### Classification, social classes and cultural practices.

### A GDA approach through Bourdieu's sociology of culture

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### Abstract

This chapter discusses some of Bourdieu's classical analyses of cultural practices on the basis of a Geometric Data Analysis methodological framework, by which we essentially mean here a combination of Multiple Correspondence Analysis (MCA) and cluster analysis.

After having constructed a space of French cultural practices through a specific MCA on a set of French recent (2003) survey data, we proceed to a cluster analysis of the respondents and discuss its relevance as regards Bourdieu's sociological concepts and cultural taxonomies, as they are developed in *La distinction*.

This approach allows representing statistically different "families of cultural behavior" on the basis of a sociological interpretation of these behaviors, as Bourdieu did in *La distinction* through more "qualitative" typologies, opposing social agents according to their relationship to "culture". He for example distinguishes pre-reflexive adhesion to the legitimate culture in the dominant classes, cultural "goodwill" in the middle classes, the "choice" or "taste" imposed by necessity in the popular classes...

GDA methods then allow formalizing and operationalizing some of the main sociological problems raised by Bourdieu and to operationalize their solution inside a new framework.

### Introduction

Recent breakthroughs in the methodology of Geometric Data Analysis (GDA, especially Le Roux, Rouanet, 2004, and Le Roux, Rouanet, 2010) allows continuing the perspective of the analysis of social space structures as Bourdieu put it into work during the 1970s, especially in an article published with Monique de Saint-Martin entitled in French "L'anatomie du gout" (an anatomy of taste) (Bourdieu, de Saint-Martin, 1976), which was afterwards included and expanded in the book *La distinction* in 1979 (Bourdieu, 1979).

These breakthroughs are not only methodological refinements which "modernize" an "old" instrument (multiple correspondence analysis), already much used by Bourdieu himself and by numerous members of his "team" (Rouanet et al., 2000, Lebaron, 2010). They help to examine various sociological issues which are at the center of what can be called, 30 years after, the "Distinction model": the issue of the existence of a "cultural hierarchy" and its social determinants, the relative weight of various types of capital (cultural and economic) as factors of cultural inter-individual variations in lifestyles or, more specifically, the question of the structural homology which characterizes different sub-spaces constituting the global social space.

In this chapter, we focus on the issue of the determination of « classes » of individuals on the basis of cultural practices and their sociological interpretation, especially as regards their (sociological) consistence. It is a kind of analysis which has been largely used by Bourdieu, since the beginning of the 1960s (Lebaron, 2010), probably under the influence of Thorstein Veblen, Maurice Halbwachs, Edmond Goblot and a set of other sociologists, but with a particular efficiency and a high degree of synthesis. He for example describes "distinction" as a largely unconscious attitude intending at maintaining one's position in the social space, seen as place of permanent symbolic evaluation struggles.

This general feature of social behavior is not reducible to a purely rational quest of the maximal amount of symbolic capital, but it can certainly be approached as such: people try to maintain their relative position in a general social market where the relative value of people and practices is of symbolic nature and is collectively produced. As the laws of this market are unknown by agents and permanently changing, it creates a perpetual move of diffusion and distinction of some aspects of lifestyles, especially cultural practices as symbolic dimensions of the conditions of existence.

Bourdieu analyses types of cultural attitudes: in the bourgeoisie, the adhesion to legitimate culture (recognized classical music for example) is made "natural" as a part of a general dominant ethos. Attitudes are more ascetic, as they are less natural and have to be acquired, in the petty bourgeoisie: it corresponds to what he calls "cultural goodwill", a systematic set of behavior, especially aiming at conquering the more legitimate signs of integration inside the bourgeoisie. In the popular classes, the absence of competence in highbrow cultural domains is not seen as a lack but opposed to real and realistic popular tastes.

In this chapter we base this kind of typology on a systematic GDA methodology, using first MCA, then a Euclidean classification.

# Bourdieu's conception of social classes and the "class-culture" debates

A large sociological literature has recently discussed the importance of "cultural factors" in relation to the issue of the existence of social classes, especially in comparison with more socio-economic definitions like the ones which prevail in the British sociology (see Bennett, Savage, Silva, Warde, Gayo-Cal, Wright, 2008). The existence of a relation between social groups and cultural practices has been largely discussed in connection with the growing importance of consumer attitudes, changes in cultural production, and the rise of "omnivorousness" for cultural goods (Peterson, 1991), observed in various empirical studies, especially in the Anglo-Saxon world. The idea the "cultural hierarchies" have become more fluid and less strict has been often developed.

In parallel, a set of authors have also put into question the relevance of "social class" as a central factor of social behavior. Some have, more specifically, stressed the high level of dispersion between individuals in cultural matters, the important "dissonances" of their tastes and practices (Lahire, 2004). Recently, authors have tried to articulate Bourdieu's theory of legitimate culture and the new observations and considerations aiming at making the sociological account of the class-culture relationship more "flexible" (Coulangeon, 2010).

In our view, Bourdieu's theory of "social class" and habitus has often been misinterpreted, because it has been disconnected from the set of empirical observations, which has given it all its explanatory and interpretative strength. In particular, the use of Geometric Data Analysis methods since the 1970s has been a constant practice of Bourdieu and his main theoretical inventions have often been (like the notion of "social space") related to issues raised by his data material and methodological operations.

Bourdieu's conception of social classes has known some evolution since his first analyses of "class ethos" and inequalities in the 1960s, especially in Algeria. In *Distinction*, he proposes a complex analysis of the relationship between "social class" and "cultural practices" as part of a "lifestyle" and expression of a *habitus* (Bourdieu, 1979). Social classes are symbolically (and in particular politically) constructed on the basis of agents' positions in the social space, and especially on the basis of their similar types of lifestyles, founded in habitus, which create "elective affinities" between them. Cultural practices as central components of the lifestyle participate to the symbolic construction of classes (Bourdieu, 1984).

GDA allows displaying all the observed inter-individual variability in a first step. The social space is based on the differences between individual's characteristics. Then social variations can be observed in the space and their intensity can be "shown" geometrically. This is for Bourdieu a way to concretely "prove" the close connection between symbolic structures and the space of social conditions.

### The data

We use here the data from the "enquête permanente sur les conditions de vie des ménages" (EPCV survey, today called "SILC" survey at the EU level). It was realized in 2003 with a supplement entitled "participation culturelle et sportive" ("Cultural and sport participation"). This survey is composed of 5625 individuals from 15 and more, restricted by us to the 5497 individuals of 18 and more for international comparison purposes.

The survey includes a number of questions related to cultural and sport practices, which allows measuring differences in the intensity, more exactly the frequency, of these practices and it adds to them detailed information about individuals and households<sup>1</sup>. The questionnaire has not been conceived for GDA, and especially for MCA: questions with multiple choices had to be recoded in the perspective of MCA.

The survey is not very rich on the economic characteristics of the respondents, outside household income in large classes, and some aspects of household's equipment. The wealth, either financial or in real estate, is not estimated, nor the most strictly economic elements of lifestyle, such as the main budgetary headings ("budgetary coefficients"), sparing behavior, time used for consumption and the management of money, etc.

Our first goal was to use a dataset sufficiently close to Bourdieu's data in *La distinction*, an analysis directly inspired by Bourdieu and the recent breakthroughs in GDA. The fact that data were neither collected for MCA nor in Bourdieu's perspective is of course a limit.

### The construction of the space

The most important step of analysis, in line with Bourdieu, is the construction of the space by the choice of active questions (and in specific MCA passive modalities). This step can be described as the geometric modeling phase of the analysis. It is the heart of what Bourdieu calls the "construction of the research object" with Passeron and Chamboredon in 'Le métier de sociologue' (Bourdieu, Chamboredon, Passeron, 1968), and a concrete operationalization of this epistemological concept.

One can regret by the way the fact that, in numerous work intending at discussing « Bourdieu's theory », either in a historical comparative or more theoretical perspective, the issue of the way the social space is concretely constructed has been either totally left aside or under-argued. They condition the sociological relevance of the results obtained by Bourdieu and the interest of a discussion of its empirical conclusions.

We have constructed a space of cultural practices, including legitimate cultural practices (like different types of reading books or magazines), listening to classical music, etc., practices

<sup>&</sup>lt;sup>1</sup> This survey has not been much used in France, outside work by Philippe Coulangeon (for example: Coulangeon, 2010).

more related to youth lifestyle in its multiple meanings (listening to music genres, specific radio channels, watching particular sitcoms, etc.), and more popular practices (related to popular TV programs, listening to radio, etc.).

If the questionnaire is not centered on taste properly speaking, we kept questions revealing preferences such as the TV channel the most watched, the genre of music most often listened to, etc. We nevertheless have to insist on the fact that this kind of survey is much more precise and rich on the amount of time spent in practices than on the expression of tastes or attitudes.

It led us to leave aside in the construction of the space (but of course not as supplementary elements) dimensions which may appear as fundamental part of the lifestyle, and leisure practice in particular: concrete practices (gardening, "bricolage", etc.), economic practices like consumption and sparing, social capital practices, sport practices...

It is a restriction if one compares to the perspective adopted by Pierre Bourdieu and Monique de Saint-Martin in "L'anatomie du gout", which analyses the space of lifestyles. We have limited ourselves to a "representative sample" of cultural practices. We have coded active questions after a careful examination of elementary statistics, which has led us in many cases to retain binary codings.

### Elementary statistics for active questions

Colored categories have been put as "passive" in the specific MCA.

TV_	cha	anr	nel

Label of categories	Count	Percentage
Fr3_reg	525	9.55
La5/Arte	495	9.00
Cable	460	8.37
NoOneinParticular	1053	19.16
France2	705	12.83
TF1	1377	25.05
M6	507	9.22
Irrelevant	133	2.42
Canal+	228	4.15
Don't_Know	14	0.25
	5497	

TV\_news

Label of categories	Count	Percentage
rarely	687	12.50
often	4681	85.16
irrelevant	129	2.35
	5497	

#### TV\_sitcoms

Label of categories	Count	Percentage
never	2906	52.87
often	2462	44.79
irrelevant	129	2.35
	5497	

#### Tv\_film

Label of categories	Count	Percentage
rarely	1978	35.98
often	3384	61.56
irrelevant	135	2.46
	5497	

#### Tv\_games

Label of categories	Count	Percentage
never	1986	36.13
often	3380	61.49
irrelevant	131	2.38
-	5497	

#### TV\_sport

Label of categories	Count	Percentage
never	2993	54.45
often	2368	43.08
irrelevant	136	2.47
	5497	

TV	_clip

Label of categories	Count	Percentage
never	4463	81.19
often	902	16.41
irrelevant	132	2.40
	5497	

TV\_art

Label of categories	Count	Percentage
never	3263	59.36
often	2101	38.22
irrelevant	133	2.42
	5497	

TV\_docu

Label of categories	Count	Percentage
never	1487	27.05
often	3875	70.49
irrelevant	135	2.46
	5497	

#### TV\_theater

Label of categories	Count	Percentage
no	4424	80.48
yes	938	17.06
irrelevant	135	2.46
	5497	

#### SP\_movies

Label of categories	Count	Percentage
never	2843	51.72
<1/term	928	16.88
<1/month	833	15.15
>=1/month	893	16.25
	5497	

#### SP\_Theater

Label of categories	Count	Percentage
no	4634	84.30
yes	863	15.70
	5497	

#### SP\_history

Label of categories	Count	Percentage
no	5001	90.98
yes	496	9.02
	5497	

#### SP\_dance

Label of categories	Count	Percentage
no	4808	87.47
yes	689	12.53
	5497	

#### SP\_circus

Label of categories	Count	Percentage
no	4979	90.58
yes	518	9.42
	5497	

#### SP\_comedy

Label of categories	Count	Percentage
no	4773	86.83
yes	724	13.17
	5497	

#### SP\_opera

Label of categories	Count	Percentage
no	5262	95.72
yes	235	4.28
	5497	

#### SP\_concert

Label of categories	Count	Percentage
never	4133	75.19
<1/term	1003	18.25
>=1/term	361	6.57
	5497	

#### RegionalNewsPaper

<u> </u>		
Label of categories	Count	Percentage
Never	2023	36.80
Sometimes	1563	28.43
Regularly	1911	34.76
	5497	

#### NationalNewsPaper

Label of categories	Count	Percentage
Never	4063	73.91
Sometimes	993	18.06
Regularly	441	8.02
	5497	

#### TVMagazine

Label of categories	Count	Percentage
Never	1281	23.30
Sometimes	829	15.08
Regularly	3387	61.62
	5497	

#### CultMag

Label of categories	Count	Percentage
Never	4239	77.11
Sometimes	869	15.81
Regularly	389	7.08
	5497	

#### ScientMag

Label of categories	Count	Percentage
Never	4301	78.24
Sometimes	842	15.32
Regularly	354	6.44
	5497	

#### ComicStrips

Label of categories	Count	Percentage
never	4205	76.50
<1/term	438	7.97
<1/month	364	6.62
>=1/month	478	8.70
?	12	0.22
	5497	

#### **Bk\_Police**

—		
Label of categories	Count	Percentage
Oui	1321	24.03
No	4176	75.97
	5497	

#### Bk\_Romance

Label of categories	Count	Percentage
Oui	986	17.94
No	4511	82.06
	5497	

### Bk\_Classical

Label of categories	Count	Percentage
Oui	1195	21.74
No	4302	78.26
	5497	

#### Bk\_SciFi

Label of categories	Count	Percentage
Oui	1887	34.33
No	3610	65.67
	5497	

#### **Bk\_History**

Label of categories	Count	Percentage
Oui	1424	25.91
No	4073	74.09
	5497	

**Bk\_Politics** 

Label of categories	Count	Percentage
Oui	1171	21.30
No	4326	78.70
	5497	

#### Bk\_Art

Label of categories	Count	Percentage
Oui	973	17.70
No	4524	82.30
	5497	

#### Music

Label of categories	Count	Percentage
French songs	1349	24.54
International pop	680	12.37
Techno/world/rap	416	7.57
Rock	232	4.22
Jazz	146	2.66
classical	456	8.30
Other music	512	9.31
no	1706	31.04
	5497	

#### Radio

Label of categories	Count	Percentage
Anything Else	62	1.13
News	598	10.88
Mus&Conc	1212	22.05
News&Mus Conc	2246	40.86
Everything	435	7.91
No Radio	944	17.17
	5497	

### Contributions of questions and headings to the overall variance

Heading	ctr
тν	28.5
TV_channel	12.3
TV_news	1.8
TV_sitcoms	1.8
Tv_film	1.8
Tv_games	1.8
TV_sport	1.8
TV_clip	1.8
TV_art	1.8
TV_docu	1.8
TV_theater	1.8

Heading	ctr
SP	19.6
SP_movies	5.3
SP_Theatre	1.8
SP_history	1.8
SP_dance	1.8
SP_circus	1.8
SP_comedy	1.8
SP_opera	1.8
SP_concert	3.5

Heading	ctr
Press	17.5
RegNewsP	3.5
NatNewsP	3.5
TV_mag.	3.5
Culture_mag	3.5
Science_mag	3.5

Heading	ctr
Books	17.9
Comics	5.3
Bk_Police	1.8
Bk_Romance	1.8
Bk_Classical	1.8
Bk_SciFi	1.8
Bk_History	1.8
Bk_Scient	1.8
Bk_Art	1.8

Heading	ctr
Mus.Radio	19.3
Music	10.5
Radio	8.8

The contributions of headings are the following: 28% (TV), 19% (SP) and 17.5% for the 3 others (Press, Books and Music-Radio). Headings are more or less balanced, with a slight predominance of TV.

### **Results of specific MCA**

We present here the results of our geometric modeling of the data.

#### a. Number of axes to interpret

We have 33 active questions actives with 90 active categories, and 13 questions have passive categories. The dimension of the space is at most equal to 90 – (33-13) = 70 (cf. Le Roux, Rouanet, 2010, p.63). The five first eigenvalues are the following:  $\lambda_1 = 0.1666$ ,  $\lambda_2 = 0.0717$ ,  $\lambda_3 = 0.0607$ ,  $\lambda_4 = 0.0481$  et  $\lambda_5 = 0.0468$ .

The first eigenvalue is by far the most important and corresponds to modified rate of 77%; the fourth is well separated from the third, so we will interpret 3 axes corresponding to a cumulated modified rate of 90.45%.



Figure 1: diagram of eigenvalues

	Axis 1	Axis 2	Axis 3
TV	12.3	38.9	48.8
SP	24.2	12.9	5.2
Press	18.1	10.7	19.6
Books	37.9	8.8	13.9
Mus.Radio	7.4	28.6	9.6

Table 3: Contributions of themes to the first three axes

We notice that the first three axes include all the themes with a predominance of Books and spectacles on Axis 1, TV and Radio-Music on Axis 2, TV and Books on Axis 3.

### b. Interpretation of axes

As statistical criteria to interpret a category, we take a contribution higher than: 100/90=1.1, that is the average contribution.

### Axis 1 ( $\lambda_1 = 0.1666$ )

	Axis 1			
questions	categories		-	+
TV_channel	La5	/Arte		1.74
TV_art	never		1.81	
		often		2.60
TV_theater		yes		1.61
SP_cinema	never		2.45	
	>=1/n	nonth		2.59
SP_Theater		yes		3.52
SP_history		yes		1.15
SP_dance		yes		1.97
SP_comedy		yes		1.71
SP_opera		yes		2.46
SP_concert	never		1.24	
	<1,	/term		1.71
	>=1,	/term		2.53
Nat.NewsPaper	never		1.62	
	some	times		2.33
	reg	ularly		2.47
Cultural Mag	never		1.53	
	some	times		2.70
	reg	ularly		2.66
Scientif Mag	some	times		2.40
Comic Strips	>=1/n	nonth		1.03
Bk_Policier		yes		2.22
Bk_Clas		yes		4.45
	no		1.24	
Bk_SciFi		yes		4.12
	no		2.15	
Bk_Hist		yes		4.31
	no		1.51	
Bk_Polit		yes		5.09
	No		1.38	
Bk_Art		yes		5.77
	No		1.24	
Music	cla	issical		1.99
	no		2.05	
Radio	Every	/thing		1.88
			18.21	65.27

36 categories have a contribution higher than the mean contribution. Together, they account for 83.5% of the variance of Axis 1.

On this first axis, one finds on the left (negative side) categories of "no practice" such as "no art film on TV", "does not go to the cinema", "never goes to concert", no reading of national newspaper, of a cultural magazine, no reading of classical, sci-fi, politics, history or art books, no listening to music.

On the right side (positive side), one finds categories of rather intense cultural practices, such as: for TV, watching Arte, going out to historical, dance spectacles, comedies, go to the opera, to the concert, reading a national newspaper, a cultural magazine, comics, reading classical literature, crime, politics or art books, listening to classical music, listening to radio...



It is an axis of cultural practice, or, more precisely, of "legitimate" cultural practices.

Axis 1 can be analyzed as an indicator of intensity of cultural practices, especially the most « legitimate » ones, that is the one which characterize the « culture lettrée » ("literary culture") : reading art, politics, classical and history books, reading cultural magazines, going to the theater: it is closely connected to cultural capital in its more legitimate classical literary form.

### Axis 2 ( $\lambda_2 = 0.0717$ )

	Axis 2		
questions	categories	-	+
TV_channel	Fr3_reg	1.90	
	La5/Arte	1.71	
	M6		5.65
	Canal+		1.18
TV_serie	never	2.88	
	often		3.71
TV_film	rarement	3.61	
	often		2.31
TV_clip	never	1.86	
	often		10.09
SP_cine	never	3.31	
	<1/term		1.31
	<1/month		1.44
SP_circus	yes		1.11
SP_opera	yes	1.44	
SP_concert	<1/term		1.47
Regional_NewsPaper	sometimes		2.08
National_Newspaper	regularly	2.05	
TV_magazine	never	2.38	
Comic Strips	<1/term		1.31
Bk_History	yes	1.44	
Music	Chansons/variété int		4.74
	Techno/world/rap		1.50
	classical	4.42	
	no	4.75	
Radio	News	2.76	
	Mus&Conc		4.57
	everything	1.79	
	No Radio	1.72	
		38.01	42.48

29 categories have a contribution higher than the average contribution. Together, they contribute to 80.5% of the variance of second Axis.

On this second axis, one finds (on the negative side) categories of cultural practice such as: for TV, watching France 3, Arte, no sitcom, no clip; sometimes a movie; for spectacles opera but not cinema; for reading a national newspaper, regularly, history books, no TV magazine; for music, either no or classical music, and news on the radio.

At the opposite, upper (on the positive side), one finds categories of cultural practices such as Canal+ and M6 for TV; sitcoms, clips and films often watched; for spectacles, cinema, circus and concerts rather often; for reading, sometimes a regional newspaper and comics; for music, international variety, techno-world-rap, and on the radio music concerts.

This is an axis which opposes « traditional » versus « modern » cultural practices.



Axis 2 opposes practices related to youth culture, such as preferring M6 channel, music clips, songs and international variety, listening to music and concerts on the radio to opposite practices: classical music, absence of music listening or going out... It is an indicator of proximity from modern or youth culture in its broadest sense, very much devoted to music and cultural activities related to the international mass cultural production.

Plane 1-2 therefore already allows distinguishing three forms or types of cultural capital: classical cultural capital, « youth » or modern cultural capital; a low form of cultural activity related to TV and local insertion.

### Axis 3 ( $\lambda_3 = 0.0607$ )

	Axis 3		
questions	categories	-	+
TV_channel	France2		1.19
	M6	1.30	
TV_news	rarely	11.31	
	often		1.91
TV_serie	often		1.30
TV_film	rarely	2.60	
	often		1.79
TV_games	never	7.05	
	often		4.62
TV_art	often		1.86
TV_docu	never	6.25	
	often		2.73
TV_theater	yes		2.16
SP_cinema	>=1/month	2.24	
SP_concert	>=1/term	1.50	
Regional_NewsPaper	never	3.16	
	regularly		3.04
TV_magazine	never	6.55	
	sometimes	1.65	
	regularly		4.89
Comic Strips	>=1f/mois	1.17	
Bk_Policier	yes		1.23
Bk_Romance	yes		5.25
	no	1.15	
Bk_History	yes		1.71
Music	French songs		1.86
	Techno/world/rap	2.48	
	Rock	2.38	
		50.79	35.54

28 categories have a contribution higher than the average. Together, they contribute to 86.3% of the variance of the third axis.

On the negative side of the axis one finds watching M6, rarely news, movie, never game or documentary; often cinema, concert; never newspaper, TV magazine; comics; no romance books; music techno, rap, world, and rock.

On the positive side, TV one finds practices such as France 2, often news and sitcoms, movies, games, art, documentaries and theatre ; no spectacle outside ; regular reading of a regional newspaper, of a TV magazine ; reading crime, romance, history books ; listening to French variety.

The axis opposes "outdoor" practices related to the body and "home" and softer practices. It is related to the corporal and environmental inscription of cultural activities.



![](_page_16_Figure_0.jpeg)

Cloud of individuals in plane 1-2. On can see the great concentration of points on the left side of the cloud (little cultural practice) contrasting with the right side of the cloud (intense cultural practice) where points are more dispersed.

![](_page_16_Figure_2.jpeg)

The constructed space is easily interpretable in terms of cultural oppositions. On this basis, can we construct a typology of cultural groups and test its consistence with Bourdieu's analyses in *Distinction*?

### **Euclidean clustering**

Are the classes resulting from a euclidean clustering (here a hierarchical ascending clustering) in a way or the other similar to the different families of cultural practices and habitus identified by Pierre Bourdieu in *Distinction*? Do we observe a relationship between these classes and the social characteristics of the respondents?

We first have to recall here the main cultural categories stressed by Bourdieu. In the dominant groups, "legitimate culture" is made natural through a process of socialization to classical music, literature, etc., reinforced by the school, that is a kind of "official legitimate cultural". Inside the dominant classes, an opposition distinguishes the groups according to their relative amount of cultural capital, between more avant-gardist practices and more "classical" ones. We also find this polarization between "fractions" inside the "petty bourgeoisie": but a common point of the members of the middle classes is to be oriented towards legitimate culture without mastering all the codes which define it: this is what Bourdieu calls the "cultural goodwill". In the popular classes, the relation of domination is related to an opposition to legitimate culture seen as a culture of the dominant groups and a more realistic and real-world orientation. This is the "taste of necessity".

To answer our questions, we ran a HAC using Ward's method, that is minimizing the variance constituted at each step of the aggregation process. We have kept four classes

![](_page_17_Figure_4.jpeg)

To interpret classes, one proceeds as follows:

For each class *c*, compare the relative frequency of the category *k* ( $f_k^c$ ) for individuals belonging to class *c* to the one ( $f_k$ ) for all individuals.

Descriptively, the deviation between category k in class c and category k in the overall set of individuals is said to be large if  $f_k^c - f_k > 0.05$  or if  $f_k^c / f_k > 2$ .

For the categories with large deviations, we perform the typicality test (the combinatorial test of comparison of a frequency to a reference frequency), hence a combinatorial *p*-value (one-sided). If  $p \le 0.025$ , the frequency is statistically greater than the reference frequency with (S\*) if  $0.005 and (S**) if <math>p \le 0.005$ .

The categories for which the deviation is *descriptively large and statistically significant* are said to be 'over-represented'.

In the same way, they are said to be 'under-represented' if  $f_k^c - f_k < 0.05$  or if  $f_k^c / f_k < 0.5$ , and if the result of the test is significant. The interpretation of classes is based on the sectors that are over-represented.

![](_page_18_Figure_1.jpeg)

![](_page_19_Figure_0.jpeg)

Cluster 1/4 (Count : 217 - Percentage : 3.95)					
Variables labels	Chamataniaina	% of the	% of the		
	Characterizing	category in	category in	p - value	Weight
	categories	the cluster	the sample		
SP_opera	yes	95.85	4.28	0.0000	235
SP_Theater	yes	67.74	15.70	0.0000	863
Bk History	yes	65.44	25.91	0.0000	1424
Bk_Art	yes	57.14	17.70	0.0000	973
Bk Politics	yes	59.45	21.30	0.0000	1171
Bk_Classical	yes	56.22	21.74	0.0000	1195
Bk SciFi	yes	60.83	34.33	0.0000	1887
Music	classical	44.70	8.30	0.0000	456
Nat_NewsP	Regularly	37.33	8.02	0.0000	441
SP_dance	yes	41.47	12.53	0.0000	689
SP_concert	>=1/term	35.48	6.57	0.0000	361
SP_films	>=1/month	45.16	16.25	0.0000	893
TV_theater	yes	43.32	17.06	0.0000	938
TV_art	often	62.67	38.22	0.0000	2101
Culture_Mag	Regularly	30.88	7.08	0.0000	389
SP_comedy	yes	34.56	13.17	0.0000	724
Radio	Everything	29.03	7.91	0.0000	435
TV_channel	La5/Arte	27.19	9.00	0.0000	495
Tv_games	never	53.00	36.13	0.0000	1986
Bk_Police	yes	39.17	24.03	0.0000	1321
SP_concert	<1/term	33.18	18.25	0.0000	1003
SP_history	yes	22.58	9.02	0.0000	496
TV_sitcoms	never	65.90	52.87	0.0000	2906
Nat_NewsP	Sometimes	29.95	18.06	0.0000	993
Scientif_Mag	Sometimes	26.27	15.32	0.0000	842
SP_films	<1/month	24.88	15.15	0.0001	833
Culture_Mag	Sometimes	25.35	15.81	0.0001	869
Scientif_Mag	Regularly	14.29	6.44	0.0000	354
Tv_films	rarely	43.78	35.98	0.0095	1978
SP_circus	yes	15.67	9.42	0.0019	518
Bk_Romance	yes	23.96	17.94	0.0136	986
TV_news	rarely	18.43	12.50	0.0066	687
TV_clip	never	86.64	81.19	0.0194	4463
TV_mag	Sometimes	20.28	15.08	0.0214	829

In Cluster 1, one finds 34 categories which are over-represented. These categories concern intense cultural practices (participation and diversity): theatre on TV, art programs, Arte channel, never games, sitcoms or clips; going to opera, theatre, concert, dance performance, cinema; preferring classical music; reading history, art or politics books, classical literature and daily national newspaper. The categories "high education", "above 46 years" and "high income" are overrepresented.

We have here a small set of individuals defined by their high level of legitimate cultural practices close to what Bourdieu calls the « dominant taste ». In this class, high level of education (the "grandes écoles") and dominant social groups are over-represented.

![](_page_20_Figure_0.jpeg)

18.10

32.92

15.07

19.03

10.79

73.28

9.48

27.27

10.22

10.06

6.08

66.67

Class

Class

Education

Education

Laptop

Health3

UpperClass

MiddleClass

master/DEA

Bac

yes

good

Cluster 2/4 (Count : 1613 - Percentage: 29.34)						
	Characteria inter-	% of the	% of the			
Variables labels	Characterizing	category in	category in	p - value	Weight	
	categories	the cluster	the sample	_	_	
TV_art	often	58.03	38.22	0.000	2101	
Bk_Politics	yes	40.55	21.30	0.000	1171	
Bk_SciFi	yes	51.89	34.33	0.000	1887	
Bk_History	yes	43.09	25.91	0.000	1424	
Bk_Art	yes	33.79	17.70	0.000	973	
TV_channel	La5/Arte	23.56	9.00	0.000	495	
Bk_Classical	yes	36.14	21.74	0.000	1195	
Tv_games	never	48.92	36.13	0.000	1986	
Culture_Mag	Sometimes	27.22	15.81	0.000	869	
Nat_NewsP	Sometimes	29.39	18.06	0.000	993	
ComicStrips	<1/month	17.73	6.62	0.000	364	
Radio	Everything	18.97	7.91	0.000	435	
Music	classical	19.16	8.30	0.000	456	
Bk_Police	yes	34.41	24.03	0.000	1321	
Nat_NewsP	Regularly	18.29	8.02	0.000	441	
Scientif_Mag	Regularly	16.62	6.44	0.000	354	
SP_films	>=1/month	26.41	16.25	0.000	893	
Music	Rock	13.89	4.22	0.000	232	
TV_theater	yes	26.66	17.06	0.000	938	
SP_Theater	yes	25.17	15.70	0.000	863	
Culture_Mag	Regularly	16.49	7.08	0.000	389	
Scientif_Mag	Sometimes	24.30	15.32	0.000	842	
TV_sitcoms	never	61.75	52.87	0.000	2906	
SP_concert	>=1/term	14.88	6.57	0.000	361	
TV_docum.	often	78.43	70.49	0.000	3875	
Tv_films	rarely	43.15	35.98	0.000	1978	
SP_concert	<1/term	25.17	18.25	0.000	1003	
SP_films	<1/month	21.88	15.15	0.000	833	
SP_dance	yes	18.72	12.53	0.000	689	
ComicStrips	<1/term	13.08	7.97	0.000	438	

In cluster 2, there are 30 categories over represented. The categories concern the reading of various sorts of books, an active use of cultural programs on TV channels, the rejection of popular TV programs like TV games, a moderate reading of cultural magazines and national newspapers, cinema attendance, taste for rock music, comic strips...

0.000

0.000

0.000

0.000

0.000

0.000

521 1499

562

553

334

3665

Upper and middle classes are over-represented, as well as high and middle levels of education.

This is relatively close to Bourdieu's notion of « cultural goodwill ». Compared to the practices of the dominant cultural group, practices here are less "legitimate" and more "indirect" (Arte TV channel). This attitude consists in a close relation to educational efforts and an abstract "respect" to the dominant cultural norm.

![](_page_21_Figure_0.jpeg)

Variables labels	Characterizing categories	% of the category in the cluster	% of the category in the sample	p - value	Weight
AGE	[26;36]	24.58	17.85	0.000	981
Education	CAP/BEP	36.38	28.22	0.000	1551
Dividends	no	75.55	70.73	0.000	3888
Housing	tenant(without furniture)	39.61	34.80	0.000	1913
Housing4	tenant	41.73	36.87	0.000	2027

In cluster 3, one finds 21 categories that are over-represented. These categories concern cultural practices associated with youth culture: TV channel M6, watching films, clips, sitcoms, games; listening to radio for music; liking international pop music, or techno, world or rap music.

Younger age groups (26-36 years) and vocational education are over-represented. We have a class defined by the practice of "modern" youth culture.

![](_page_22_Figure_0.jpeg)

(		0/a of the	0/2 of the		
Variables labels	Characterizing	90 01 Lite	90 01 Lite	n value	Weight
Y AT TAUTES TAUEIS	categories	the chuctor	the comple	p - varue	weight
D.d		47.92	21.04	0.000	1704
NULSIC	no	07.65	51.04	0.000	1700
D1. S.:E:	never	00.20	51.72	0.000	2643
BK_SCIF1	NO	90.39	60.67	0.000	3010
ComicStrips	never	97.80	76.50	0.000	4205
SP_concert	never	94.59	75.19	0.000	4133
Nat_NewsP	Never	92.93	73.91	0.000	4063
Scientif_Mag	Never	96.58	78.24	0.000	4301
Culture_Mag	Never	95.44	77.11	0.000	4239
TV_art	never	77.15	59.36	0.000	3263
Bk_Politics	No	96.09	78.70	0.000	4326
Bk_History	No	90.53	74.10	0.000	4073
Bk_Classical	No	93.81	78.26	0.000	4302
Bk_Police	No	90.96	75.97	0.000	4176
TV_channel	Fr3_reg	24.13	9.55	0.000	525
Bk_Art	No	96.51	82.30	0.000	4524
TV_channel	TF1	38.36	25.05	0.000	1377
SP_Theater	no	95.09	84.30	0.000	4634
Tv_games	often	72.24	61.49	0.000	3380
Radio	No Radio	27.90	17.17	0.000	944
TV_clip	never	90.75	81.19	0.000	4463
SP dance	no	96.94	87.47	0.000	4808
TV docum.	never	36.01	27.05	0.000	1487
SP comedy	no	95.52	86.83	0.000	4773
Reg NewsP	Regularly	43.35	34.76	0.000	1911
Bk Romance	No	90.53	82.06	0.000	4511
SP circus	no	98.58	90.58	0.000	4979
TV theater	no	88.47	80.48	0.000	4424
SP history	no	98.65	90.98	0.000	5001
Tv films	rarely	42.70	35.98	0.000	1978
Radio	News	17.30	10.88	0.000	598
TV mag	Never	29.61	23.30	0.000	1281
TV channel	France2	17.86	12.83	0.000	705

Categories of little cultural practice are overrepresented: not listening to music; not going to cinema; not reading; watching TV channels FR3 (regional) or TF1 (popular); reading regional newspaper; not listening to radio except news.

The categories of low educational level (primary or no diploma), age 66-76 and >76 years are overrepresented. 36% of individuals of the working class are in this cluster.

Class 4 is characterized by a low level of legitimate cultural practices and some popular specific practices like watching certain TV-channels.

Speaking of « necessity taste » on the only basis of their distance to legitimate culture does not totally account for the specificity of these popular practices: localized, they are also characterized by a reference to traditional values, as opposed to more "modern" youth practices.

## Conclusion

The four identified classes finally correspond to different specific cultural styles, for which the conscious research of distinction is not a necessary feature. We have in particular noticed a clear separation between two forms of "popular culture", one related to the Anglo-Saxon cultural industry and the youth, and another, more traditional and localized. These results are totally consistent with Bourdieu's analysis, provided that we contextualize it in a totally different period and in another context.

This approach has allowed us to examine from a new point of view the issue of the determinants of cultural practices and the social space. The construction of a typology of cultural practices corroborates Bourdieu's analyses in *La distinction*, on the basis of recent data, and leads us to a general characterization of habitus in today's French society.

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