With the results calculated in the former section, the data can be introduced in the expressions $U1 = a1 * X1$ and $U2 = a2 * X1$ in order to determine the sample canonical variates. Once calculated, identifying proportions of sample variance explained by canonical variates becomes possible by summing the vectors squared elements, being $R^2_{z1U1} = 0.66$ *and* $R^2_{z1U2} = 0.14$.

```
dataset = scale(P10_16)
X1 = dataset[1:3, ]
X2 = dataset[4:5, ]

a1 <- matrix(c(0.03190054, -0.06528672, 0.05237954), nrow = 3, ncol = 1)
a2 <- matrix(c(-0.026875170, 0.002375188, 0.020018672), nrow = 3, ncol = 1)
b1 <- matrix(c(-9.7227405, 0.5197661), nrow = 2, ncol = 1)
b2 <- matrix(c(2.0576724, -0.2314993), nrow = 2, ncol = 1)

U1 <- t(a1) %*% X1
V1 <- t(a2) %*% X1
```

In the light of the results, the first variate is a better representative than the second, being 0.66 considerably higher than 0.14