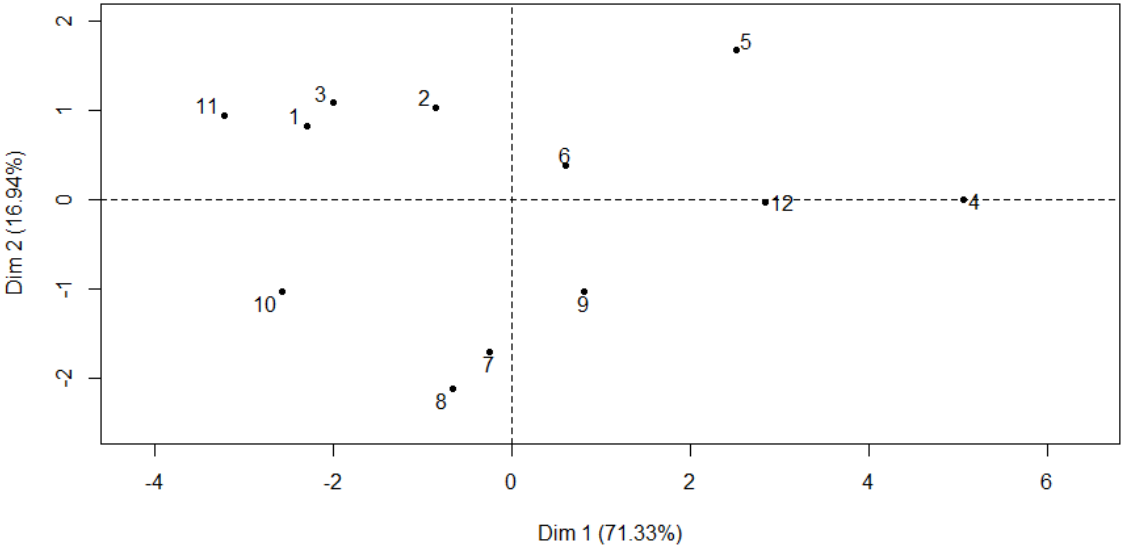
Individuals factor map (PCA)



Variables factor map (PCA)



Individuals factor map (PCA)



Younger's identity

589 youngers

Age (13-14,15,16,17-19) and gender

Open question; "Who am I?"

Initially:

49922 words, 4257 different words

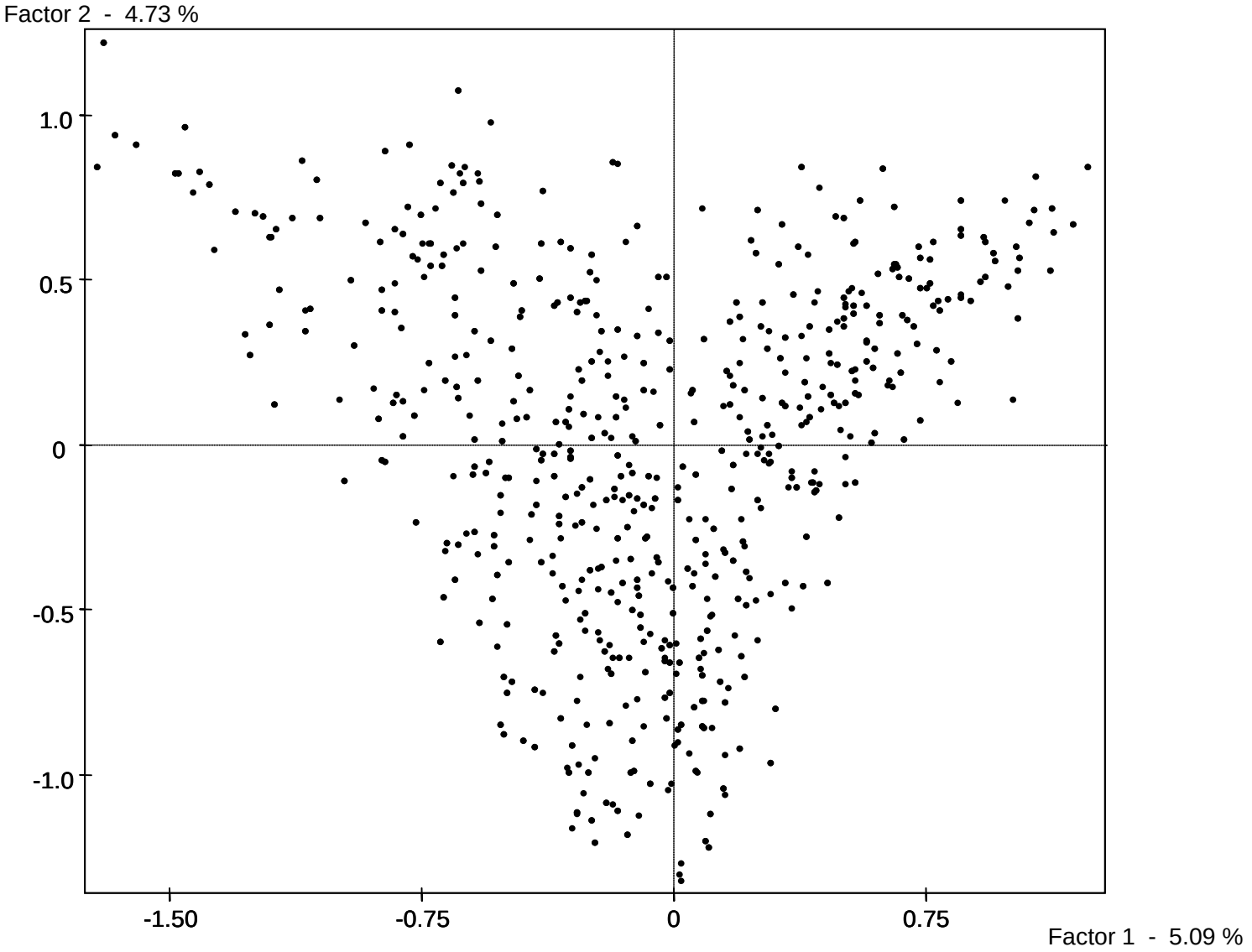
2234 words used only once

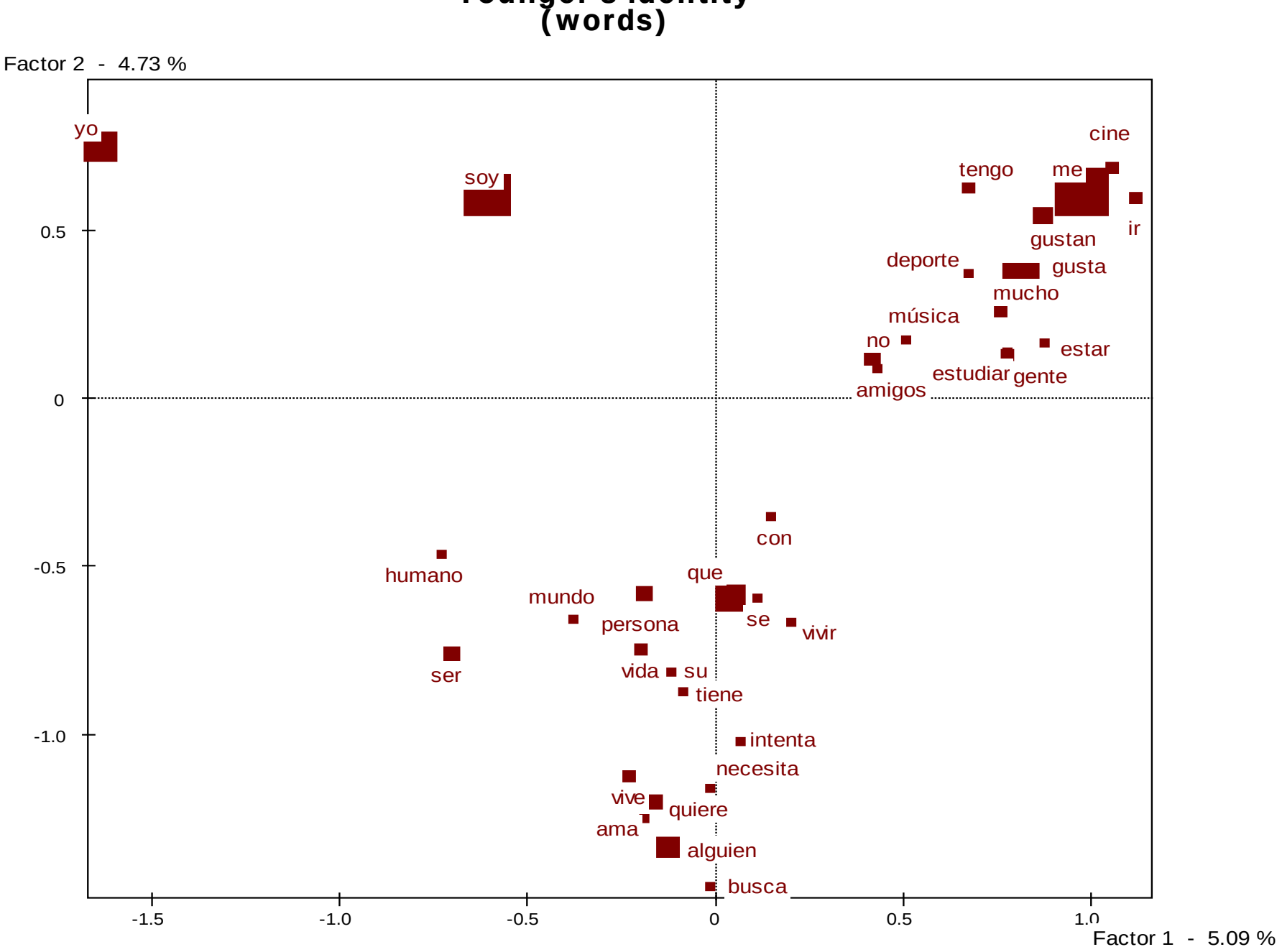
After first processing:

25407 words, 189 different words

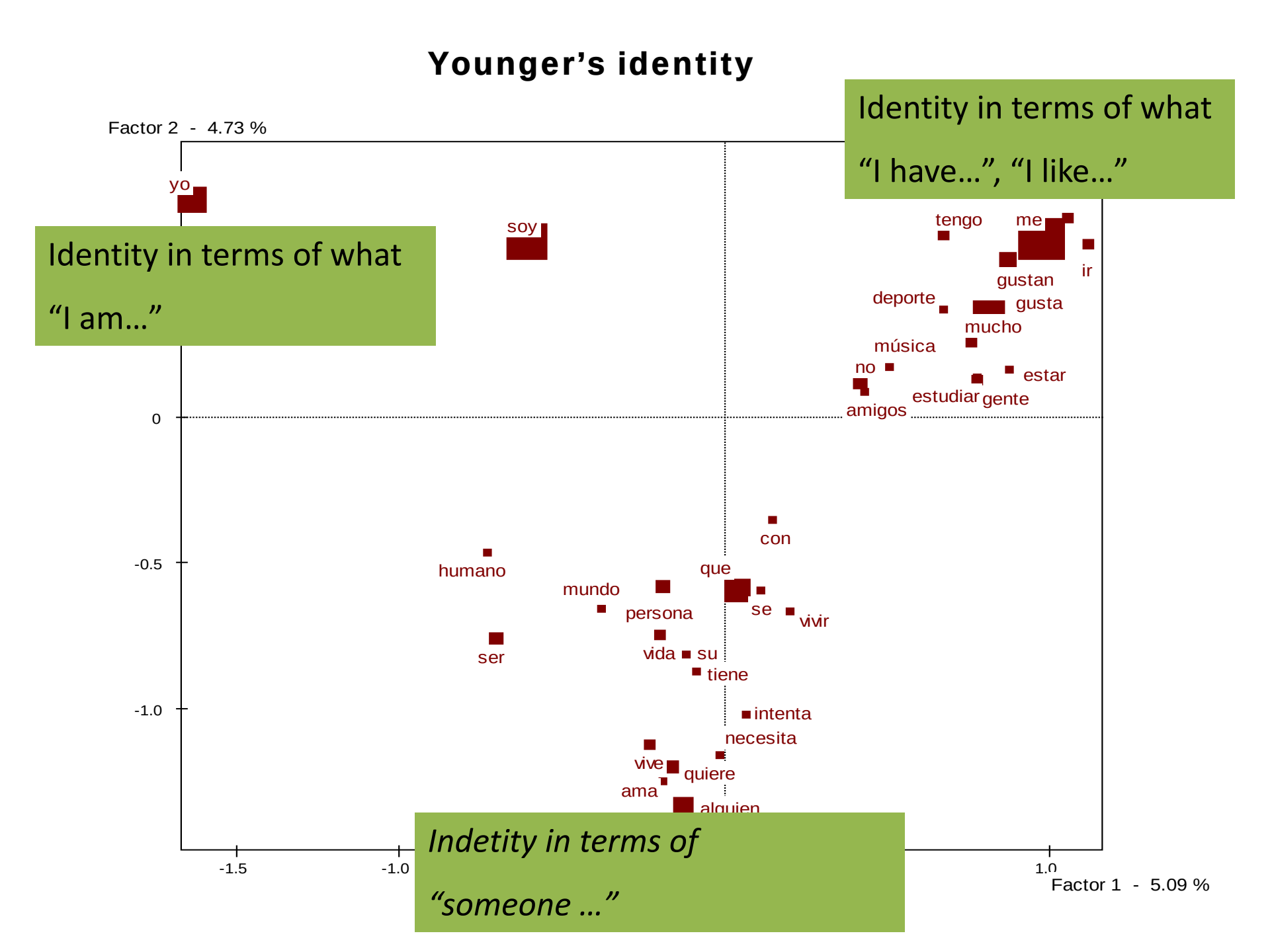
...

Younger's identity
(389 youngers)

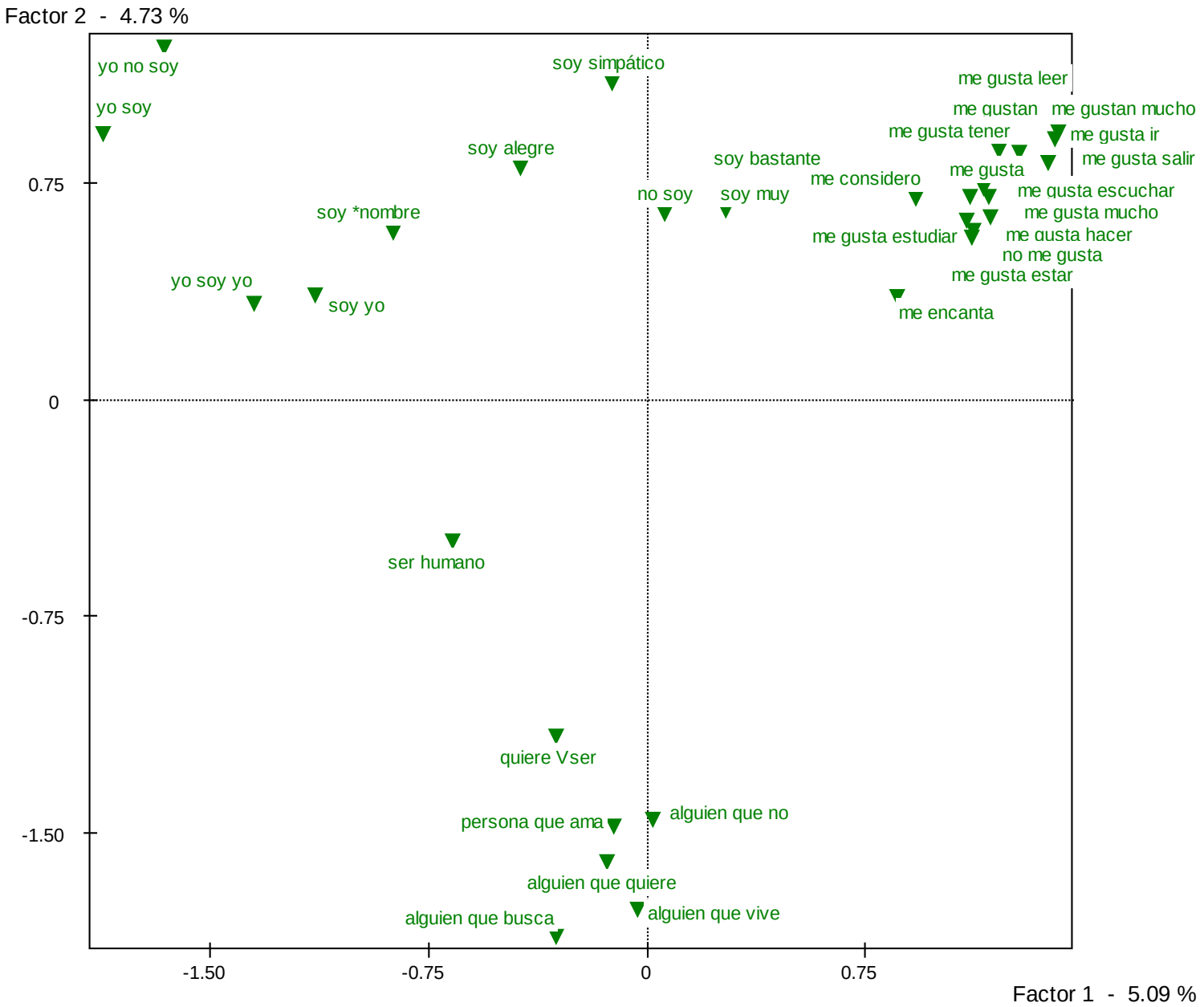



Younger's identity
(words)
Factor 2 - 4.73 %
yo
soy
cine
tengo
me
ir
gustan
deporte
gusta
mucho
música
no
estar
estudiar
gente
amigos
con
humano
que
mundo
se
vivir
persona
ser
vida
su
tiene
intenta
necesita
vive
quiere
ama
alguien
busca
0.5
0
-0.5
-1.0
-1.5
-1.0
-0.5
0
0.5
1.0
Factor 1 - 5.09 %

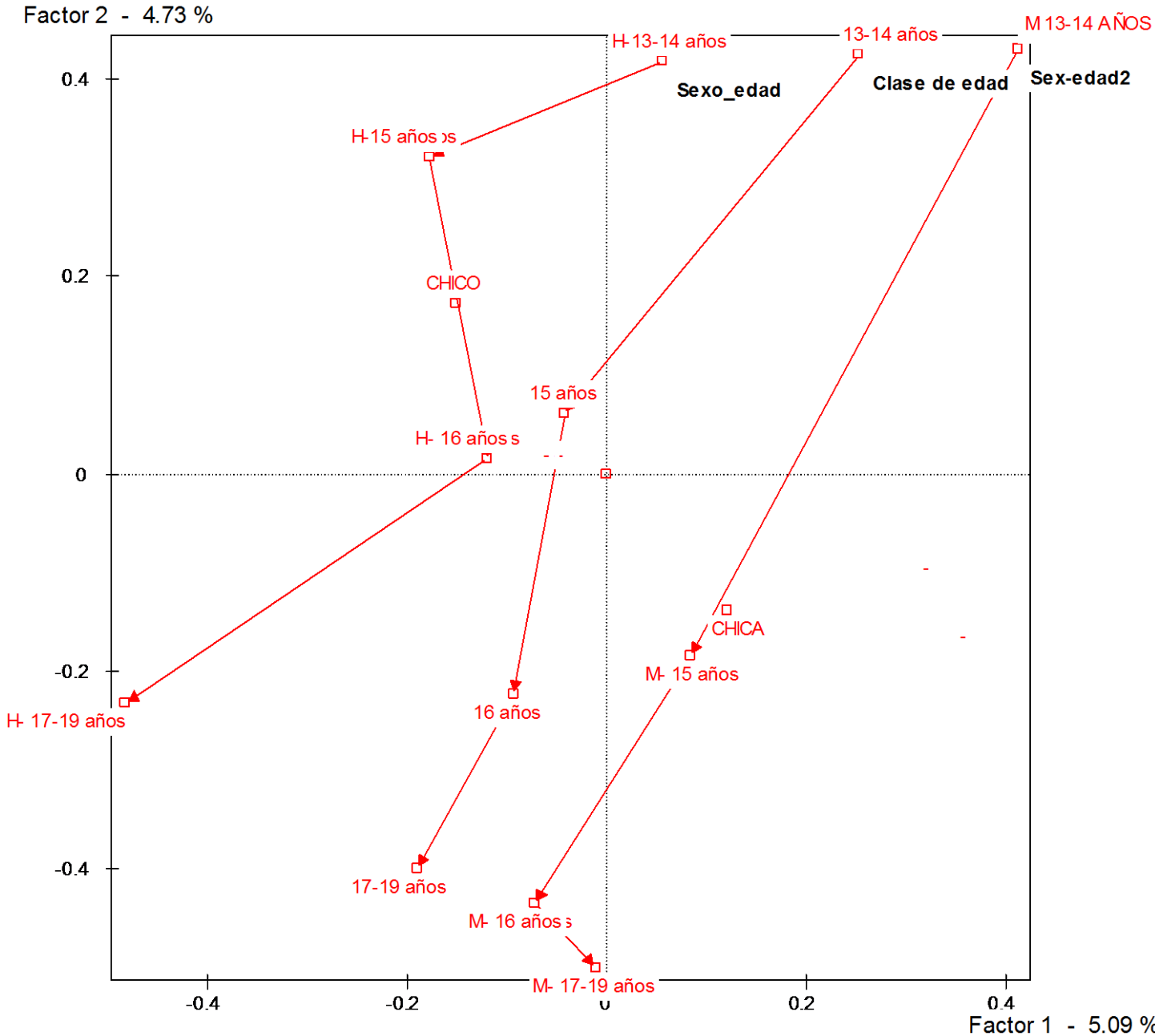
Younger's identity



Younger's identity (repeated "segments")



Younger's identity (age and gender)



Wines
(21 wines described by 31 variables)

```
data(wine)
wine_cont <- wine[,3:31]


d1 <- as.dist(cor(wine_cont))
plot(hclust(d1))


d2 <- as.dist(abs(cor(wine_cont)))
plot(hclust(d2))
```