Papers on Social Representations Volume 19, pages 25.1-25.22 (2010)

Peer Reviewed Online Journal ISSN 1021-5573
© 2010 The Authors
[http://www.psych.lse.ac.uk/psr/]

Does Orthodoxy of Knowledge Polarize Social Anchoring?: Representations of the Market as a Function of Academic Major and Subjective Knowledge in Economics

REGIS SCHEIDEGGER THOMAS TÜSCHER University of Lausanne

This research examines hegemonic social representations of the economic system as a function of academic majors and subjective knowledge in economics. The results evidenced that studying social and political sciences (N = 205) and literature (N = 190), was linked to hierarchy attenuating orientation, and geared to a subversive stance towards the market. In contrast, majoring in business (N = 140) and law (N = 98) was linked to a weaker hierarchy attenuating orientation, and led to a market legitimizing stance. Moreover, subjective knowledge in economics polarized these effects primarily in majors in which economic issues were of academic interest, that is, in business and social and political sciences. This research, which sought to articulate hierarchy enhancing/attenuating beliefs with hegemonic/subversive social representations, highlights the function of the orthodoxy of knowledge in the academic anchoring of social representations.

Keywords: Academic anchoring, orthodoxy of knowledge, hegemonic/subversive social representation, HE/HA institutions.

What representational processes underpin justification or contestation of the capitalist system? The social representation (SR) of a fair market is assessed by the stance on the hegemonic economic system (Scheidegger, et al., 2010), or free market social order (Staerklé, 2009). It can be related to the measure of Fair Market Ideology (Jost, Blount, Pfeffer, & Hunyady, 2003), which is considered as a hierarchy enhancing legitimating belief (Pratto & Sidanius, 1999) related to economic conservatism (Harvey, 2005; Jost, Glaser, Kruglanski, & Sulloway, 2003; Lebaron, 2000; Thorisdottir, Jost, Lviatan, & Shrot, 2007).

Apart from some exceptions (Roland-Lévy, Kirchler, Penz, & Gray, 2000; Scheidegger, Clémence, & Staerklé, 2010; Van Bavel & Licata, 2002; Vergès, 1999; Viaud & Roland-Lévy, 2000), Social Representation (SR) theory has scarcely been mobilized for studying issues related to the hegemonic economic system. The present research brings some new arguments for the relevance of studying the SR of a fair market with a multiple level perspective (Doise, 1982). Taking the sociological level of academic anchoring and the psychological level of subjective knowledge into account, it adds a promising and yet unexplored issue which underlines the link between hegemonic vs. subversive SR (Moscovici, 1988; Howarth, 2006a), and hierarchy enhancing (HE) and hierarchy attenuating (HA) oriented academic institutions (Haley & Sidanius, 2005).

Relying on the approach of the organizing principles with quantitative methods (*e.g.*, Devos, Spini, & Schwartz, 2002; Doise, Clémence, & Lorenzi-Cioldi, 1993; Staerklé, Delay, Gianettoni, & Roux, 2007), the first goal of our study was to show that the stance on the hegemonic economic system was linked to underlying normative beliefs. More precisely, we focused on its sociological anchoring (Doise, 1982; 2005) in academic majors, which orientations tended either towards subversion (HA) or hegemony (HE). However, considering that knowledge is an institutionalized social construction (Berger & Luckmann, 1966) based on group-shared knowledge (Scheidegger, et al., 2010; Staerklé, 2009), the second goal of this study was to test the extent to which subjective knowledge in economics polarized the endorsement of a fair market SR in academic majors in which the economy is of academic interest, that is, in business and in social and political sciences.

GROUP-SHARED BELIEFS AND SOCIAL REPRESENTATIONS

In the realm of Social Representations (SR) theory (Moscovici, 2008; Wagner & Hayes, 2005), the organizing principles approach assumes that SR are normative principles that guide attitudes (Doise, 2005; Doise, et al., 1993). These *common-sense theories* are sociologically anchored in groups (Doise, 1982; 2005), which occupy specific positions in the social hierarchy (Bourdieu, 1984; Clémence, 2001). As such, when they express attitudes towards the social order, people rely on group-shared knowledge. Consequently, "shared knowledge both represents and creates the social context in which it is developed, thereby exemplifying the anchoring process in social representations theory" (Staerklé, 2009, p. 1098). Group anchoring is thus analyzed as a communication process according to which common sense is given to a social object (Moscovici, 2008).

Accordingly, a SR can be *hegemonic* and favor the social order, or it can underpin contestation and *subversion* as a function of a group's common fate (Howarth, 2006a; Moscovici, 1988). In this respect, those at the bottom of the social hierarchy do not always accept the social order, and would be interested in contesting the hegemony of advantaged groups according to the type of legitimating beliefs they endorse (Haley & Sidanius, 2005; Sidanius & Pratto, 1999; Sidanius, Pratto, Martin, & Stallworth, 1991; Sidanius, Pratto, Van Laar, & Levin, 2004; Staerklé, 2009). Such beliefs can either enhance hierarchies (HE) and inequalities between groups or promote equality by attenuating hierarchies (HA) (Pratto & Sidanius, 1999). Stereotypes supporting the social order (Glaser, 2005; Kay & Jost, 2003) or conservatism (Jost, Glaser, et al. 2003; Lebaron, 2000; Thorisdottir, et al., 2007) are, for instance, evidence of the endorsement of HE legitimating beliefs.

ACADEMIC MAJORS AND SHARED BELIEFS

Research on academic socialization has demonstrated that students' attitudes also varied according to the hegemonic legitimating beliefs communicated in their academic majors (Guimond, Dambrun, Michinov, & Duarte, 2003). These findings underline a socialization process, which either favors or questions the social order (Guimond, 2001). Indeed, the researchers pointed out that law students (HE institution) – more than psychology students (HA institution) – held prejudices

against minorities as they justified more intergroup hierarchies through the endorsement of social dominance orientation (see also Haley & Sidanius, 2005; Sidanius et al., 2004). In the domain of attribution of responsibility, business students (HE), as compared to social science students (HA), tended to attribute poverty more to personal (dispositional attribution) than to situational inquiring factors (Guimond, Begin, & Palmer, 1989). Consistent with these results, business students have been proven to justify the market functioning's principles (*Fair Market Ideology*) more than social sciences students (Jost, Blount, Pfeiffer, & Hunyady, 2003; Scheidegger et al., 2010). In sum, students tend to analyze issues according to the hegemonic knowledge of their respective majors. This knowledge, as will be developed in the next sections, is of different kinds and plays a role in the signification given to the social order.

KNOWLEDGE AND POLITICAL STANCE

Political ideology is not always used as a reference point for making judgments. Only those who know the political system the best -i.e. those who have *political sophistication* (Delli Carpini, & Keeter, 1993; Price, 1999) - are able to make a rational judgment on political issues (Converse, 1964; Michaud, Carlisle, & Smith, 2009). Indeed, Michaud and collaborators (2009) showed that the more political sophistication citizens had, the more organized by political ideology their attitudes were (in terms of left-right opposition).

But objective knowledge is not neutral – that is, it cannot be confounded with an ideal scientific or expert competence (Friedman, 2006; Howarth, 2006b; Jovchelovitch, 2002) or rationality (Mitchell & Tetlock, 2009; Staerklé, 2009). Rather, objective and subjective knowledge, in politics as well as in economics, are social constructions that play a social and psychological role in people's understanding of the world they live in (Bourdieu, 1984; Friedman, 2006; Jost, et al. 2003; Lebaron, 2000; Thorisdottir et al., 2007). Knowledge can thus be linked to the subjective self-perception of competence in a domain. For instance, results provided by Bennett (1997) indicated that the *sense of subjective political competence* was leading to political participation; those who believed they had subjective political knowledge participated more in elections. Henceforth, subjective knowledge in politics was just as important as political sophistication in the formation of opinions.

However, the latter studies took solely the psychological level of anchoring into account (Doise, 1982), *i.e.* the amount of knowledge useful for a stance. The second goal of our research was to explore the role of subjective knowledge in economics as a function of the academic major in which it is shared and communicated. In other words, what kind of majors may favor subjective knowledge in economics, and how?

ORTHODOXY OF KNOWLEDGE AND SOCIAL REPRESENTATIONS

Belonging to an academic institution provides students with knowledge, which is used to explain specific issues (Guimond, 2001; Haley & Sidanius, 2005). Feeling competent in a domain may thus enhance polarized legitimating or subversive attitudes toward a hegemonic economic social order, particularly for those who work more directly on issues related to economics (Abraham, 2007). Students in business (HE) may be inclined to legitimize the hegemonic economic social order according to group-shared orthodoxy of knowledge in economics (Lebaron, 2000). Orthodoxy of knowledge in economics is defined as the positive value given to the knowledge of theories and authors who developed a hegemonic knowledge in economics (*e.g.*, Rational choice or Adam Smith), as opposed to critical approaches to capitalism (*e.g.*, Socio-economics or Karl Marx) (Scheidegger et al., 2010). In this way, subversive attitudes in majors such as the HA social sciences (Guimond et al., 2003; Haley & Sidanius, 2005), may be favored among those opposed to the orthodoxy of knowledge in economics.

This explanation found empirical support in a recent study which highlighted that hegemonic SR of the economy were predicted by the orthodoxy of knowledge in economics (Scheidegger et al., 2010). The results also indicated that business students endorsed hegemonic SR of the economy and orthodoxy of knowledge in economics more than social sciences students. Believing that economics had a social value or not, thus favored a polarized stance on the economy in these majors. But one striking result in the latter study was that the effect of the participants' critical subjective knowledge in economics on the SR of the economy was mediated by the orthodoxy of knowledge. Pretending to know authors and theories, which are critical to capitalism, went along with the value given to orthodox knowledge in economics. But is the link between subjective knowledge in economics and orthodoxy of knowledge in

economics specific to business and social sciences students? In other words, is the link also observable in other majors?

ORTHODOXY OF KNOWLEDGE AND SUBJECTIVE KNOWLEDGE

Our assumption is that economics and its consequences on society are important issues for business as well as for social sciences students. Indeed, business students, who study economics as their main discipline, feel more competent in economics. In contrast, courses social sciences students follow – more so than those literature students follow, for instance – touch upon issues related to the impact of the market system on society (*e.g.*, on welfare, wealth inequalities, and domination processes). These two majors thus constitute the groups in which subjective knowledge in the field of economics is inclined to play the strongest role in polarizing the SR of a fair market. More precisely, business students (HE) should be more prone to adopt a positive stance on the free market when they have more subjective knowledge in economics. In contrast, when they have subjective knowledge in economics, social and political sciences students (HA) should endorse a more subversive stance on the market economy.

Not having access to *regular* knowledge in economics – a legitimate discourse about an object (Berger & Luckmann, 1996; Bourdieu, 1984) – does not suggest the lack of a politically and ideologically oriented point of view (Jovchelovitch, 2002; Mitchell & Tetlock, 2009; Staerklé, 2009). This difference has been empirically evidenced in the first study of Scheidegger and collaborators (2010). Indeed, social sciences and literature students endorsed the SR of a fair market less than law and business students did. Students from HE majors such as law (Haley & Sidanius, 2005; Guimond et al., 2003), or students from HA majors such as literature (Haley & Sidanius, 2005), had respectively hegemonic and subversive SR of a fair market. However, subjective knowledge in economics should play a weaker role (or no role at all) in these majors, since the field of economics and its consequences on society are less important issues. Consequently, the crucial point for SR theory was to test the extent to which subjective knowledge in economics polarized the hegemonic/subversive fair-market SR, thus emphasizing the orthodoxy that may underpin subjective knowledge in HA or HE oriented academic majors.

HYPOTHESES

We first wanted to grasp the structure of subjective knowledge in economics across the academic majors. If the economics is of particular interest in the business academic major, because these students study economics as a main discipline, the level of subjective knowledge in economics should be, on average, higher than in other majors. In social and political sciences, however, because these students study the consequences of economics on society, subjective knowledge in economics should be at least higher than in literature.

Our second assumption is that social representations of a fair market are differently anchored in academic majors. We expect students in business and law (HE) to endorse economic conservatism; *i.e.* a hegemonic stance on the market system. On the contrary, we expect students in social and political sciences and in literature (HA) to hold a subversive stance on the market system.

Finally, according to the orthodoxy of knowledge hypothesis, we expect this effect to be polarized by subjective knowledge in economics. Students of social and political sciences who claim they would be able to explain economic mechanisms should endorse more subversive SR of a fair market. On the contrary, business students who assert an understanding of economics should embrace more hegemonic SR of a fair market. Law and literature students should not be influenced by subjective knowledge in economics. Indeed, because they do not focus on economics or the impact of the economic system on society, their respective teachings should not interfere.

METHOD

Procedure and Population

From December 4, 2008 to January 25, 2009, we emailed all the students from the University of Lausanne in Switzerland ($N \approx 12'000$) to invite them to freely answer an online questionnaire (the answer rate was 9 %: N = 1'100). Because we were interested in academic majors supposed to be HE or HA orientated, we selected business (HEC, N = 140) and law (N = 98) as representatives of the HE orientation, and literature (N = 190) and social and political sciences students (SSP, N = 205) as

representatives of the HA orientation¹. There were 362 females and 271 males in the sample ($N_{\text{total}} = 633$). With the exception of business students (females = 46; males = 94), there were more women than men in the academic majors; $\chi^2(3) = 46.52$, p < .001. Average age of participants was 21.64 (SD = 2.14). A majority of participants (N = 443) answered before the end of 2008, and 190 answered between January 1st and January 25th. We controlled for gender, age of participants, and the period of participation in the survey (December vs. January) in the analyses. The scarce (and weak) effects of these control variables did not change the patterns of the results at all. We thus dropped them in the presentation of the results.

Subjective Knowledge in Economics

Subjective knowledge in economics was assessed with a two-item aggregate emphasizing the participants' perceived ability to explain two economic processes to someone else (1 = absolutely unable to 4 = absolutely able): "Would you be able to explain the market's functioning to another person?" and "Would you be able to explain the subprime mortgage crisis to another person?" (α = .77; M = 2.55; SD = .91).

Social Representation of a Fair Market

Doise's approach of underlying organizing principles (2005; Doise & al., 1993) does not primarily deal with qualitative content analyses or interviews, which are mostly used in SR research. As lay principles, social representations are consequently not directly "measured". They are deduced from the stance participants hold on a particular object. To address the social representation of a fair market, which is related to hierarchy enhancing economic conservatism (Jost, Glaser, et al., 2003), we thus adapted the 15-item sub-scale of fair-market ideology on general attitudes toward the free-market economy: answers ranging from 1 = do not agree at all to 6 = totally

¹ We thus test the impact of subjective knowledge, which is supposed to have an influence only in majors in which the economy is of academic interest, over and above the HE orientation that is shared by business and law students, and the HA orientation shared by social sciences and literature students.

agree. For instance: "The free market system is a fair system" or "In many markets, there is no such thing as a true "fair" market price" (reverse coded) (see *Appendix* in Jost, Blount et al., 2003)². A principal components analysis (PCA) revealed two dimensions (KMO = .93, variance explained = 50.03 %). Two items opposed to the fair market (items 4 and 13 in Jost et al., 2003) did not match the first factor (which explained 40.75 % of variance). Since the results with the second dimension were redundant, we dropped the second dimension and kept solely the first factor as a 13-item single dimension ($\alpha = .90$; M = 2.65; SD = .85)³. The SR of a fair market was strongly correlated with the participants' political orientation (r = .65, p < .001). In line with former results obtained between these two constructs (Jost, Blount et al., 2003; Scheidegger et al., 2010), increased endorsement of the *social representation of a fair market* went along with increased right-leaning political ideology (conservatism).

Controlling the HA/HE Orientation in the Majors

Before checking for our assumptions, two measures of State regulation policy attitudes (Staerklé, et al., 2007) and political orientation (7 points scale from *extreme left-wing* to *extreme right-wing*) were used as proxies of social dominance orientation to check for the HA/HE orientation of the four selected majors. The measure of *disciplinary state policy* attitude consisted of a 4-item scale (answers ranging from 1 = *do not agree at all* to 6 = *totally agree*), asking participants if they would agree with social control (M = 2.72, SD = 1.14; $\alpha = .84$), which underpins a HE orientation: a) The State should supply more police on the streets, b) The State should supply more police during political demonstrations, c) The State should increase the number of video surveillance devices, and d) The State should punish drug consumers more

_

² In French, *fairness* is translated as *équitable*. As it is not univocal and not easily translatable in French, we controlled for the meaning attributed to *fairness* by the participants. We asked them to choose one of four meanings to define it. The results confirm that *fairness* was mainly perceived as *just* by 72.4% of the participants: *linked to solidarity* = 19.5%; *legitimate* = 5.1%; and *linked to deservingness* = 3%.

³ The results with the second dimension as DV suggest a similar pattern as the results with the first dimension.

severely. The second measure, *Welfare state policy* attitude, asked participants if they would favor State regulation for more equal distribution of resources between social groups (M = 4.18, SD = 1.09; $\alpha = .79$). This underpins a HA orientation: a) The State should make efforts to fight tax fraud, b) The State should make firms pay a minimum salary for a full-time job, c) The State should sanction firms that fire people in mass, and d) Increasing taxes among the wealthiest would be a good solution for reducing social inequalities.

RESULTS

Check Analyses

Controlling the HE/HA orientation in the majors

To make sure social sciences and literature students are HA-oriented majors, and business and law HE-oriented majors, we ran ANOVAs with academic major as IV (4: social sciences, literature, law, business) on political orientation and the measures of disciplinary and welfare policy attitudes. The results (Table 1) suggest that, on average, the level of political orientation tends to the centred left (M = 3.26, SD = 1.41). However, the average political orientation varied as a function of the major: F(3, 624) = 77.05, p < .001; $\eta_p^2 = .27$. The Tukey *post-hoc* test indicates that literature and social sciences students are the majors in which political orientation leans more to the left (liberal). On average, they have similarly high levels of left-leaning political orientation, but they differ from both law (p < .001) and business (p < .001). Business is the only major in which political orientation leans to the right (conservative), and it is more right-oriented than law (p < .001).

The results also partially confirm our assumption regarding disciplinary attitudes: F(3, 620) = 19.22, p < .001; $\eta_p^2 = .09$. Indeed, the means do not clearly indicate a HE orientation in law or in business. The Tukey *post-hoc* test indicates that the average social sciences and literature students have similar levels of low disciplinary attitudes and endorse them less than both law and business students ($p_s < .001$). Law and business students do not differ from each other.

With respect to welfare policy attitudes -F(3, 620) = 62.53, p < .001; $\eta_p^2 = .23$ – as expected, social sciences and literature students are equally and strongly supportive, and differ from both law (p < .001) and business (p < .001). Business students, who on average support welfare policies, are less supportive than law students (p < .001). In sum, in spite of drawing a clear-cut division between HE and HA majors, one should rather talk about more or less HA orientation in the majors.

Table 1. Mean Scores of Political Orientation and Policy Attitudes as a Function of Academic Major

		Political orientation		Disciplinary state policy		Welfare state policy	
	N	M	SD	M	SD	<i>M</i>	SD
Social sciences	200	2.70	1.22	2.43	1.07	4.57	.87
Literature	180	2.74	1.17	2.49	1.05	4.51	.89
Law	97	3.63	1.33	3.01	1.00	4.07	1.08
Business	137	4.48	1.15	3.22	1.23	3.25	1.05
R^2 adjusted		.27***		.08***		.23***	

Note. Means and standard deviations are reported.

Exploring the structure of subjective knowledge in economics

We ran an ANOVA with the academic major as IV (4) on subjective knowledge in economics: F(3, 632) = 85.23, p < .001; $\eta_p^2 = .29$. The *post-hoc* Tukey test confirms that business students have more subjective knowledge in economics (M = 3.45, SD = .61) than any other academic majors ($p_s < .001$). Literature students (M = 2.15, SD = .79) have less subjective knowledge than social sciences students (M = 2.42, SD = .83: p < .01), and as much subjective knowledge as law students (M = 2.32, SD = .79). The latter have the same average level of subjective knowledge as social sciences students. The results thus emphasize that business students have more subjective knowledge than all other students. Moreover, they indicate that between the most HA-oriented majors, social and political sciences students have more subjective knowledge in economics than literature students.

^{*** =} p < .001.

Academic Majors Anchoring and Subjective Knowledge

We conducted linear regressions with academic major (four majors) and subjective knowledge (continue centred) as IV, on the SR of a fair market to test the polarization hypothesis. Since academic major was a nominal variable, it was dummy-coded. Four analyses were conducted: each major was successively used as dummy-coded reference group. The polarization of stance will be assessed with the direct effects of subjective knowledge on the fair-market SR when controlling for the interactions between the majors and subjective knowledge (simple slope analysis; *cf.* Aiken & West, 1991). The results of the interactions between the majors (coded 1) and subjective knowledge will allow the comparison of each major's slope with the slope of the dummy-coded reference group (coded 0) (*cf.* Judd, McCelland, Ryan, Muller, & Yzerbyt, 2010).

Our second hypothesis was that the more HA oriented social sciences and literature students would endorse a hegemonic SR of a fair market less than the less HA oriented students of law and business. The results clearly confirm this assumption (Table 2) since business students (M = 3.37, SD = .76) endorse the fair-market SR more than social sciences students (M = 2.28, SD = .72) – B = -.83, t(627) = -6.84, p < .001. They endorse it also more than literature students (M = 2.40, SD = .70): B = -.72, t(627) = -5.79, p < .001. Similarly, law students (M = 2.88, SD = .80) endorse the fair-market SR more than social sciences – B = -.63, t(627) = -6.77, p < .001 –, and literature students: B = -.52, t(627) = -5.36, p < .001. In contrast, business students do not differ from law students – B = -.20, t(627) = -1.49, ns –, and social and political sciences students do not differ from literature students: B = .11, t(627) = 1.37, ns.

Turning to the polarization hypothesis, the results (Table 2) first emphasize that the more business students have subjective knowledge, the more they endorse the fair-market SR: B = .30, t(627) = 2.95, p < .01. In contrast, the more social and political sciences have subjective knowledge in economics, the less they endorse the fair-market SR: B = -.13, t(627) = -2.07, p < .05. Subjective knowledge neither predicts less endorsement of the fair-market SR in literature -B = -.08, t(627) = -1.12, ns, nor more endorsement of the fair-market SR in law: B = .09, t(627) = .97, ns. The slope of subjective knowledge in business, however, was not more positive than in law: B = -.21, t(627) = -1.51, ns. By contrast, it was significantly more positive than in literature -B = -.37, t(627) = -3.08, p < .01 – and in social and political

sciences: B = -.43, t(627) = -3.60, p < .001. The slope in social and political sciences was marginally more negative than in law -B = .22, t(627) = 1.95, p < .06 –, but did not differ from literature: B = .05, t(627) = .58, ns. Finally, the slightly negative slope of literature students was not different from the slightly positive slope of law students: B = .17, t(627) = 1.44, ns.

In sum, the effect of subjective knowledge was significant and led to less endorsement of the SR of a fair market in social and political sciences, but the polarization was not stronger than in the literature major. In contrast, the effect of subjective knowledge significantly led to more endorsement of the SR of a fair market in business, but this effect was not stronger than in law. Finally, subjective knowledge did not differentiate law and literature students in terms of polarization.

Table 2. Social Representation of a Fair Market as a Function of Academic Major and Subjective Knowledge in Economics

	Social representation of a fair market								
Dummy-coded reference group	Business		Soc. & pol. sciences		Literature				
	В	SE	В	SE	В	SE			
Constant	3.10***	.110	2.27***	.051	2.38***	.059			
Business			.83***	.121	.72***	.125			
Social & political sciences	83***	.121			11	.078			
Literature	72***	.125	.11	.078					
Law	20	.134	.63***	.093	.52***	.097			
Subjective knowledge (slope)	.30**	.101	13*	.062	08	.067			
Business*Economic knowledge			.43***	.118	.37**	.121			
Soc. & pol. sciences*Economic knowledge	43***	.118			05	.091			
Literature*Economic knowledge	37**	.121	.05	.091					
Law*Economic knowledge	21	.138	.22+	.112	.17	.115			
R^2 adjusted			.2	6***					

Note. Coefficients are not standardized. Subjective knowledge = subjective knowledge in economics (centred). Results with law as dummy-code are not displayed.

$$+ = p < .06. * = p < .05. ** = p < .01. *** = p < .001.$$

DISCUSSION

Our research goal was to show that the stance on the market system was sociologically anchored in HE/HA-oriented academic majors, and that the anchoring was particularly polarized by subjective knowledge in business and social and political sciences. Our results evidenced the academic anchoring hypothesis since economic social order justifying patterns appeared in the least HA majors of law and business. The most subversive stances occurred in the most HA majors of literature and social and political sciences. Nevertheless, our check analyses emphasized that a clear distinction between HE/HA institutions did not match the current sample. Rather, there were different levels of HA orientations in the academic majors, ranging from a very low level in business, a low level in law, and a medium-high level in literature and in social and political sciences. This limitation may be due to the free participation in the survey. Participants probably found the opportunity to express their opinions toward the economic situation at the beginning of the subprime mortgage crisis. This could have influenced students whose criticism of the capitalist system was above average. Despite the limitation of the HE/HA distinction, the results however revealed a general and powerful academic anchoring process. Social and political sciences students and literature students were more HA oriented and rejected the SR of a fair market more than law and business students who, on average, legitimized the free-market economy more than others.

The polarization assumption was that in academic majors that deal directly with the economy (critical to, or supportive of the hegemonic economic system), subjective knowledge in economics would lead to a more orthodox stance towards the economy. The analysis underlined that subjective knowledge significantly polarized the academic anchoring for business and social and political sciences students. This was not true for law and literature students, since subjective knowledge in economics did not predict more endorsement of the fair-market SR in these two majors. Nevertheless, we could not confirm that the polarization of subjective knowledge in social and political sciences was stronger than in literature. Similarly, the results do not suggest that the polarization of subjective knowledge in business was stronger than in law. Notwithstanding this, we can affirm that subjective knowledge had more importance in the academic majors in which the economics was of academic interest. Indeed, the analysis of the structure of subjective knowledge in the majors confirmed

that business students had more subjective knowledge than any other students, and that social and political sciences students had more subjective knowledge than literature students. We discuss this issue more broadly in the next sections by also clarifying former work on knowledge and its impact on the academic anchoring of social representations.

Orthodoxy of Knowledge and Knowledge

Our approach to social representations clarifies the role of subjective knowledge in economics in the construction of a political stance. Business students had more subjective knowledge in economics than all other majors, and social and political sciences students had more subjective knowledge than literature students. This result confirms that pertaining to specific groups leads to some type of knowledge (Haley & Sidanius, 2005; Guimond, 2001; Lebaron, 2000; Scheidegger et al., 2010; Staerklé, 2009). Since students who had more subjective knowledge had the most orthodox stance, our results fit research that highlighted the link between sophistication and ideological consistency of attitudes (Converse, 1964; Friedman, 2006; Michaud et al., 2009). Regarding Social Representations theory, the results of Michaud and collaborators (2009) illustrated that more political sophistication favored the use of political orientation as an organizing principle of political stance. However, because these studies did not take the group anchoring into account, they could not emphasize that in some groups – such as law or literature – subjective knowledge was not necessary for endorsing a subversive vs. hegemonic stance. Considering solely the psychological level of knowledge has thus hidden the impact of the sociological level (Doise, 1982), which points to the sense given to knowledge by the groups. Moreover, notwithstanding social sciences students were not expected to be experts in economics, they held attitudes against the system, opposed to those of business students, as a function of subjective knowledge. Therefore, focusing solely on sophistication, which is an "objective" measure of knowledge, does not seem to be sufficient to understand attitudes (Bennett, 1997). Knowing is not agreeing (or disagreeing) with the content of concepts. Our results thus suggest that group-shared subjective knowledge leads to different perceptions and attitudes towards the social order (Clémence, 2001; Howarth, 2006a; Scheidegger et al., 2010; Staerklé, 2009). This explanation, however, suffers from some limitation since subjective knowledge

in economics was our assessed moderator, whereas economic sophistication may have been more appropriate to discuss the work on political sophistication. Future research is thus needed with "objective" economic knowledge measures as well. For comparison concerns, measures of political sophistication or subjective knowledge in politics would also be of great interest. This would allow us to better understand the link between subjective knowledge and sophistication. In the framework of SR theory, this would give an insight into the link between common sense and expert knowledge (Moscovici & Hewstone, 1984; Van Bavel & Licata, 2002; Bangerter, 1995).

Orthodoxy of Knowledge and Academic Anchoring

Social representations of the social order are probably the sources and the results of *symbolic struggles* to impose legitimate worldviews (Bourdieu, 1984; Lebaron, 2000; Moghaddam, 2006), which oppose HE and HA institutions. But sub-groups in the more or less HA groups exist. We proposed that subjective knowledge in economics did not have the same function in all majors. Checking the polarizing effect of subjective knowledge enabled the underlining of different processes at work between the less HA-oriented majors of business and law, as well as between the more HA-oriented majors of social and political sciences and literature. Without the distinction based on the role of subjective knowledge in economics, we would have concluded that the same group anchoring processes were driving the stance in the more or less HA-oriented majors. But sometimes, as in law and literature, subjective knowledge was not necessary for holding polarized and consistent more or less HA oriented stances toward the social order. In contrast, it played an important polarizing role between business and social and political sciences students.

CONCLUDING REMARKS

Relying on Doise's (2005) approach of the organizing principles with quantitative methods (Doise et al., 1993), all our predictions found at least partial confirmation in the data collected among students pertaining to business, law, literature, and social and political sciences. The first result emphasized the academic anchoring of subversive and hegemonic stance in more or less HA-oriented academic majors, and

contributed to articulate the concepts of Hierarchy-Enhancing and Hierarchy-Attenuating-oriented institutions (Guimond et. al, 2003; Haley & Sidanius, 2005; Sidanius & Pratto, 1999; Sidanius, Pratto, Van Laar, & Levin, 2004) with hegemonic and subversive social representations (Howarth, 2006a; Moscovici, 1988; Scheidegger et al., 2010). By showing that subjective knowledge in economics polarized the formation of political stance on the economy, our research also adds a promising and yet unstudied variable in SR theory and its articulation with hierarchy enhancing and attenuating beliefs. Even though future research is needed on the concept of orthodoxy of knowledge, we gave some evidence illustrating the need not to consider knowledge solely as an objective explanatory variable that influences attitudes at a psychological level (Doise, 1982). We demonstrated that the stance towards the economic system was primarily polarized by subjective knowledge in institutions in which the economy was an academic issue. Our study suggests that the normative context of a group influences the sense given to knowledge and the stance towards the social order (Bourdieu, 1984; Clémence, 2001; Lebaron, 2000; Scheidegger et al., 2010; Staerklé, 2009). Academic anchoring was thus necessary for exploring different trends in terms of HE/HA-orientation in academic majors. But taken alone, this level of analysis was not sufficient to access a detailed understanding of the stance on the market system. In other words, this study contributes to Social Representations theory by highlighting that both academic anchoring and psychological anchoring were useful to understand the stance on the market economy.

Acknowledgments: We would like to thank Nasim Nobari, Nelly Courvoisier, Vincent Pillaud and two anonymous reviewers for their helpful comments on an earlier version of this article.

REFERENCES

- Abraham, Y. M. (2007). Du souci scolaire au sérieux managérial, ou comment devenir un « HEC ». *Revue française de sociologie, 48,* 37-66.
- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bangerter, A. (1995). Rethinking the relation between science and common sens: A comment on the current state of SR theory. *Papers on Social Representations, 4*, 1-16.
- Bennett, S. E. (1997). Knowledge of politics and sense of subjective political competence: The ambiguous connexion. *American Politics Quarterly*, 25, 230-240.
- Berger P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise on the sociology of knowledge*. Garden City, New York: Anchor Books.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste* (R. Nice, Trans.). Cambridge, MA: Harvard University Press.
- Clémence, A. (2001). Social positioning and social representations. In K. Deaux & G. Philogène (Eds.), *Representations of the social* (pp. 83-95). Oxford: Blackwell.
- Converse, P. E. (1964). The nature of belief systems in mass publics. In D. E. Apter (Ed.), *Ideology and discontent* (pp. 206-261). London: Free Press of Glencoe.
- Delli Carpini, M. X., & Keeter, S. (1993). Measuring political knowledge: Putting first things first. *American Journal of Political Science*, *37*, 1179-1206.
- Devos, T., Spini, D., & Schwartz, S. H. (2002). Conflict among human values and trust in institutions. *British Journal of Social Psychology*, *41*, 481-494.
- Doise, W. (1982). L'explication en psychologie sociale. Paris: PUF.
- Doise, W. (2005). Les représentations sociales. In N. Dubois (Ed.), *Psychologie sociale de la cognition* (pp.151-207). Paris: Dunod.
- Doise, W., Clémence, A., & Lorenzi-Cioldi, F. (1993). *The quantitative analysis of social representations*. Hemel Hempstead: Harvester Wheatsheaf.
- Friedman, J. (2006). Democratic competence in normative and positive theory: Neglected implications of « the nature of belief systems in mass publics ». *Critical Review, 18*, 1-43.

- Glaser, J. (2005). Intergroup bias and inequality: Legitimizing beliefs and policy attitudes. *Social Justice Research*, 18, 257-282.
- Guimond, S., Bégin, G., & Palmer, D. L. (1989). Education and causal attribution: The development of « person-blame » and « system-blame » ideology. *Social Psychology Quarterly*, *52*, 126-144.
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology*, 84, 697-721.
- Guimond, S. (2001). Epistemic authorities in higher education: The relative influence of peers, faculty and courses on attitude formation and change. In F. Butera, & G. Mugny (Eds). *Social influence in social reality: Promoting individual and social change*, (pp. 211-223). Ashland, OH, US: Hogrefe & Huber Publishers.
- Haley H., & Sidanius, J. (2005). Person-organization congruence and the maintenance of group-based social hierarchy: A social dominance perspective. *Group Process and Intergroup Relations*, 8, 187-203.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Howarth, C. (2006a). A social representation is not a quiet thing: Exploring the critical potential of social representations theory. *British Journal of Social Psychology*, 45, 65-86.
- Howarth, C. (2006b) How social representations of attitudes have informed attitude theories: The consensual and the reified. *Theory and Psychology*, *16*, 691-714.
- Jost, J. T., Blount, S., Pfeffer, J., & Hunyady, G. (2003). Fair market ideology: Its cognitive-motivational underpinnings. *Research in Organizational Behavior*, *25*, 53-91.
- Jost, J. T., Glaser J., Kruglanski, A. W. & Sulloway, F. (2003). Political conservatism as motivated social cognition. *Psychological bulletin*, *129*, 339-375.
- Jovchelovitch, S. (2002). Re-thinking the diversity of knowledge: Cognitive polyphasia, belief and representation. In T. Apostolisis, G. Duveen, & N. Kalamalikis (Eds.), *Psychologie & Société n°5: Représentations et croyances* (pp. 121-138). Ramonville Saint-Agne: Erès.
- Judd, C. M., McCelland, G. H., Ryan, C. S., Muller, D., & Yzerbyt, V. (2010).
 Analyse des données: une approche par comparaison de modèles. Bruxelles: De
 Papers on Social Representations, 19, 25.1-25.22 (2010) [http://www.psych.lse.ac.uk/psr/]

Boeck.

- Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of «poor but happy » and « poor but honest » sterotype exemplars on system justification and implicit activation of the justice motive. Journal of Personality and Social Psychology, 85, 823-837.
- Lebaron, F. (2000). La croyance économique, Paris: Liber, Seuil.
- Michaud, K. E. H., Carlisle, J. E., & Smith, E. R. A. N. (2009). The relationship between cultural values and political ideology, and the role of political knowledge. Political Psychology, 30, 27-42.
- Mitchell, G., & Tetlock, P.E. (2009). Disentangling reasons and rationalizations: Exploring perceived fairness in hypothetical societies. In J. Jost, A.C. Kay & H. Thorisdottir (Eds.), Social and psychological bases of ideology and system justification (pp. 126-157). New York: Oxford University Press.
- Moghaddam, F. M. (2006). Interobjectivity: The collective roots of individual consciousness and social identity. In T. Postmes & J. Jetten (Eds.), *Individuality* and the group: Advances in social identity (pp. 155-174). London. UK: Sage.
- Moscovici, S. (1988). Notes towards a description of Social Representations. European Journal of Social Psychology, 18, 211-250.
- Moscovici, S. (2008). Psychoanalysis: Its image and its public (translated from French, original edition 1961). Cambridge, UK: Polity Press.
- Moscovici, S., & Hewstone M. (1984). De la science au sens commun. In S. Moscovici (Ed.), *Psychologie sociale* (pp. 539-566). Paris: PUF.
- Price, V. (1999). Political information. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.). Measures of Political Attitudes (pp. 591-639). London: Academic Press.
- Roland-Lévy, C., Kirchler, E. Penz, E., & Gray, C. (Eds.), Everyday Representations of the Economy (pp. 10-18). Wien: WUV.
- Scheidegger, R., Clémence, A., & Staerklé, C. (2010). Ancrage de la légitimité économique dans les filières académiques: une approche représentationnelle de la socialisation et de l'autosélection. Revue Internationale de Psychologie Sociale/International Review of Social Psychology, 23, 111-142.
- Sidanius, J., & Pratto, F. (1999). Social dominance. An Intergroup Theory of Social Hierarchy and Oppression. Cambridge: Cambridge University Press.

- Sidanius, J., Pratto, F., Martin, M., & Stallworth, L. M. (1991). Consensual racism and career track: Some implications of social dominance theory. *Political Psychology*, *12*, 691-721.
- Sidanius, J., Pratto, F., Van Laar, C., & Levin, S. (2004). Social dominance theory: Its agenda and method. *Political Psychology*, *25*, 845-880.
- Staerklé, C. (2009). Policy attitudes, ideological values and social representations. Social and Personality Psychology Compass, 3, 1096-1112.
- Staerklé, C., Delay, C., Gianettoni, L., & Roux, P. (2007). *Qui a droit à quoi*? *Représentations et légitimation de l'ordre social*. Presses Universitaires de Grenoble.
- Thorisdottir, H., Jost, J. T., Lviatan, I., & Shrot, P. E. (2007). Psychological needs and values underlying left-right political orientation: Cross-national evidence from Eastern and Western Europe. *Public Opinion Quarterly*, 71, 175-203.
- Van Bavel, R., & Licata, L. (2002). Une approche théorique des représentations sociales de l'économie: au-delà de la science et du sens commun. In C. Garnier, & W. Doise (Eds.), Les représentations sociales: balisage d'un domaine d'études (pp. 81-10). Montréal: Les éditions nouvelles.
- Vergès, P. (1999). Représentations de l'économie: une forme de connaissance. In D. Jodelet, (Ed.), *Les représentations sociales* (6^{ème} éd., pp. 407-428). Paris: PUF.
- Viaud, J., & Roland-Lévy, C. (2000). A positional and representational analysis of consumption. Households when facing debt and credit. *Journal of Economic Psychology*, 21, 411-432.
- Wagner, W., & Hayes, N. (2005). Everyday discourse and common sense. The theory of social representations. Basingstoke, UK: Palgrave Macmillan.

REGIS SCHEIDEGGER is a Senior FNS researcher in Social Psychology at the University of Lausanne in Switzerland. His current research focuses on political attitudes and social representations. He is also working with Christian Staerklé and Tiina Likki within the framework of a European Science Foundation research program (HumVIB: Human Values, Institutions and Behaviour) on Welfare attitudes in Europe directed by Stefan Svallfors (Umeå University, Sweden). ADDRESS: Department of Social Psychology (Unilaps), Institute of Social Sciences, University of Lausanne, CH-1015 Lausanne, Switzerland. Email: regis.scheidegger@unil.ch.

THOMAS TÜSCHER is a Graduate Assistant at the University of Lausanne. He is doing a PHD thesis with Christian Staerklé on the articulation between stereotypical antagonisms and social representations of the social order. His current research also focuses on political attitudes and social representations. ADDRESS: Department of Social Psychology (Unilaps), Institute of Social Sciences, University of Lausanne, CH-1015 Lausanne, Switzerland. Email: thomas.tuscher@unil.ch.