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The Social Positioning of the French According to the EPCV Survey

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Résumé

Différents indicateurs sont disponibles pour repérer la position sociale des Français : à partir de leur profession, de leur niveau de ressources ou de leur niveau d'éducation. Cette note examine similitudes et différences entre les classements induits par ces différents indicateurs dans une logique inspirée d'approches du type « analyse de l'incohérence du statut » ou « espace social » bourdieusien.

Abstract

Various indicators are available to locate the social position of the French people: their profession, their level of resources or their education. This note examines the links between these elements in a logic that stems from approaches like analysis of the "status cristallization" or Bourdieu's vision of social spaces.

Mots clés : statut social, espace social, incohérence de statut.

Keywords : social status, social space, status cristallization.

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The following analyses are based on the *Enquête Permanente sur les Conditions de Vie* fielded in May 2003. This issue of the EPCV ongoing survey included a complementary questionnaire about sport and cultural practices. 5626 persons who form a representative sample of the French population aged 15 and more answered the questionnaires. Several items of information are available in this survey to locate the social position of the persons: class position, social status, education level, and economic resources level. We are going to examine the links of these elements in a logic that stems from approaches like "analysis of the status coherence" or Bourdieu's vision of the social space. Save contrary note, the data will be weighed (their weight was built on the basis of a post-stratification and regarding the particularities of the survey plan, survey of households, then of the individual within the household).

1. Data & Scales

Occupational positioning

The classification of occupations will be that of the French code named PCS (*Professions-catégories socioprofessionnelles*), a classification system coding "Occupation/Socio-professional Categories" (see annex). This classification is in fact the only one available in the French data. International classifications like ISCO aren't coded and can only be obtained as more or less satisfactory transcodifications of the PCS code.

Three aggregation levels fit together and are available in the PCS code from the most detailed (easily assimilated to the four ISCO numbers) to the most aggregated one (6 "Groups") passing through a level with 2 digits distinguishing 32 "socio-professional categories". Starting with this nomenclature, we will be able to build either class schemas or occupational scales.

- The more aggregated level – level 1, level of "groups" – may be assimilated to a schema of class position. We can also rebuild the EGP scheme with the "*categories socioprofessionnelles*", level 2.
- Three scales which score the occupational position and can be calculated from the PCS code are available in France:
  - A "prestige scale" – variable St(prestige) hereafter - based on a 1998 survey (Y.Lemel & L.Rainwater: *Les déterminants du statut social. Compte-rendu d'une expérimentation en France*). This scale uses subjective assessments of the French population about the consideration they have to different occupations. It is available for the 3-digit level, the most detailed level in the PCS framework;
  - A first "social status scale" – variable St (Stat.homog) - based on homogamy data, Goodman model II applied to 2000 Census data. This scale is also available for the most detailed level in the nomenclature of the PCS;
  - Another "social status scale" – variable St (Stat.homop) - based on homophily data, Goodman model II applied to 1962 "*Contacts*" survey (see Y.Lemel & A.S.

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Cousteaux, *document de travail du CREST, n°2004-10*). This scale is only available for the level of the socio-professional categories, not for the most detailed level in the PCS framework.

These three occupational scales are standardized hereafter. Whereas the scale of prestige and that of homogamic social status are available at the most detailed level of the PCS code – i.e. the level of occupations –, the homophilic social status scale is only available for the intermediary level thus, it is this latter which will constitute the reference framework of the present note.[2]

The status positions are given to people according to their current occupations or to their previous occupations for those who are unemployed or retired. Therefore, 558 persons will be excluded because they have never practiced an occupation: the most concerned are the youth, mostly students (¾ are under 25). Besides, all the farmers will be dealt with together, since the data of the survey doesn't allow a distinction of their status on the PCS code bases.

Income, diploma

Two other social positioning registers are available in the EPVC survey: the economic resources level on the one hand, and the level of diplomas on the other hand, proxies for *economic capital* and *cultural capital* in the bourdieusian sense respectively.

The survey does not provide the personal wage or the retirement pension of the individuals themselves but does provide an evaluation of their global family income. The global income is the one stated by the households, with an income equation being applied to assign an amount to the households that refused to indicate their incomes. This global income will be related hereafter to the number of home members in order to constitute a standard-of-living indicator and then will be treated in Log and then standardized.

The education code is the one suggested in Hollmeyer-Zlotnich & Wolf, 2003[3]. A scale will be associated to it according to how many years of studies are required (from the admission to secondary school) in order to obtain the corresponding level. This mode of scale construction gives rise to three comments: a/ in its construction itself, the scale doesn't make any difference between general and vocational diploma when the latter ones require the same number of years of studies; b/ the scale refers to the number of years theoretically required, not to the number actually observed; c/ the nature of the diplomas may have changed over the period but this is obviously not specific to the scale. Some sensibility studies were done and suggested that the results are quite independent from the exact values that are selected for constructing the scale, as long as that the ranking and the order of magnitude are respected.

Table 0

[2] In theory, there are 32 "socio-professional categories" but in reality, they are only 28 since we excluded the "clergy" socio-professional category given its very weak numbers, and since the data available in the survey did not differentiate the farmers into three socio-professional categories as the PCS code does.

[3] Hollmeyer-Zlotnich J.H.& Wolf C. eds, 2003, *Advances in Cross-National Comparison. A European Working Book for Demographic and Socio-Economic Variables*, New York, Kluwer Academic

2. The correlations between occupational scales

The correlations between the three scales, calculated among the whole French population, i.e. on an individual basis, are very strong: around 0.90[4]. They are slightly stronger between the two social status scales than between these two previous scales and the prestige one. This result is very well underlined by a PCA: the first component that represents 94% of the variance is equally correlated to the three scales whereas the second component (which represents 4% of the global variance) puts the prestige scale, to which it is positively correlated, in contrast with the two other scales it is negatively correlated to.

Table 1

The whole of the three scales seems therefore to structure itself around a hierarchical global dimension, that can be found in every scale, and around a positioning differential according to whether the appreciation of the positioning is obtained by a direct assessment of the population (case of the prestige scale) or is inductively constructed through the observed structures of social affinity (scales funded on the homogamy or homophily matrices).

What could be the sociological interpretation of these results? The "prestige" scale can be easily assimilated to a "global desirability" scale in Goldthrope's meaning. The fact that the scales funded on homogamic or homophilic matrices similarly distinguish themselves from the prestige scale makes us think that specific principles are acting in the rankings linked to social interrelations. However, these particular principles are only introducing limited adjustments compared to a general hierarchy on which global desirability would give a special interpretation. The contrary would be surprising since it is hard to conceive that relationship between persons who recognize their mutual situations as "equal" because they frequent each other would be in contradiction with the "desirability" of situations !

In reference to the prestige scale it would appear that:

- The following socio-professional categories receive a "malus" (penalty value) in social interrelations: the labour forces (excluding "skilled workers in handling, warehousing and transport"), including "foremen" (whose social status is particularly under-evaluated compared to their global evaluation in terms of prestige); "craftsmen", "technicians", "farmers" and "entrepreneurs"; to some extent, "companies' engineers and technical managerial staff ". All these occupations – apart from "entrepreneurs" – suggest manual or technical skills. From this point of view it would be most significant that "traders" do not appear on this list when other "self-employed" professionals do appear.
- The socio-professional categories of the "white-collar" type (excluding those of the civil service) and "managerial staff" (excluding again those of the civil service)receive a "bonus".

Graph 1

Among both scales based on affinity, it is worth noting that it is the homogamic one which is the best correlated to the prestige scale. This probably means that, as opposed to friendly relations, matrimonial relations remain more linked to a wish for equivalence of "desirability" of situations between spouses.

[4] They are of the same nature, but very slightly stronger if we calculate them from aggregated data and not from data pondered on the 28 socio-professional categories.

3. Class positions and occupational scales

The class position, as well as the scales, is calculated from the two-digit level of the socio-professional category code. As we mentioned, this level discriminates 28 socio-professional groups or categories. A "class position" will then gather three to five of these categories (or possibly a single one), so that the intra-class variability is a priori reduced in comparison with the one we would observe on really individual data: there are in fact only 28 values to be divided in 10 groups. Therefore it is a bit artificial to calculate variances explained by the class position.

The variance explained by class positions is strong. It is slightly stronger for the two affinity scales than it is for the prestige scale. The variance explained by the class schema defined by the most aggregated level of the PCS code– distinguishing 6 class positions – is stronger than the one explained by the EGP code (it is worth reminding that both codes are in fact only classifications slightly different from the "socio-professional categories").

Table 2

The value ranges of scales in different classes are presented in graph 2, where we obviously find the consequences of the relative drop of the working-class categories in the social status scale in reference to the prestige scale. We note that the "petty bourgeoisie" class appears to be much more homogenous through the prestige scale (social desirability?) than through the two other scales. This result is linked to the especially positive evaluation, through the prestige scale, of the socio-professional category of "*entrepreneur*". As the category is mainly composed of directors of small companies, it was here placed in the "petty bourgeoisie". The exact place of this category in a scheme of the EGP type could be questioned.

Graph 2

4. Income, diploma and occupational scales

Dealing with individual characteristics, it seems natural to analyse the links at the individual level. However, indexes of Blau-Duncan type are generally calculated on a level clearly more aggregated: that of occupation. Now, there is no reason that the conclusions are the same in both cases. This is exactly what we find in the present case. We will thus analyse both kinds of results. Otherwise, these results are more or less the same whatever the occupational scale that is used.

Education and income as predictors of the occupational status at the individual level

The social status noticeably grows with the level of education , especially with the highest levels. We could make out several stages: first of all, the complete absence of diploma; then, access to primary and secondary education without having achieved the latter level – whatever the nature of the diploma obtained (general or occupational) –; achieving the *Baccalauréat;* and finally, post-graduate studies. Overall, the effects of a rise in the number of years of studies on the social status are far from being linear.

Through an interpolation, graph 3 visualises the links between the numbers of years of studies and the occupational status. The sample representative of the whole French labour

force or of the French people who have already worked is mostly composed of people who do not have the "maturity certificate". Thus, two modes are noticeable: one at the age of 9, another at a much smaller age[5]. Two groups of persons correspond to the 9-year-old mode, the occupational status of whom differs: working-class categories of lower status on the one hand, and white-collars (as well as foreman) on the other.

Graph 3

There is also an increase in the social status with the economic resources. Again, the growth is not regular: an extra point of income (1 point = 1 standard deviation of the Log of the family income in relation to the number of the members of the household) corresponds to slight rises in the occupational status of the people located in the inferior half of the resources distribution whereas it corresponds to a high rise in the better-off people's status.

However, what we notice here is very different from what we noticed in the case of educational resources. Obviously, the possibility to deduce people's status from their economic resources is much less stronger than it is when it is inferred from their education level because the dispersion of the resources at the specified occupational status level is much larger than that of the educational level. The adjustment is far poorer[6].. Of course, the economic resources examined here are these of households while education and status are, by definition or by construction, fully individual characteristics[7]. Household may be composed of a various number of members who could have social status similar or different from that of the person considered. So, it might be argued that such an analysis blurs the link between the social status of an *individual* and his economic resources, but the fact is that people live in households and pool their resources more or less, so that household resources is at least an evaluation of what the people could access to.

Graph 4

Overall, a synthetic indicator similar to Blau-Duncan's one (similar but calculated here on the individual data, which is quite important: see below) and obtained by regressing income and education on the homogamic social status scale would be:

SES =-1.43 + 0.14 EDU + 0.22 St(log Income/head), R2= 0.46, N= 5048.

Education and income as predictors of the social status at the aggregated level

A priori, the analyses of the links between income, education and the occupational scales at the aggregated level can give different results from those obtained at the individual level. The reason is simple: all the individuals belonging to a same occupational category have the same occupational score but they differ in terms of education or economic resources level. Consequently, the coefficients of the regressions are not the same in both cases, which is usual in such cases, comparable to the cases of "ecological fallacy".

In the present case, the results are as follow:

[5] The average of the indicator is around the age of 9, which is far less than the time needed to obtain the *Baccalauréat.*

[6] R2 of 0.18 in one case, of 0.42 in the other.

[7] Even though the social status is built from a homogamic matrix, it is used to quote the individual occupations. An individual practicing a given occupation is not necessarily in the modal homogamic situation specific of his/her occupation.

	Model I ***Aggregated data***	***Model II*** ***Individual data***
Intercept	-0.01	-1.43**
Education	0.23***	0.14***
St(Log Income/head)	0.74*	0.22***
R2	0.88	0.46
N	28	5048

*** 0.001 significance, **=0.01 significance, *=0.05 significance

In the case of individual data, the variables are measured as above; it is the averages of these variables that are used in the case of aggregated data.

The coefficients are clearly different and their relative ratio too. More precisely, the coefficients are more important on aggregated data in such a way that, for instance, an additional point on income will trigger a much more important increase of the synthetic indicator if we measure its effects through aggregated data than if we use individual data. It can be shown that regressions on aggregated data will always – in such cases when the inner variance to the aggregated groups of the variable explained is nil – trigger higher coefficients on aggregated data than on individual data: the impact will thus always seem more important on aggregated data.

Modeling on individual data could appear as presenting a systematic bias in under-estimating the low values of the occupational status and in over-estimating the high values in comparison with the model on aggregated data (graph 5). The point is that the predicted values couldn't be the same for individuals practicing the same occupation even if the value to be predicted is the same for all of them but, nevertheless, model II predict the values of the individual occupational status with the characteristics of the individual "at best". Precisely, by definition, Model I aims at reproducing the value of occupational status for each group "at best" with the average characteristics of these groups in income and diploma but doing that overshadow the variability inside these groups. Both models will coincide all the more when the intra-group variances of the explanatory variables are low.

Graph 5

The correlations between dimensions. Structure of the social space.

Given what we have said about the very strong correlations between the three occupational scales and the difficulty of reducing them to a mere combination of economic and educational resources, we can consider that we are dealing here with three different spheres of hierarchical structuring of society: economic resources, educational resources and occupational status. At least from a statistical point of view, and even if some theoretical reasons could conclude differently, there is no reason for treating these different spheres asymmetrically.

A PCA of three indicators – one indicator for each sphere – highlights the elements we have discussed up to now. The existence of a general hierarchy that can be found through these indicators is recognizable by the characteristics of the first component: this component

explains 66% of the variance and is positively correlated almost equally to each indicator. The second component (23%) contrasts the income indicator with the two others. The social status indicator and the educational one alone define the third component (12%), which contrasts them both with each other.

Graph 6

This PCA analysis suggests that the indicators for the education level and the social status refer to very similar hierarchal arrangements. Both could be regarded as proxies of the dimension of "cultural capital" as opposed to the economic capital in the structure of Pierre Bourdieu's analyses. In this spirit, it is thus possible to create 1) an index of "global capital" by adding up the three indicators[8] and 2) an index of composition of this global capital calculated as the half-sum of the indicators of education level and social status minus the indicator of monetary resources: these two indexes are correlated at 0.98 to the first two component of the PCA respectively. The resulting social space is given in graph 7 below. In fact, the distribution of the population (labour force or persons having worked) within this social space is quite independent from the precise way we operationalize the two dimensions. Its characteristics, which we will comment, seem quite structural.

Graph 7

Firstly, the distribution of the global capital is quite asymmetrical, with a mode for lower values. The result seems all in all reasonable given what we know of the unequal structures: cf. for instance the Log-normal distribution of income.

Secondly, as opposed to the feeling emerging from *The Distinction*, what differentiates the bottom from the top of the overall hierarchy is not the fact that higher categories vary more with the composition of their capital than others. The degree of the diversification, at the ell of the indicator that has been built, seems more limited in these higher categories. However, what clearly characterizes these high categories – as opposed to medium and low categories – is the relative importance of the "cultural" part of their "global capital". Consequently, the possible effects of the differences in the "composition of the capital" may be more easily analyzed within medium and low categories than within the highest categories. These results seem in contradiction to the approach in *The Distinction*.

[8] All scales are standardized before.

Tables & Graphs

Tab 0. distribution of the population by educational level

Educational level	*Workforce or persons having worked*	*Persons under the age of 30*	*Nb of equivalent years*
a. Inadequately completed gen. educ.	0,17	0,14	5
b. Gen. elementary educ.	0,14	0,01	7
c. Gen. elementary educ. & voc. qualif.	0,11	0,03	9
d. Intermediate gen. qualif. & voc. qualif.	0,03	0,02	10
e. Intermediate gen. qualif.	0,17	0,33	9
f. Gen. maturity certificate	0,07	0,13	12
g. Maturity certificate : Voc./Gen. with voc. qualif.	0,06	0,08	12
h. Gen Lower tertiary educ.	0,01	0,03	14
i. Voc Lower tertiary educ.	0,09	0,10	14
j. Low Higher tertiary educ.	0,05	0,07	16
k. High Higher tertiary educ.	0,08	0,07	19

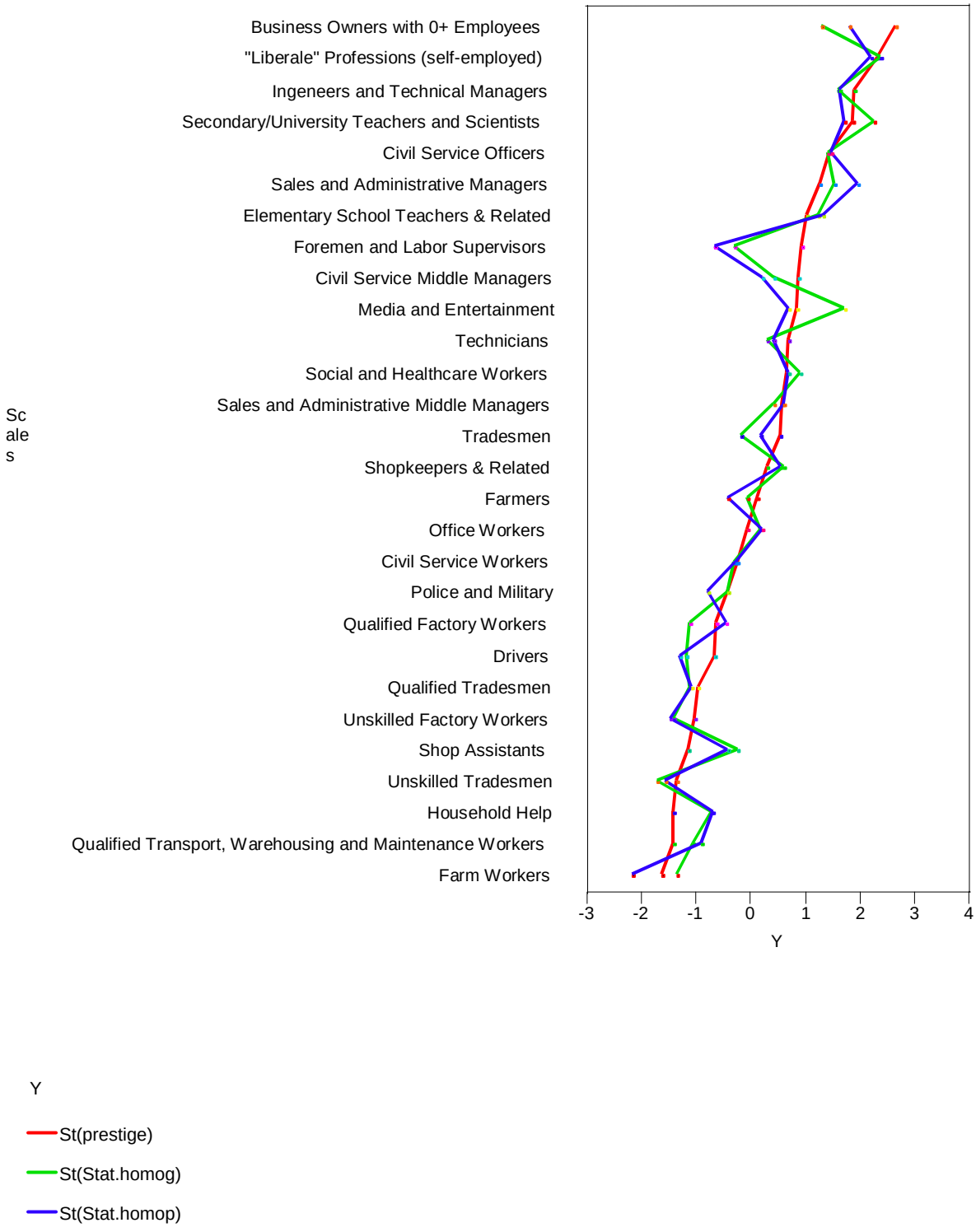
Adapted from Hollmeyer-Zlotnich J.H.& Wolf C., 2003, figure 1, “The Educational System in France”, p 226

Tab 1. Correlations between scales of occupational positioning

	ST (prestige)	***St (Stat.homog)***	***ST (Stat.homop)***
St (prestige)	1,00	0,90	0,88
St (Stat.homog)	0,90	1,00	0,96
ST (Stat.homoph)	0,88	0,96	1,00

N=

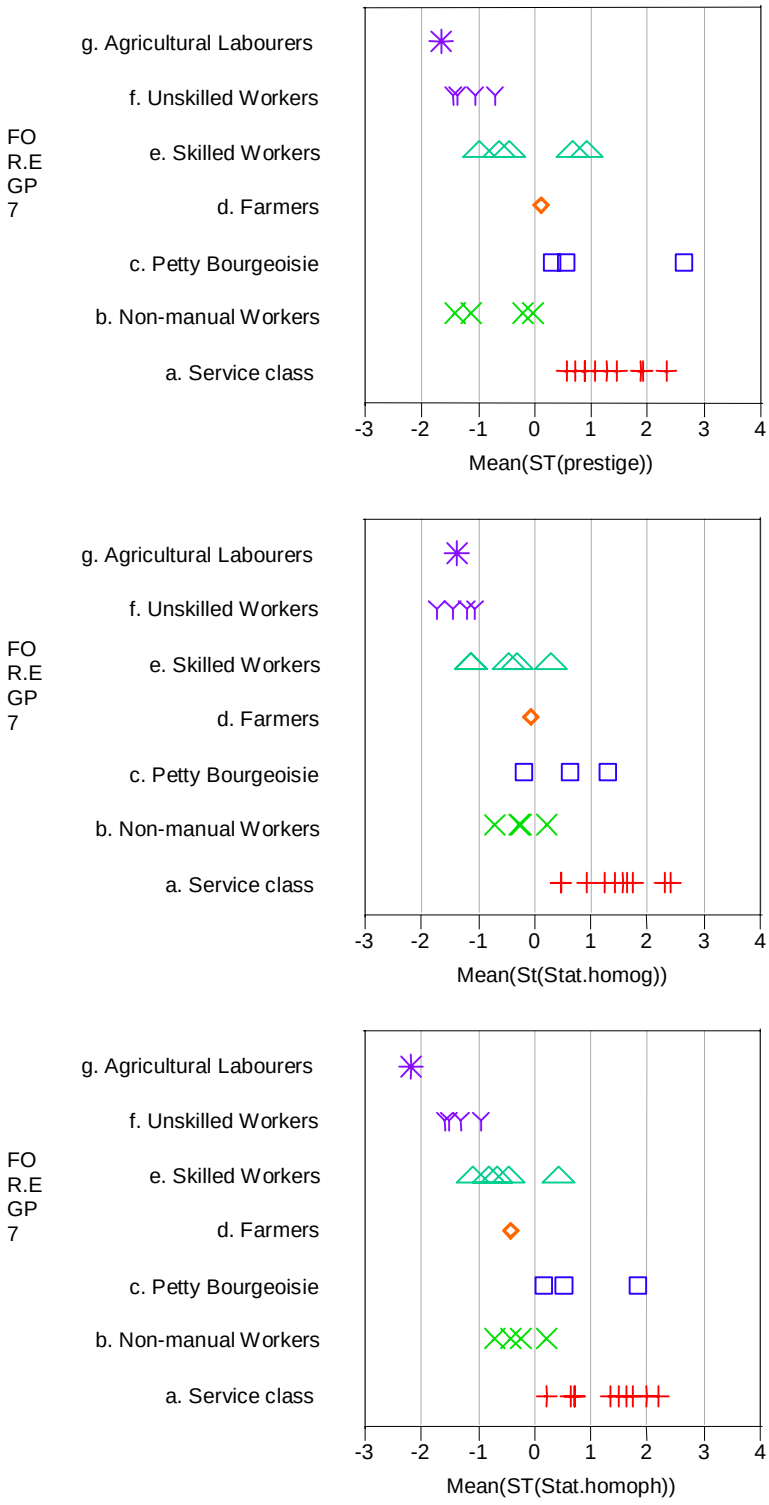
Graph 1. For each socio-professional category , values of the occupational scales.



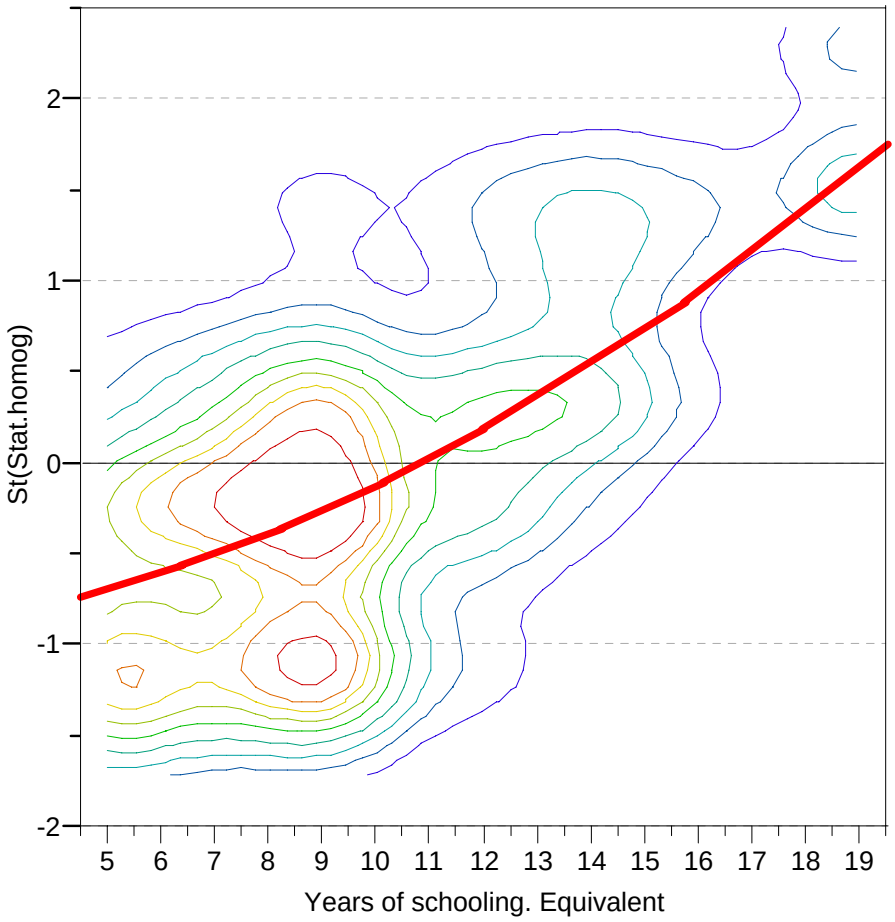
Tab 2. Variance of occupational scales explained trough class position

Scale	***Class position located by***	
	EGP Code	***PCS Code***
« prestige »	0.69	0.83
« social status 1 »	0.79	0.88
« social status 2 »	0.81	0.82

Graph 2. For each class, range of values of the three occupational scales.

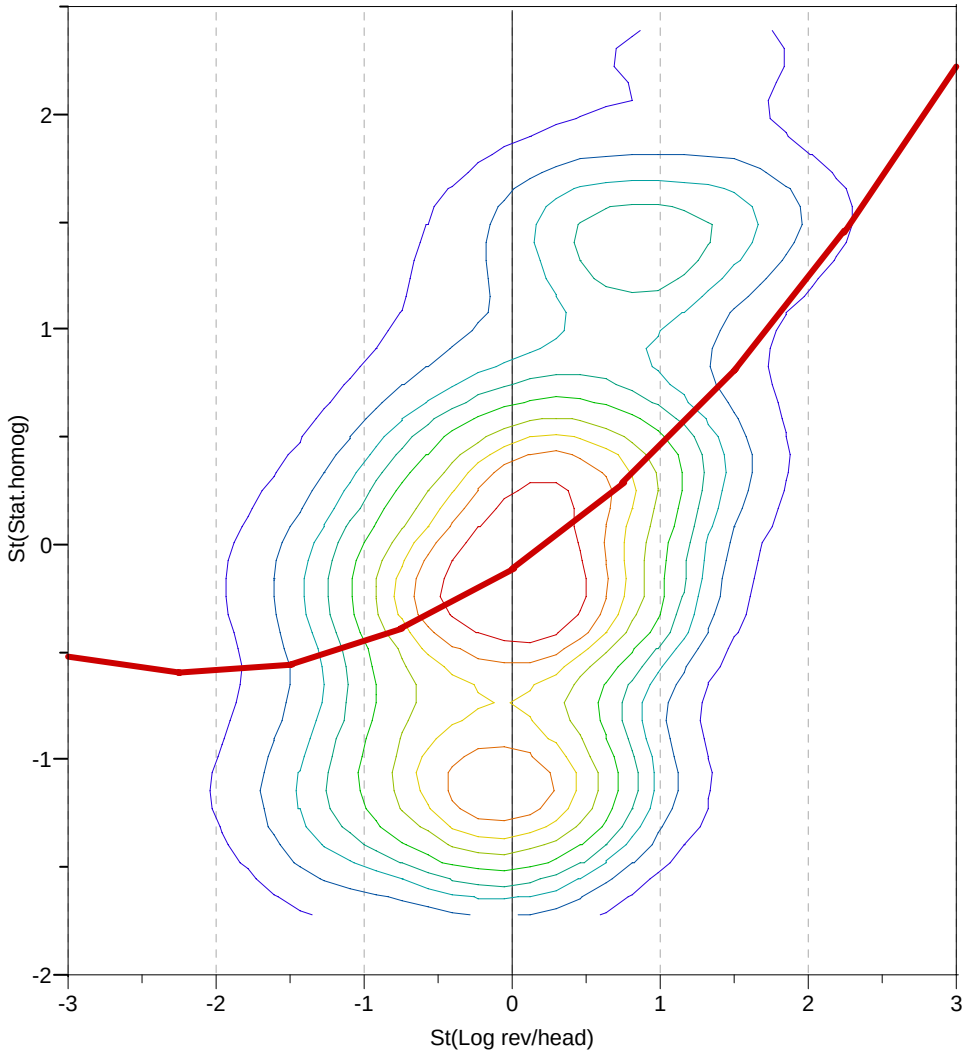


Graph 3. Observations density in the "social status" x "year of schooling" space.



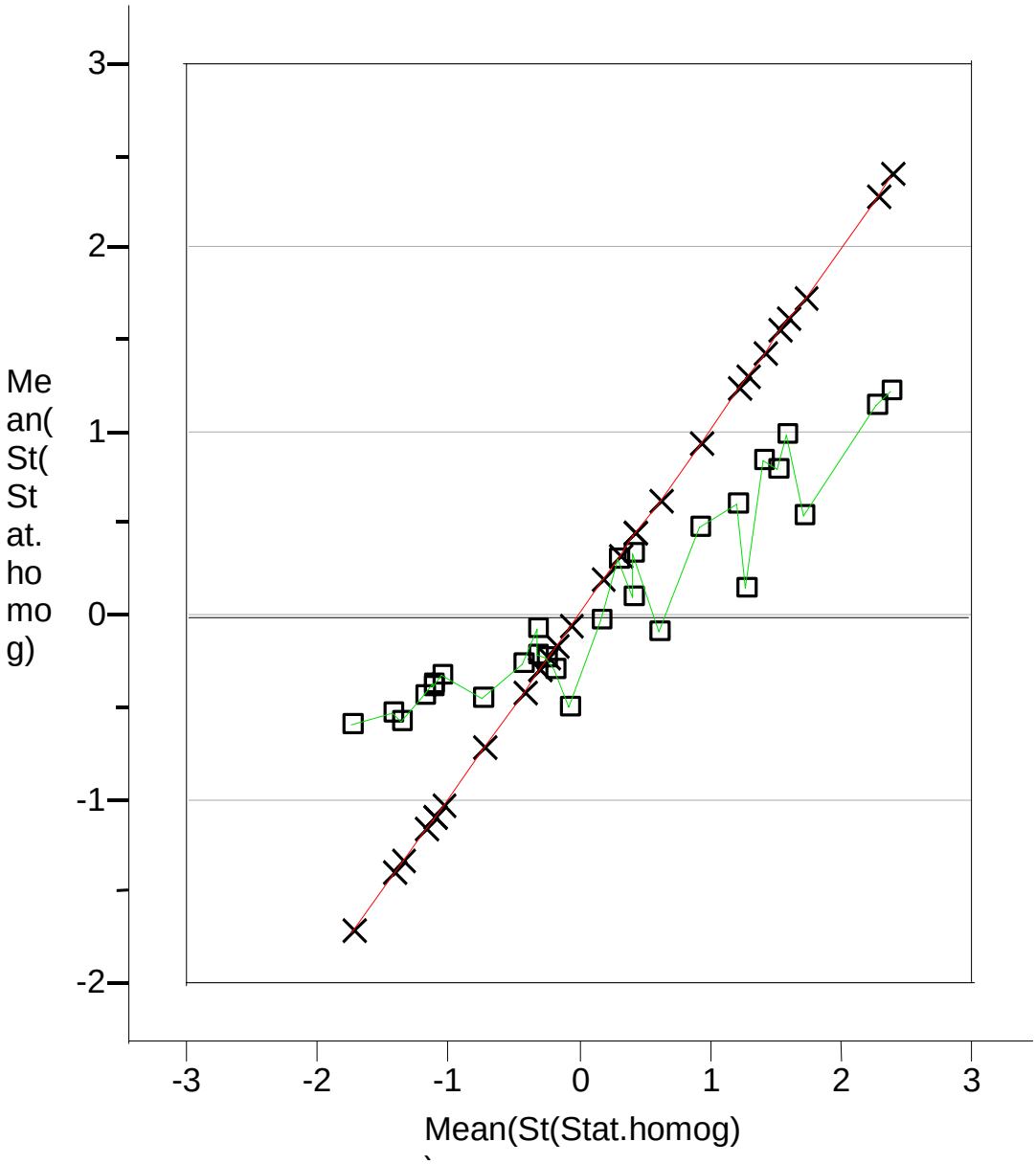
Note. The density is modelled through a bivariate normal kernel smoother using an FFT and inverse FFT to do the convolution. The red line is the graph of the order two-polynomial min-square adjusted to the individual data

Graf 4. Observations density in the "social status" x "income" space.



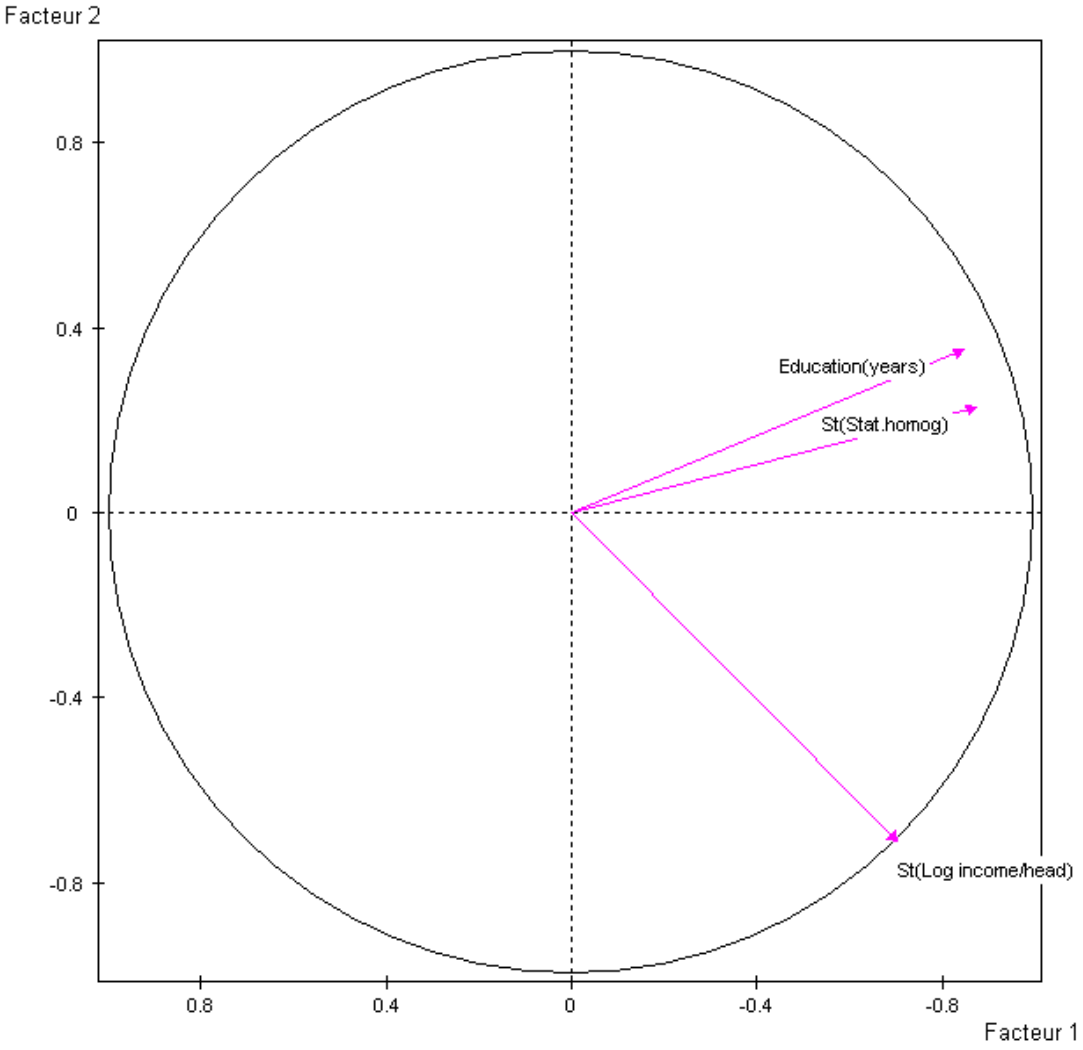
See note, graf 3

Graph 5. Values observed and foreseen by an indicator of the SES type calculated on the whole workforce population or persons having worked, contingent upon the value of the social status scale.

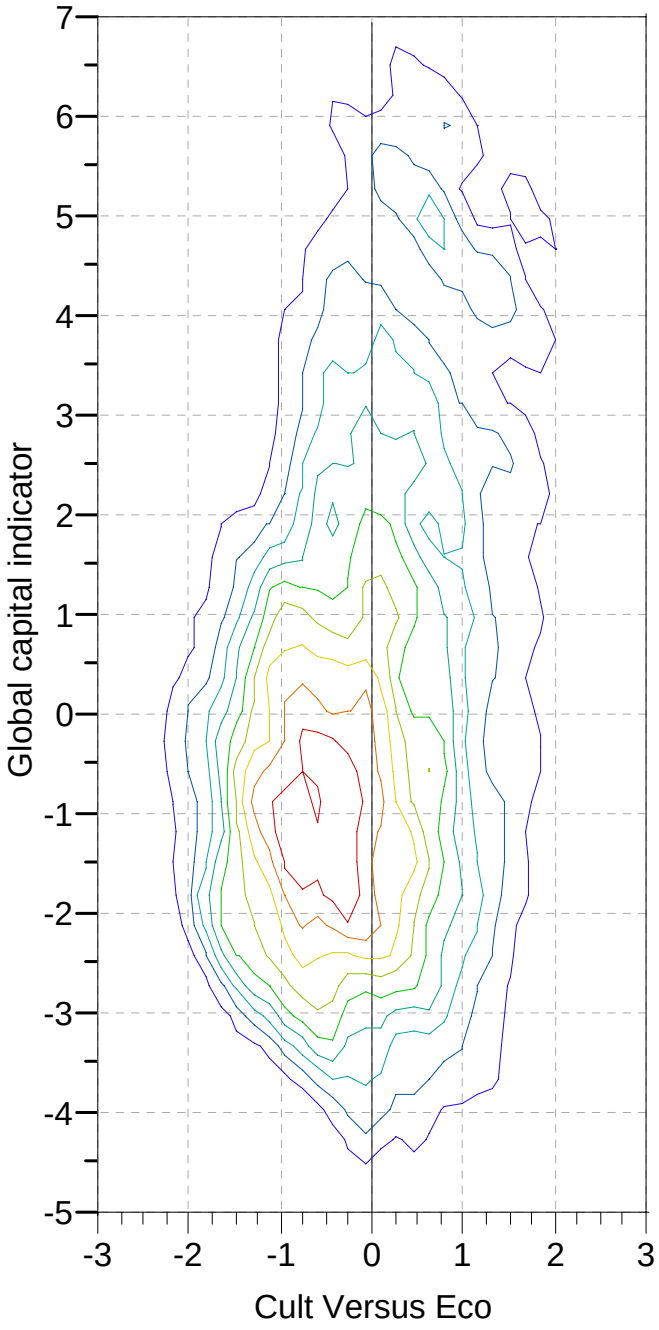


Note. The observations are ordered by growing value of the homogamic social status scale values, corresponding to the 28 socio-professional categories. The model chosen is the one indicated in the text.

Graph 6. Space 1-2, PCA, three indicators of social positioning



Graph 7. A Bourdieu's social space



Note. See explanation in the text

Annex 1. The PCS code

The *Professions-catégories socioprofessionnelles* classification is specific to France and has undergone six updates since their invention in the 1950s. The PCS system codes occupations down to three- and four-digit levels. There is full articulation among levels. It broadly approximates class schemes at the more general - single- and double-digit level of "socio-professional groups" - but notwithstanding, single- and double-digit nomenclature is obviously specifically tailored to French society.

1. Farmers
    11. Small Farmers
    12. Medium Farmers
    13. Big Farmers
2. Tradesmen, Shopkeepers and Business Owners
    21. Tradesmen
    22. Shopkeepers & Related
    23. Business Owners with 10+ Employees
3. Managers and Secondary/University Teachers
    31. "Liberale" Professions (self-employed)
    33. Civil Service Officers
    34. Secondary/University Teachers and Scientists
    35. Media and Entertainment
    37. Sales and Administrative Managers
4. Intermediate Professions
    42. Elementary School Teachers & Related
    43. Social and Healthcare Workers
    44. Clergy
    45. Civil Service Middle Managers
    46. Sales and Administrative Middle Managers
    47. Technicians
    48. Foremen and Labour Supervisors
5. White Collar Workers
    52. Civil Service Workers
    53. Police and Military
    54. Office Workers
    55. Shop Assistants
    56. Household Help
6. Blue Collar Workers
    62. Qualified Factory Workers
    63. Qualified Tradesmen
    64. Drivers
    65. Qualified Transport, Warehousing and Maintenance Workers
    67. Unskilled Factory Workers
    68. Unskilled Tradesmen
    69. Farm Workers