



Co-Authorship Recognition Antecedents: the Brazilian research community case

Charles Kirschbaum

André Mascarenhas

Felipe Zambaldi

Suzane Strehlau



Inspirar para Transformar

Copyright Insper. Todos os direitos reservados.

É proibida a reprodução parcial ou integral do conteúdo deste documento por qualquer meio de distribuição, digital ou impresso, sem a expressa autorização do Insper ou de seu autor.

A reprodução para fins didáticos é permitida observando-se a citação completa do documento

Co-Authorship Recognition Antecedents: the Brazilian research community case

Charles Kirschbaum
André Mascarenhas
Felipe Zambaldi
Suzane Strehlau

ABSTRACT

The present paper explores the antecedents of co-authorship recognition in the Brazilian community of business administration research. Confronted with schematic vignettes encompassing varying levels of ambiguous and power-asymmetric situations, respondents exposed their positioning vis-à-vis co-authorship. Respondents identified the Brazilian community as favoring extrinsic exchanges (i.e., recognition is granted independently from effort invested in the research itself) even at situations where there was neither ambiguity that low effort was invested by the benefitting parties, nor power-asymmetric relationships. In contrast, individuals' beliefs leaned towards intrinsic exchanges, with mixed results at low-ambiguity and high power asymmetric relations.

Keywords:

Co-authorship, Sociology of Science, Ethics, Ethnomethodology, Brazil

Co-Authorship Recognition Antecedents: the Brazilian research community case

INTRODUCTION

Research collaboration is perceived as an important characteristic of highly productive individuals. On quantitative and qualitative accounts, co-authorship is important in promoting productivity and high impact (Wuchty, Jones and Uzzi, 2007). Most accounts on collaboration address the relationship between researchers as the main unit of analysis. In this paper, we focus on the inner life of co-authorship. Specifically, we want to narrow our focus to the issue of recognition of authorship (for instance, Heffner, 1979; Brunner, 1991; Floyd, Schroeder, Finn, 1994).

This discussion is not restricted to academic articles, but it gains practical outcomes ethical code and formal institutional features. Research associations seek to develop ethical codes in order to define what is worth of authorship. Relevant for this paper, the Academy of Management ethical contains a section on what constitutes co-authorship. As we will detail below, AOM's ethical code establishes a criteria for recognition of authorship that leads the parties to explore what was each one's added value to the paper under analysis. We label this approach "intrinsic", for it restricts recognition to those parties who effectively provided a substantial contribution to the paper's core argument.

In contrast to this standard departing point, we observe relationships where co-authorship is granted to parties whose contribution to the research piece is at best ambiguous. From this perspective, individuals' beliefs and practices may deviate from the widespread ethical code canon. We called such behavior as "extrinsic exchange" oriented.

In order to explore one's positioning towards co-authorship recognition, we elaborated ethnomethodologically inspired vignettes (fictional situations) with varying degrees of ambiguity

on value-added to the paper and power-asymmetry between the parties involved. At each vignette, respondents had to position themselves and were able to explicit their beliefs and justifications underlying their behavior. As a result, we obtained a reasonable picture of co-authorship recognition predisposition in the Brazilian research community: individuals perceive the research community as favoring extrinsic exchanges, although they personally might lean towards intrinsic exchanges. Vignettes that were low in ambiguity but high in power-asymmetry proved to be richer sources of discrepancy between personal beliefs and perceived community behavior, leading us to further explore these situations. Beyond flashing out current predispositions and perceptions at the Brazilian community, we aim at offering tools to assessing co-authorship recognition at different contexts.

Following, we ground co-authorship recognition in the social exchange theoretical framework, following we overview the Brazilian community research development, justifying this context as a privileged site for enquiring co-authorship recognition. Our methods include the development of vignettes and the respective questionnaire, sampling, and exploratory quantitative and qualitative strategies. At the results and discussion section, we address the behavior expected we expected vis-à-vis the observed behavior. At the conclusion we advance possible future research efforts from the current one, including the assessment of cross-country comparison potential.

FRAMING CO-AUTHORSHIP IN SOCIAL EXCHANGES

Co-authorship might be described as a social exchange, as authors (parties) deploy resources in a common enterprise in order to produce a collectively desirable outcome in highly ambiguous settings (Kramer & Martin, 1995; Blau, 1964). Bellow, we will develop our theoretical framework, taking as a major theoretical backbone Blau's (1964) exchange approach.

Within Blau's exchange taxonomy, we first explore the contrast between *intrinsic* and *extrinsic* exchanges. In the former, parties would take most of their benefits from the interaction itself. For instance, when a couple decides to go together to a movie theater, generally they will both enjoy each other company's for the sake of being together (Blau, 1964, p. 15). In contrast, extrinsic exchanges entail a certain degree of burden to one of the parties who expects a benefit that is not contained in the interaction in itself (Blau, 1964, p. 16). Blau makes it explicit that both types of exchange must be regarded as ideal-type simplifications. Real life exchanges fall somewhere in the continuum of these poles. We postulate that authors leaning towards "intrinsic exchanges" will generally: (1) strive to promote apprenticeship¹ to all parties involved, and most importantly to this paper (2) grant authorship recognition only to those parties directly involved in the task needed to develop the research piece².

In contrast to an "intrinsic exchange", we propose that authors leaning towards "extrinsic exchanges" will tend to: (1) grant co-authorship in spite of strong asymmetries among individual contributions to the task, including null effort from one or more parties and (2) perceive benefits not intrinsic in the co-authorship relation as satisfactory compensation for the effort asymmetry. As an example, young scholars might aggressively seek to co-author with prestigious senior scholars in order to increase (perceived) odds of getting published and cited. Van Dyne (1996) labels this attempt as "manipulative". In its extreme, co-authorship would be granted to the senior author only for the sake of "image impression", regardless of actual effort deployed. On the other hand, senior scholars might aggressively seek younger students to grant them co-authorship in

¹ From Blau's ideal-type definition of intrinsic exchanges, common learning would suffice to sustain and justify the common effort. The mutual expectation of accrued from an eventual publication is already an extrinsic element in the exchange nature. As far as we are dealing with ideal-typical concepts, we dismiss this extrinsic element.

² Contribution to a paper should not be confused with sheer "effort", expressed in hours spent. In several well-known cases, effort that was not directly linked to the major paper's insights development is granted recognition at the credits in the footnote.

exchange of extrinsic benefits. Van Dyne (1996) labels this attempt as “controlling”, which also entail the role of power in asymmetric exchanges.

Blau’s distinction between economic and social exchanges is also instrumental for our analysis. In economic exchanges are regulated by relatively clear-cut exchange rates and the transaction is well defined in a timeframe (e.g. a contract between two companies). In contrast, social exchanges entail murky reciprocation standards. Within social exchanges, such as mentor-student relationships, fairness is grounded on informal standards and reciprocation is neither instantaneous, nor easily predicted (Blau, 1964, p. 88, Mauss, 1967, Bourdieu, 1977, Burns, 1990). For instance, Cummings (1996) insists that a relationship with a doctoral student entails not only substantive shared learning and publishable outcomes, but also personal and public support. This support includes, for instance, integrating the student in the mentor’s network. Although such benefits do exist in mentor-mentee social exchange relationships, in intrinsic-reward oriented relationships co-authorship recognition is not linked to other benefits outside the article scope. In contrast, eagerness to link one to another would be regarded as impolite (Mauss, 1967; Bourdieu, 1977). Nevertheless, refusal to provide external benefits (such as a positive recommendation letter) might ultimately jeopardize the relationship and eventually erode potential future collaborative endeavors (Blau, 1964, p. 18). The core intuition under the “social exchange” concept is that ambiguity is prevalent, and as a consequence, trust between the parties is necessary in order to accomplish the collective goals.

In formal organizations, hierarchical power might function as a necessary device in order to remove conflicts generated by social exchange ambiguity (Blau, 1964), suggesting that “power” and “trust” potentially function as either complementary or substitutes (Möllering, 2006). In contrast to formal organizations, a co-authorship dyad is not typically under the monitoring control of a superior hierarchical authority or public scrutiny. Nonetheless, co-

authorship relations might also be power (due to resource asymmetry) and authority-ridden (specially the mentor-mentee relationship). Floyd, Schroeder and Finn (1994) suggest that imbalances in power could lead to exploitative co-authorship relationships. Consciousness of power imbalance might lead authors to take preemptive actions to seek equilibrium. For instance, Hinings and Greenwood (1996) remark their explicit effort to neutralize power imbalance by redistributing power among all involved. Although such conscious effort to check power asymmetry might be feasible among authors with no formal relationships, such effort might be daunting between supervisors and doctoral students, where power asymmetry and evaluation is intrinsic to the relationship (Kramer and Martin, 1996). Probably as a function of such high potential power relations, personal accounts proliferate in stating the need of disentangling co-authorship recognition and supervisor's authorship, in favor of student's sole authorship. For instance, in the words of Cunnings: "[m]y guidelines are that the first, probably the best, and may be the only paper be sole authored by the student. If there is to be an additional paper, I would like to coauthor, as second author" (Cunnings, 1996, p. 151). In the same token, Kramer and Martin state that "[a]dvanced students may be ready to do independent work, perhaps with faculty member as a second author. Sooner or later, the faculty member should become an advisor on an independent student research project – one for which the faculty member takes and deserves no authorship credit" (Kramer and Martin, 1996, p. 176).

Blau explains that resource asymmetry might lead to the exercise of power as dominant parties exploit dependent parties (Blau, 1964, p. 30). However, such exploitation might not take place if such behavior goes against what is perceived as socially accepted (Blau, 1964, p. 24). Moreover, all involved parties might despise dependency relations as value consensus is internalized. In other words: compliance with social consensus is not a result of risk calculation of being observed by third-party audiences, but a matter of authentic empathy with the

consensual social values. From this perspective, we want to establish a bridge between exchange and legitimacy³. An exchange will be legitimate in so far as it is congruent with a shared system of norms, beliefs and definitions (Suchman, 1995). Correspondingly, social actors refer to shared beliefs and narratives in order to justify their practices (Swidler, 2001b). In the quotes reproduced above, we may observe an overall concern in promoting students' research autonomy and protecting co-authoring fairness.

We may find a community's consensus crystallized in ethical codes. The management researchers affiliated to the Academy of Management (AOM) must abide to its ethical code that is explicit in directing co-authorship recognition towards "intrinsic exchanges"⁴. In spite of this orientation, in a research among faculty at AACSB business schools, Manton and English (2008) have found that "35% reported having collaborated with a coauthor who had done very little work on a published article" (Manton and English, 2008, p. 283). In their research, the authors clearly stated the deleterious effects of such practice to the management research community.

To be sure, the subjective feeling of exchange fairness is not attained only through intrinsic exchanges. In certain cultures, extrinsic exchanges in co-authorship could be, in theory, generally accepted and expected (Blau, 1964, p. 145). Moreover, in spite of a given surrounding culture protecting intrinsic exchanges, a particular dyad could develop local expectations leading towards extrinsic exchanges (Blau, 1964, p. 146)⁵. As a result, we may observe a social approval

³ Our concern in retaining the link between social exchanges and legitimacy led us to constraint our exchange theoretical review mostly to Blau's writing. As WR Scott points out, other exchange theorists frequently downplayed the ideational element within exchanges, in favor of rational choice approaches (Calhoun, Meyer and Scott, 1990).

⁴ We may find at the AOM's ethical code the following guidelines: " 4.2.2.1 AOM members ensure that authorship and other publication credits are based on the scientific or professional contributions of the individuals involved. 4.2.2.2 AOM members take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have contributed. 4.2.2.3 AOM members usually list a student as principal author on multiple-authored publications that substantially derive from the student's' dissertation or thesis."

⁵ We could assume that private contracting, including extrinsic exchanges terms would be acceptable if both parties were believed to have freely consented to it. However, such private contracting practice would hurt the function of the surrounding community. As Manton and English (2008) point out, 'gift authorship' erodes the very meaning of authorship, leading to negative externalities effects.

of exploitative relationships (Blau, 1964, p. 203). However, rather than assuming that an observable pattern behavior is coupled with internalized beliefs, we should investigate the degree to which individuals agree with their surrounding community practices (Lukes, 2008). Following Blau, such feelings of injustice emerge as individual beliefs collide with perceived established social consensus. Belief clashing might not necessarily be publically expressed, as involved parties avoid voicing their concerns in public, fearful of punishment and ostracism (Zerubavel, 2006). In its extreme, individuals are silently coerced to concede co-authorship to powerful parties in order to keep their careers viable⁶. In the following section, we justify why the Brazilian context is a privileged site for investigating non-standard co-authorship practices and justification discourses.

RELEVANCE OF THE BRAZILIAN CASE

The Brazilian community of research in business administration⁷ is a privileged empirical case that permits the observation around both practices and attached justifications to these practices. In Brazil, the absence of a formal ethical code as a convergence point permits the flourishing of a plethora of discourses that might support extrinsic exchanges⁸.

⁶ As an illustrative remark, we may find in fictional literature quotes on exploitative relations between supervisors and supervisees: “Out of a sense of duty toward the university, he puts aside the woman of the court and the nobleman Yohanan, to devote himself to his students. He confers with them and provides them with material for their papers. He reaches into his box of notes, takes out a handful, and offers to share them. He is generous and ungrudging toward his students, who will write articles based on references he has discovered, labored over, and collected, material that was previously overlooked. Some professors require their students to gather material for them. And there are professors who put their own name alongside the student's, making themselves the coauthor, assuming, in their vanity, that it will be to the student's advantage if they lend their name to the work. Not so with Herbst; Herbst takes what is his and offers it to his students without patting himself on the back and saying, ‘See how wonderful I am - how decent, how generous - while others are stingy.’” (Agnon, 1996, pp. 303-4, italics added).

⁷ The category “business administration” encompasses all specialties typically offered in a Business School: organizational theory, strategic management, human resources, finance, marketing, etc. As a consequence, it encompasses “management” research, typically found at the Academy of Management meetings.

⁸ Although the Brazilian national association of management researchers (ANPAD) is formally affiliated to the Academy of Management, no formal ethical code has been released to this day, guiding coauthorship recognition.

Comparatively to other countries like U.S., England, France or Germany, Brazil is a later comer both in research and full-time professorship (Bertero, 2007). Traditionally, most business schools have been dedicated to teaching, rather than research⁹. In parallel, little value was given to research, freeing the faculty to perform other non-research related activities, like consulting and school management. As a consequence, the hiring of full-time professors was seen as a provision in order to maintain minimum personnel level that could guarantee the teaching of undergrad core classes. In parallel, non-public schools saw academic postgraduate programs as too expensive to maintain and devoted little incentive to research. As a result, higher status was usually given to part-time faculty who had not only exposure to the “real world”, but could also earn higher income in comparison with the full-time faculty. In contrast, most of one’s research effort was closely associated to a doctoral thesis, required in order to become a full-time professor. Given low salaries earned by full-time professors and the lack of incentives to sustain research efforts, many full-time professors tended to relax their research effort, while incorporating to their schedule ad-hoc consulting projects that supplemented their income¹⁰.

In 1998 government led discussions for a new postgraduate policy in Brazil, this being progressively implemented since then (Arruda, 1999). As a consequence, the field of management research suffered an important regulatory shift, mirroring major changes in educational policies at the level of society. Brazilian education authority proposed new incentives for research in the country, in an attempt to foster private support for academic activities through linking the level of status of educational institutions (and consequently, several strategic advantages) to the existence of academic postgraduate programs meeting minimum standards.

⁹ This phenomenon is not true to other social science communities in Brazil, who have produced sizeable and worldwide relevant research production in political science, economics, anthropology and sociology.

¹⁰ This picture does not capture the totality of the Brazilian academic research practices. Several researchers, albeit a minority, developed full-fledged research pieces in spite of the lack of incentives.

While public universities already had traditional and prestigious academic programs, private for-profit and not-for-profit institutions saw themselves facing the challenge of hiring researchers and developing consistent academic programs. These changes were supervised by CAPES, the governmental agency for graduate programs, which established standards of research production to be met by institutions. These changes led scholars to comply with a minimum publication level, within three-year evaluation cycles; otherwise they would be expelled from the graduate program, which usually meant becoming a lecturer or part-time teacher¹¹. In spite of this early criticism, a surge in research production took place in the management research community in Brazil, as academic postgraduate programs flourished around the country, attracting several different student profiles. These ranged from those aiming at engaging into research activities, developing academic careers, to those willing at improving their corporate résumés, and still, those seeking legitimacy to their on-going part-time teaching activities, as CAPES imposed having a master diploma as a new requirement for lecturing at undergraduate courses. In parallel to this increase in research volume, measured in publications, there is a widespread belief that quality rose, as a consequence to an increased participation in international forums and submissions to international journals.

METHODS

Following Swidler (2001a), we developed small vignettes describing co-authorship mixing ambivalent and power-asymmetric situations (see Exhibit 1). Vignettes are widely used in ethnomethodological research designs, for (1) they request respondent's positioning towards a

¹¹ At first, the “publish or perish” rule was perceived as coercive and exogenous from research community. Detractors held the following arguments against the new policy. First, the imposition of a minimum production level was frequently associated with an attempt to copy U.S. standards. However, would argue these critics, while in the U.S. the evaluation system is reinforced at the academic unit level, in Brazil it was imposed by the government. Second, the establishment of a minimum volume of research in a three-year cycle would jeopardize the development of more deep and insightful oeuvres that could take several years to be fully matured.

concrete situation and (2) and their ambiguous, decontextualized characteristics permits unearth respondents hidden contextual taken-for-granted assumptions required in interpreting a situation. For each vignette, we asked the respondent to provide a position regarding the recognition of co-authorship. This positioning was captured through a close-ended multiple-choice questionnaire. Also, for each situation we let the respondent to add comments. These comments were analyzed in tandem with the behavior presented in the multiple-choice section. We combined elements of qualitative and quantitative orientation to expand and complement our research (Tashakkori & Teddlie, 1998). Data was gathered by an internet based questionnaire. Exploratory quantitative analysis was employed to: quantify the relations among the vignettes, determine a data structure with basis on the relations found, and explore the nature of these relations. Qualitative analysis, on its turn, was used to achieve deeper understanding of the structure found by means of interpreting respondent's comments.

[INSERT EXHIBIT 1 HERE]

Questionnaire

We developed a semi-structured questionnaire, where in its first part we captured the respondent demographic data¹², in the second part we captured the reaction to the vignettes, structured in close-ended alternatives, finally in the third part we allowed the respondent to express his or hers opinion towards the vignettes and the alternatives. The open section in the questionnaire captures the qualitative justification for positioning as well as any supplementary assumptions taken in order to permit choice.

For each vignette, the respondent was required to answer two questions. First, the respondent had to take a position towards the situation. We labeled the first question to each vignette the Respondent's Personal Opinion (**Opinion**, in short). Second, the respondent had to

¹² No nominal personal, institutional, or regional identification included in order to protect the respondent identity, and reduce the chances of misrepresentation.

identify his surrounding community's behavior. Two reasons led us to ask our respondents how they perceived their surrounding community practices beyond their own opinions on how one should proceed. First, when we directly ask someone's opinion on ethical issues, we run the risk of obtaining a misrepresentation of oneself, even if no identity is disclosed (Cicourel, 1981). Second, contrasting one's opinion with one's perception of community practice gives us an additional analytical dimension yielding both probable community consensus and cognitive dissonance. We labeled the second question to each vignette the Respondent's Perception of his Surrounding Community (abbreviated to **Community**).

Each question (either Opinion or Community) for each vignette had three alternatives¹³ that would be variants of the following structure (it was not allowed blank or don't know answers):

- (a) Focal researcher should be the only author
- (b) Focal researcher should be the first author
- (c) Focal author and non-focal author must negotiate the co-authorship recognition.

We label "focal author" the party that we understand there is no ambiguity whether he or she should be the author or at least a co-author. In the vignettes 1, 2, 3, 4 and 5 the focal researcher is a supervisee. In the vignette 6 and 7, it is a student. In the vignette 8 it is researcher B. In contrast, we developed the vignettes to place ambiguity whether "non-focal authors" should receive co-authorship. In the vignettes 1, 2, 3, 4 and 5 it is the supervisor. In the vignette 6 it is a faculty member. In the vignette 7 it is a senior researcher. In vignette 8 it is researcher A, who holds a brokerage role between researcher B and the book publisher. We advocate that by

¹³ With exception of Vignette 8, where we inserted a choice where the non-focal author could be granted the position of first author. Available answers for Opinion and Community were always symmetric.

choosing one of the available alternatives, the respondent will be taking a position in the “intrinsic-extrinsic” discussion proposed.

We inserted vignette 1 as a “control situation”. The standard interpretation is that both should be co-authors, for there is little ambiguity that they shared the tasks related to the preparation of the paper¹⁴.

Supervisor-supervisee relationships are fraught with ambiguity. In several cases, it is difficult to identify the boundaries between the supervisor’s own research and the supervisee’s original contribution. AOM’s ethical code clearly defends granting co-authorship recognition to the supervisor when the paper stems from the supervisee’s thesis: “§4.2.2.3: AOM members usually list a student as principal author on multiple-authored publications that substantially derive from the student’s dissertation or thesis”. We interpret¹⁵ that this article was designed to (1) protect supervisor-supervisee relationship from predatory bargaining and (2) avoid exposing a private relationship to public scrutiny. From the dyad perspective, such publicity could be morally disputable (Raz, 1999) and could jeopardize the relationship long-term perspective. From an institutional point of view, the adjudication of private information veracity in a relationship might be costly (Williamson, 1975). Hence, the recommendation of co-authorship granting to the non-focal author, while granting the top position to the student becomes a solution that keeps intact the relationship ambiguity¹⁶.

¹⁴ Although both parties might negotiate who deserves to be the first author, we would not expect any respondent to choose alternative “c”, for the recognition of authorship itself should not be an issue. This question was excluded from our multivariate models because very few respondents chose alternative “a”. Low frequencies in a cell bias the analysis of nominal data (Reynolds, 1984). The low presence of “a” answers brings us the comfort to say that respondents were generally able to conceive the situations in an abstract fashion, detached from concrete personal grievances (Kohlberg, 1969).

¹⁵ In personal communication from AOM’s officials, they declared that such practice was replicated from comparable benchmarks, as the American Sociological Association’s ethical code.

¹⁶ The ethical code solution might be second-best in certain circumstances, while the best solution would be, from an intrinsic exchange perspective, promoting the student as a sole author as much as possible. As seen in the quotes above, many researchers proactively set stricter boundaries between one’s work and the supervisee’s research.

We attempt to capture such ambiguity with vignettes 2, 4 and 5 (namely, **Block 1: highly ambiguous and high power asymmetric situations**). Vignette 2 sets the standard situation. There is highest ambiguity on the value added by the supervisor during the supervision relationship. It is not clear, from the vignette, whether the supervisor-supervisee interactions throughout the relationship history were instrumental in developing the research. Perceived ambiguity may decrease at vignette 4, where we learn that the supervisor did not review the submitted version. In vignette 5, we learn that the student reviews alone her thesis, leading to a substantive effort not supported by the supervisor. For all this block of vignettes, the answer “c” would be a reasonable one: focal author and non-focal author should negotiate given the intrinsic ambiguity the parties face (see Exhibit 2 for a summary). Respondents answering “a” for this block of vignettes would be interpreted as orthodox defenders of focal-author’s sole authorship. In contrast, respondents who answered “b” would be considered applying an institutionalized practice, as co-authorship is automatically granted to the non-focal author. Interestingly, both “a” and “b” answers do not fully deal with the ambiguity built-in these vignettes.

[INSERT EXHIBIT 2 HERE]

The following set of vignettes, labeled **Block 2 (low ambiguity and high power asymmetry)** brings situations with little room for ambiguous interpretation regarding the non-focal author contribution: limited contribution should yield no co-authorship recognition when one follows intrinsic exchange orientation. Nonetheless, we kept the power asymmetry high (non-focal author is either the supervisor or a discipline teacher). At Vignette 3, the paper stemmed from a discipline, which implies that the supervisor deployed much less effort in its development, in comparison to the standard supervision work stated in vignette 2¹⁷. In this

¹⁷ To be sure, we assume that a discipline’s final paper is strongly related to the discipline’s theoretical references. If a student’s discipline paper is solely related to one’s thesis research, Vignette 3 becomes compatible to Vignette 2.

situation, we expect a higher rate of answers “a” if the respondent follows intrinsic exchange principles. In the same vein, at vignette 6, we believe that it is the duty of a teacher to provide references during a course. As a consequence, claiming authorship would be non-acceptable. Because both situations incur in power-asymmetry relationships, we might expect a high rate of “b” choices when the surrounding community is expected to follow extrinsic exchange orientation.

At **Block 3** we maintained situations where non-focal authors provided little contribution to the work. However, they were designed to capture low power-asymmetry. In the vignette 7 we find a customary tradition among researchers of providing tips and cues, while refraining from claiming authorship. From an intrinsic exchange orientation, claiming authorship would be abusive. On the other hand, if researchers refrained providing tips due to a lack of direct incentive, there would be much less community learning and communication. Following Mauss (1967), these are “generalized exchanges”, for individuals contribute to each other benefit without clear reciprocation, while they believe that benefits will accrue at the community level (indirect benefits). In vignette 8 there is no ambiguity that researcher A should not receive co-authorship, for he has not contributed to the article itself. At this block of situations, respondents are expected to answer “a”, if following intrinsic exchange principles. In contrast, the choosing of answer “c”, the desire to open up the process of co-authorship recognition to a negotiation, implies the core of extrinsic exchange orientation: parties make explicit whether the co-authorship is valid based on benefits not restrained to the research itself. Answer “b” has commonalities with answer “a”, in the sense that it let no room for negotiations, and as a consequence, eliminates ambiguity. However, from the intrinsic exchange perspective, the parties are too liberal towards the concept effort worth of co-authorship recognition. Individuals who

chose this alternative not only follow extrinsic exchange principles, but also accept beforehand strongly asymmetric exchange rates.

Sampling

The survey was conducted through a web-site based questionnaire. We sent invitations to participate in the survey to chairs of management graduate programs, affiliated to Anpad (the Brazilian national association of researchers in business administration) and recommended by Capes (government agency). The survey took place in March and April of 2008. 273 individuals participated in the survey¹⁸.

Most respondents are male (63%). Average age is 37 years old. 24% of respondents hold a PhD degree, 33% hold an MA degree and 43% hold undergrad degrees. Correspondingly, 44% of our sampling is constituted of MA candidates. Respondents are affiliated to several research areas. Most represented in our sample: to strategic management (20.1%), marketing (13.4%), human resource management (12.6%), and organizational theory (7.1%). We asked respondents to identify the type of academic institution they are affiliated¹⁹. Respondents were distributed in the following way: public schools (36%), confessional foundations (11.4%), non-confessional foundation (14%), for-profit schools (30%) and Other (8%).

The research's sample is grounded on convenience sampling and self-selected respondents, which curbs the inferences' accuracy on the universe of researchers in Brazil. Nonetheless, the wide distribution of respondents around key-variables permits the exploring the

¹⁸ From the whole sample, 19 individuals were not affiliated to an academic institution, and, therefore, were not considered in the analysis. Many respondents did not complete the questionnaire, possibly because they faced technical problems or quit before finishing it; consequently, responses are scarcer to questions at the end of the questionnaire than they are to questions at the beginning. Valid responses to each question, when available, were considered in the analysis.

¹⁹ We offered five choices: public schools (federal or state funded), confessional foundations (non-profit, major stakeholder is a religious entity), non-confessional foundation (non-profit, founded upon private estate), for-profit schools and other not included in the previous categories.

relationships among the observed behavior at distinct vignettes and the explanatory strength of demographic variables.

Quantitative and Multivariate Analysis

The exploratory quantitative research strategy in this article can be summarized as follows: (1) we tabulated response frequencies to all vignettes and compared them to our expectations; (2) we quantified the relations among vignettes by means of optimal scaling procedures and derived a data structure from these relations, with use of a Graph of correlations; (3) we explored the significant relations among vignettes with multinomial logistic regressions. Next, we describe these procedures in details.

We proceeded to the analysis of frequencies to identify deviance from the expected pattern of choices between Opinion and Community and among each block. If predominant frequencies deviate from our expectations, there might be a particular structure to be revealed in the Brazilian community of research in business administration. Such a structure may be latent to the choices and perceptions of respondents and can be explored by means of the relations among the answers to all vignettes. These relations may be represented by the correlations among variables. Linear correlations are not the most proper choice to describe association among categorical data which were used in this study. As a consequence, we applied an optimal scaling procedure resulting from a multivariate correspondence analysis²⁰ and transformed the nominal variables into continuous variables²¹.

²⁰ We employed the routine included in the Statistical Package for the Social Sciences (SPSS), version 17.0.

²¹ As previously stated, vignette 1 was not included in this analysis, since very few respondents (4 for Opinion and 8 for Community) chose “a” in that question; although that is a coherent result, the existence of cells with very few cases may bias results involving conditional distribution of categorical data (Reynolds, 1984). Also, because it was the first question in the questionnaire and a control variable, it was employed more as an environment setting and a practicing question than a variable of interest. All other variables, regarding both Opinion and Community, were included in the analysis.

Correspondence analysis allows nominal variables to be related according to their joint frequencies, indicating dimensions which determine the association of categories (Bartholomew et al, 2002). Optimal scaling procedures complement the task by converting the nominal variables to interval items (Tenenhaus, 1985), which can be treated as continuous variables, with basis on the dimensions found. The converted items, usually labeled transformed variables, can be jointly analyzed by means of correlations, because they are continuous.

From the calculated correlations, the data structure may be drawn with use of a Graph revealing visually interpretable links between the variables (see for instance, Yeung, 2005, for a use of lattice correlation-based graph in order to illustrate the underlying relations among communitarian beliefs). With such a tool, the latent structure of the community of Brazilian researchers in business administration may be intuitively identified.

Finally, the relations among the vignettes of Block 2 and the other vignettes are explored; Block 2 was selected to be further analyzed because, having high level of power asymmetry (as in Block 1) and low level of ambiguity (as in Block 3), its questions may play important mediation roles in the data structure. These linking variables (vignettes 3 and 6) and the nature of their relations with other vignettes will be analyzed with use of multinomial logistic regressions, usually applied to predict choices between more than two discrete alternatives (“a”, “b” or “c”, in this study) due to variations of other variables (Menard, 2001). In this article, multinomial logistic regressions are used for predictions purposes, in an exploratory manner; they are employed only to identify and detail associations between variables, since no causal direction between situations are theoretically inferred *ex ante*.

Qualitative analysis

Drawing on the respondents' comments, we were able to unearth one's justifications and taken-for-granted assumptions at interpreting the situations proposed. As expected, a significant number of respondents used the open-ended commentary questions to supply explanations for their positioning, despite the fact that commenting each answer was not required by the questionnaire. Given that we designed the questionnaire allocating one open-ended question to each vignette, the commentaries provided did not always discriminate assumptions between community practices and respondents' personal inclinations. However, content analysis techniques allowed qualitative inferences on how respondents interpret and implement co-authorship principles. Extensive reading, coding and categorizing data were basic procedures for analysis (Flick, 2004). Quality of content analysis was pursued through the use of multiple analysts, who jointly discussed research data, the process of analysis and its outcomes (Patton, 2002).

RESULTS

Analysis of variable frequencies

Table 1 reveals the absolute frequencies of both **Opinion** and **Community** alternatives – placed in the respective total counts – for all proposed situations, and the absolute frequencies of their cross-tabulations. At **Block 1** (high ambiguity and high power asymmetry), Vignette 2 portrays a standard supervisor-supervisee relationship. Not surprisingly, both Community perception and personal Opinion converge around taken-for-granted co-authorship (alternative “b”), as we would expect in healthy supervisor-supervisee relationships. When we consider all vignettes at Block 1, most respondents (50%)²² perceived their surrounding

²² The Blocks' percentages were calculated in the following way: we summed the total responses at each alternative for all block's vignettes, separated by Community and Opinion, Then we divided the number of responses per alternative by the total number of responses for a block. In a similar way, the percentage of “shifts” from one

communities (Community) to favor automatic co-authorship to non-focal authors. Many respondents (31%) perceived their communities to favor negotiation between the parties, rather than automatic co-authorship granting. It is interesting to observe that 27% of the total respondents (33% of either “b” or “c”) shifted from “b” and “c” answers towards alternative “a” at the Opinion question. We interpret this in the following way: those individuals who believe that there was a large asymmetry in contribution would prefer to avoid co-authorship recognition.

[INSERT TABLE 1 HERE]

Aggregate behavior at **Block 2** (low ambiguity and high power asymmetry) closely resembled behavior at Block 1. Most respondents perceived their communities as favoring either automatic co-authorship or negotiation (86% of total respondents). Surprising, only 45% of respondents chose sole authorship in the personal Opinion question (respectively, only 38% of those who answered “b” or “c” shifted to “a”). When we separate vignette 3 and vignette 6 answers, this unexpected behavior is stronger at Vignette 6 (discipline professor may co-author a student’s final course paper): 33% of total respondents converge both Opinion and Community answers around alternative “b”, while only 29% of total respondents (32% of those who answered either “b” or “c”) shifted to alternative “a”. Vignette 6 emerged as a strongly discrepant case, as respondents’ behavior resembled the behavior observed at Vignette 2.

At **Block 3**, we observe, in comparison to Block 2, a slight shift away from alternative “b” (automatic co-authorship) towards either “a” (sole authorship) and “c” (negotiation). As a result, the choice “b” ceases to be an anchoring point of convergence of Opinion and Community answers (only 16% of respondents, while both “a” and “c” had, respectively, 21% of total respondents’ answers). Although the percentage of answers “a” (sole authorship) achieves its

alternative to another when observing Community and Opinion was based on the sum of the figures in the cross-tabulation.

peak in this block (24% of Community and 48% of Opinion), it is still surprisingly high the percentage of respondents who would choose either negotiation or automatic co-authorship at vignettes in this block (respectively, 29% and 24% of total respondents). Only 36% of respondents who perceived their communities to favor either automatic co-authorship or negotiation would shift to sole authorship.

Variables transformation and correlations

The two dimensions extracted from the optimal scaling analysis were able to explain 56.1% of the original inertia contained in the data (that is, the variation of the alternatives selected by respondents). More importantly, data were quantified as continuous variables, and correlations among these transformed variables were calculated. Table 2 shows the correlation matrix of the transformed variables. These correlations were weak²³, the strongest being equal to 0.546²⁴.

[INSERT TABLE 2 HERE]

In order to better discriminate the strength of the resulting relations, only correlations equal to or greater than 0.30 were considered relevant for the analysis. We elaborated Figure 1 with use of the NetDraw Package in order to visualize the relations among the transformed variables. Figure 1 shows all connections between variables sharing a correlation of at least 0.30. For reasons of parsimony, the magnitudes of these correlations were not considered to differentiate linkages between variables. All the correlations are positive, meaning that

²³ The weak correlations may be due to the fact that the proposed vignettes referred to different situations, therefore catering different aspects of choices and perceptions for the vignettes. Nevertheless, positive correlations suggest that a common pattern of alternative selection, existent to some questions, was captured throughout the responses.

²⁴ This figure refers to the association between the Community perceptions of vignettes 3 and 4.

respondents tend, in general, to choose equivalent responses for the related questions, at least at some degree.

Exploring the data structure

At Figure 1, we may observe a graph representing the correlation among the questions' variables, generated with the optimal scale transformation. Simply put, we would expect two types of relations to emerge. First, we expect correlation between Community and Opinion variables. In well functioning research communities, personal opinions should converge with perceived community practices at each vignette proposed. Disagreement would lead to low correlation²⁵. Second, we would expect correlation between situations in the same block, and accordingly, correlation between proximate situations in ambiguity and power asymmetry.

[INSERT FIGURE 1 HERE]

A first inspection shows that the questions related to Community perception (Bi, Vj, C) are close to each other, forming a cohesive block in the upper left side of the graph. The ubiquitous connections among Bi, Vj, C variables portray a tendency to perceive the community as favoring co-authorship (choice "b"), regardless of the situation. In comparison, the questions related to personal Opinion (Bi, Bj, O) form an outer and larger belt in the right and bottom fringes of the graph. It is reasonable to observe Community variables more cohesive than Opinion variables, given the shared feature of a common culture, in comparison to inner personal disposition.

For analytical purposes, we sliced the graph in four regions. **Region 2** in the graph includes B1, Vj, O questions (highly ambiguous and high power asymmetry). In the upper right extreme of region 2 we find B1, V2, O, the standard relationship between a supervisor and a supervisee. B1, V4, O and next to it, B1, V5, O, lower in the region, depict lower ambiguity

²⁵ No negative results were observed.

situations. **Region 1** contains B2, Vj, O questions. As expected, B2, V6, O is close to B1, V5, O, given an even lower ambiguity regarding the non-focal author's contribution. Although B2, V6, O and B2, V3, O constitute a continuous region, the latter is also related to B1, V2, O. **Region 3** brings B1, Vj, C situations. They are all related to the corresponding B1, Vj, O questions, and follow a similar geographic distribution: from top to bottom, V2, V4 and V5. **Region 4** brings B3, Vj, C situations. They are all related to the corresponding B3, Vj, O questions, although the former do not constitute a contiguous region.

Following the expected correlations, three important disconnections are worth noting. First, B3, V7, O is neither related to B3, V8, O nor to B2, V6, O. B2, V3, O is not connected to B2, V3, C and, finally, B2, V6, C is not correlated to B3, V8, C. If these connections existed, data would render a much simpler graph: B3, V7, O and B3, V8, O would constitute a single region, B2, V6, C would not be in the middle of regions 2 and 3, and B3, V7, C would be dragged down.

At vignette 3, as shown above, we observe a major shift from choice "b" at B2, V3, C to "a" in B2, V3, O. Such dissonance will be further explored with the multinomial logistic regression and the analysis of respondents' comments. The contrast between B2, V6, C and B3, V8, C is important vis-à-vis the correlation between B2, V6, O and B3, V8, O. The absence of relation between the two vignettes is reasonable if the power asymmetry leads respondents to behave differently. At Table 1 we observe that while at B2, V6, C there is a predominance of "b" choices (taken-for-granted co-authorship), at B3, V8, C the community is perceived to favor negotiations (choice "c"). When we examine Table 1 for V2, B6, O and V3, B8, O, we observe that while at vignette 6 Opinion and Community converge around choice "b", at vignette 8 there is a sizeable shift towards sole authorship (choice "a"). We may interpret these findings in the following way: at vignette 8, respondents perceive that the community is more tolerant to

negotiations, given that the non-focal author is not part of the same organization. The higher perceived tolerance for negotiation at the community level leads to higher propensity to aim for sole authorship at the personal opinion level. In contrast, at Vignette 6, the power asymmetry is accepted by respondents. However, 35% of V2, B6, O answers favor sole authorship, placing under doubt an assumed consent to the power relationship. As a result, personal opinions (V2, B6, O and V3, B8, O) correlate, in spite of the lack of correlation between the perception of communities (V2, B6, C and V3, B8, C).

Understanding Block 2' Variables

The fact that Block 2's vignettes share high power asymmetry with Block 1's and low ambiguity with Block 3's makes it theoretically adjacent to the latter blocks. Therefore, questions in Block 2 may be central to the structure by linking Blocks 1 and 3. That suspicion may be a clue for the analysis of the Opinion variables, which were revealed to be less cohesive than the Community variables. Not only the Graph in Figure 1 shows more relevant correlations among community variables than among opinion variables, but also Table 2 shows that community variables correlations tend to be higher than correlations involving opinion variables with each other.

In order to understand the structure behind Opinion, we used multinomial logistic regressions²⁶ in order to explore relations among the Opinions variables in Block 2 and the other variables. We ran regressions with variables B2,V3,O and B2,V6,O as response variables and with the variables that correlated with them and the collected demographic variables as independent variables; results are in Table 3 and 4, respectively. We set the standard response as

²⁶ Multinomial logistic regressions are proper for identifying relations between a set of variables and the probability of specific events to happen in detracting of another.

“a” (for Blocks 2 and 3, “a” is the expected answer under intrinsic exchange logic), and computed the probabilities that alternatives “b” and “c” would be picked instead of “a”. Only effects with significance levels of 10% were kept. Interestingly, no demographic variable was statistically significant in discriminating choices in both regressions.

Vignette 3, Opinion (Table 3): respondents who prefer “b” (to “a”) in *vignette 2* have a propensity to pick “b” in vignette 3 (instead of “a”); “c” choosers also are likely to keep that alternative in both questions. However, preference for “b” (in relation to “a”) in vignette 2 is also related to preference for “c” (instead of “a”) in vignette 3. That may occur due to lower ambiguity in vignette 3 (low effort from supervisor), showing that respondents who assume substantive value in co-authorship recognition move towards negotiation.

Preferences for “b” in relation to “a” in the vignette 4 are also positively associated to preferences for “b” in vignette 3 (B1, V4, O “b”). In contrast, the relationship between the preferences to “b” at Vignette 4 to preference to “b” in Vignette 3 is surprisingly lower than the preference to “b” in Vignette 2 (B1, V2, O “b”) in relation to preference to “b” in vignette 3. We would expect B1, V4, O “b” to be higher than B1, V2, O “b”, given its theoretical lower ambiguity (hence, similar ambiguity to vignette 3’s). Choosing “c” and “b” (and not “a”) in Vignettes 6 and 3 seems to be an interchangeable practice; that is, besides keeping a correspondence in choices in relation to “a” (“c” to “c” and “b” to “b”), changes from “c” to “b” and from “b” to “c” are also observed²⁷.

[INSERT TABLE 3 HERE]

Vignette 6, Opinion (Table 3): interestingly, extrinsic preference for “b” in relation to “a” in vignette 5 is negatively related to the choice for “c” in vignette 6. These individuals do not

²⁷ The same correspondence may be observed at Table 5.

maintain the choice for taken-for-granted coauthorship when dealing with a faculty member other than the supervisor, or are reluctant to negotiate with the faculty member.

[INSERT TABLE 4 HERE]

Respondents' Commentaries to the Vignettes

Vignettes of **Block 1** (low ambiguity, high power asymmetry) were commented by 70 respondents. We identified an inclination towards discussing “contribution” as the main criteria for granting co-authorship. Due to the inherent ambiguous levels of contribution of non-focal author, respondents frequently referred to the implicit supervisor-supervisee contract as determinant of co-authorship recognition. Many respondents emphasized that the supervisor-supervisee relationship is developed throughout complex processes at countless interactions. In this sense, although the vignettes suggest situations of little involvement of non-focal author (i.e. vignettes 4 and 5); this involvement cannot be reduced to the situation itself.

This argument is counterbalanced by respondents who don't consider the mere existence of this relationship a guarantee of co-authorship. These commentators highlight the commonly insufficient contribution of supervisors along this process, assuming a more radical position according to which “authorship should be granted only to those individuals who spent effort” (vignettes 4), or still, claiming that the levels of contribution stated by the situations are just “the duty of supervisors, while the research outcome is due to the effort of supervisees” (vignettes 2). These more radical respondents often express their disapproval or sense of “unfairness” (vignettes 2 and 4) when faced by these co-authorship practices, such as in “I find them [these practices] of a bad character, the supervisor being granted co-authorship with no effort” (vignette 2).

In contrast, many respondents showed eagerness in granting co-authorship in order to maintain a long-term relationship and “not to cause them [supervisors and supervisees] problems”, or “it is politically recommendable that the supervisee grants his/her supervisor co-authorship”, or still “the supervisee doesn’t want to have problems with whom will influence his or her academic career” (vignette 2). Some respondents stated that such power asymmetry and instrumentality are legitimized within some educational institutions, whose codes of ethics clearly state that supervisees should always publish with their supervisors, maximizing the parameters for academic evaluation. Many respondents explicitly brought extrinsic exchange motivations to their comments: “a paper approved without the name of the supervisor may render the supervisee an image of ‘selfish’ or ‘disloyal’ to her supervisor” (vignette 4), or justify the granting of co-authorship “depending on the relationship the supervisee wants to have with her supervisor in the future” (vignette 4).

Vignettes of **Block 2** (high power asymmetry, low ambiguity) were commented by 40 respondents. Comments for this block’s vignettes suggest consent with asymmetric power relationships, as “supervisee who wants to earn the degree does whatever her supervisor asks” (vignette 3). However, manipulative motivation is also present as in “unfortunately the condition of experienced researcher may influence the decision of journal editors” (vignette 3). Respondents were overtly explicit in articulating alternative conceptions of worthy contribution. Many claimed that “indirect supervising is worthy of negotiating co-authorship” (vignette 6), “explanations throughout the course are important for elaborating the paper” (vignette 6), or even “incentive and moral support justify co-authorship” (vignette 6), rendering a situation fair, while we designed the vignette to be perceived as “unfair”, from an intrinsic exchange perspective. Nonetheless, fairness was frequently grounded on extrinsic motivations “mutual interests may justify co-authorship” (vignette 6),

Vignettes of **Block 3** vignettes (low power asymmetry, low ambiguity) were commented by 40 respondents. Again, several respondents stressed that clarifying what entails ‘contribution’ as the preferable road for granting co-authorship. However, we observed very lenient criteria for assessing “contribution”, as many respondents claimed that “10 lines of comments can change a paper substantially” (vignette 7). These comments were often complemented by extrinsic exchange justification as driving co-authorship decisions. For instance, one should give proper recognition to social capital and recognize “the value of contacts” (vignette 8) or “good relations for future publishing opportunities” (vignette 7 and 8). Respondents highlighted strategies of exchanging co-authorship, while maximizing the time spent by both researchers (vignette 7 and 8). Within comments to this block, part of the respondents rejects community practices recognizing their existence, while others take them as acceptable “if properly negotiated” (vignette 7).

DISCUSSION

The purpose of this paper was to explore how individuals perceived their surrounding community practices regarding co-authorship recognition, vis-à-vis their own predisposition. By offering stylized vignettes, we asked our respondents to position themselves against situations that varied along two dimensions: power and ambiguity. We grouped the vignettes in three blocks: (1) high-ambiguity and high power asymmetry, (2) low ambiguity and high power asymmetry and (3) low ambiguity and low power ambiguity. Some major characteristics of the Brazilian research community emerge from our results.

First, there is a prevalent perception that the community favors extrinsic exchanges. This finding might be hardly observable at the standard supervisor-supervisee relationship (vignette 2), although many respondents commented that power asymmetry forced them to comply with ‘gift

co-authorships'. As quoted above, several institutions enacted ethical codes that persuade supervisees to grant co-authorship to their supervisors. Nonetheless, Community preference for extrinsic exchanges becomes apparent when we introduced vignettes with lower ambiguity on value-added.

Second, unconventional conceptions of “contribution” worth of co-authorship recognition emerged from this study. Several respondents elaborated lenient conceptions of “contribution” worthy of co-authorship recognition, what might suggest an attempt to justify the given institutionalized community practice of granting co-authorship based on extrinsic exchanges²⁸.

Third, there was a relatively low personal preference towards sole authorship, even when we offered low ambiguity and low power asymmetry situations. At these vignettes, respondents plainly admitted extrinsic exchange justifications, as “co-authoring with a senior researcher increases the publication odds” or “avoiding co-authorship with supervisor might yield a reputation of selfishness”. We may also observe that for many respondents “fairness” is grounded on local, dyadic negotiation, in spite of the negative externalities originated in ‘gift co-authorships’.

Finally, interaction at the classroom reproduces the supervisor-supervisee relationship in unexpected ways: the community is perceived as favoring automatic co-authorship with a discipline professor and most respondents embrace such practice as desirable. As shown in the quotes above, the classroom is frequently regarded as an extension of the supervision experience, where “co-supervision is negotiated” and “moral support and advice” are conquered. The blurred line between the figure of classroom professor and a member of the examination committee

²⁸ As individuals become socialized in a social setting, effort is invested in providing meaning to existing practices. The attached meanings to practices are not necessarily equal to the original meanings at the moment of establishment of the practices (Berger and Luckmann, 1967).

favors the emergence of “extended family” figures at the academic institution, beyond the supervisor²⁹.

In contrast with these findings, we should also draw interpretations from effects not observed in our analyses. Throughout the multinomial logistic regressions we failed to observe any significant association between the demographic variables and the behavior at the vignettes. Failing to observe these associations means that individuals’ personal beliefs (Opinion) and community perception (Community) vary weakly vis-à-vis seniority or formal institutional affiliation.

CONCLUSION

In this investigation, extrinsic exchange orientation is prevalent, although not completely determinant of behavior. Also, respondents held heterogeneous beliefs on what a worthy contribution is. We believe that institutional embeddedness matters in explaining such results. The lack of a formal ethics code at the national association coupled with current individuals’ interests and justifications favor the reproduction of extrinsic practices. To be sure, respondents’ personal opinions leaned slightly towards sole authorship, in comparison to their perceptions on the community practices. Discrepancy between individual opinion and community practice might spur conflicts that ultimately may lead to social change (Blau, 1964, p. 227). In the history of more institutionalized communities, such conflicts led to changes in the ethos of knowledge creation (Collins and Restivo, 1983). However, we lack evidence that such dissonance will eventually lead to change in behavior and institutionalized practices. Frequently, social change is

²⁹ Not surprisingly, Cummings (1996, p. 148) states that the relationship must be also protected from outside actors, including same academic unit professors.

blocked when the dominant players are able to keep the dominated apart and erode the odds of communication and collaboration.

As a limitation to the argument above, we know that change might be originated from other sources, rather than conflict events. As an example, individuals performing part or whole PhD research effort at foreign institutions might be socialized to favor intrinsic exchanges; also, the inter-connection of local universities and associations to international institutions within accreditation processes might increase the likelihood of intrinsic exchanges. Fine-grained specification of individuals' trajectories might help to explain individual variation. Needless to say, Brazil should not be regarded as an isolated "Galapagos", where individuals' behavior and perceptions are not influenced by international trends (Tilly, 1984). In the same token, the Brazilian case should be revisited in the future, especially if its community engages in establishing an ethics code. In that case, multi-level dynamics might be more apparent, including the interaction between national and international practices, conflict between the national ethics code and the universities' local policies, and finally individual resistance against the ethics code authority to legislate over co-authorship recognition on the grounds that it should be always determined by the involved dyad.

Our methodology was instrumental in embedding both power and ambiguity in decontextualized situations. The interaction of these concepts proved to be fruitful: high asymmetric power relations with low ambiguity were perceived as compatible, regarding the community shared practice, to high ambiguity and high asymmetric power relations, although personal opinion present a peak of discrepancy. Respondents provided the context that framed their interpretation of vignettes. As a result, this instrument might be useful in eliciting tacit knowledge on distinct contexts.

For the international community, we believe that the core contribution of this paper is the establishment of a methodology able to assess personal beliefs and institutionalized practices at research communities. As a consequence, future research might be able to adapt its vignettes to different contexts and expand the sampling to cover other localities, in order to build a full-fledged cross-country comparison. A cross-country research design might also incorporate cross-cultural value assessment of what is “worth” underlying co-authorship recognition (Lukes, 2008).

We also acknowledge potential complementary methodologies to our study. Because we used a survey with thinly contextualized vignettes, thick description approaches might help to challenge our implicit link between response and practice (Bourdieu, 1977, Geertz, 1973). Specifically crafted designs could try to focus on observing the interaction between individuals who hold different beliefs. Also, a focus on practice-oriented inquiry would help us to examine the extent that the criteria of “valuable contribution” are not conceived ex-post to co-authorship granting. In addition, fruitful dialogue might be established with adjacent approaches to the exchange theory. For instance, the psychological contract implied in co-authorship relations might be directly operationalized (Rousseau, 1995).

We also hope that this paper might have practical consequences at local, country and international levels (Van de Ven, 2007). By applying this survey, department chairs might use its results as a common ground to discuss the institution’s co-authorship policies. At the national and international levels, institutional entrepreneurs might advance discussions leading to the establishment of ethical codes.

REFERENCES:

- Agnon, S. Y. (1996) *Shira*. Syracuse, NY: Syracuse University Press. Translated from the Hebrew by Zeva Shapiro. 585 p.
- Arruda, M. (1999). A nova política de pós-graduação no Brasil. *Tempo Social*, 11(2): 219-229.

- Berger, Peter & Luckmann, Thomas. (1967). *The Social Construction of Reality*. New York: Anchor Books.
- Bartholomew, D. J., Steele, F., Moustaki, I., & Galbraith, J. I. (2002) *The analysis and interpretation of multivariate data for social scientists*. Boca Raton, FL: Chapman & Hall.
- Bertero, C. O. (2007) *Ensino e Pesquisa em Administração*. Coleção Debates em Administração. Thomson Learning, São Paulo, p.98
- Bertero, C. O., Caldas, M.P., Wood Jr., T. (1999) “Produção Científica em Administração de Empresas: Provocações, Insinuações e Contribuições para um Debate Local”. *RAC*, 3(1): 147-178
- Blau, P. (1964) *Exchange and Power in Social Life*, John Wiley & Sons, New York, 352 p.
- Bourdieu, P. (1977) *Outline of a Theory of Practice*, Cambridge University Press, Cambridge, 248 p.
- Brunner, D. D. (1991). Who Owns this Work?: The Question of Authorship in Professional/Academic Writing. *Journal of Business and Technical Communication*, 5, 393-411.
- Burns, T. R. (1990). Models of social and market exchange: toward a sociological theory of games and human interaction. In: Calhoun, C., Meyer, M.W., & Scott, W. R. (Eds.), *Structures of power and constraint: essays in honor of Peter M. Blau*, Cambridge University Press, New York.
- Cicourel, A. V. (1981) The Role of Cognitive-Linguistic Concepts in Understanding Everyday Social Interactions *Annual Review of Sociology*, v.7, p.87-106.
- Calhoun, C., Meyer, M.W., & Scott, W. R. (1990), *Structures of power and constraint: essays in honor of Peter M. Blau*, Cambridge University Press, New York.
- Collins, R. & Restivo, S. (1983). Robber Barons and Politicians in Mathematics: A Conflict Model of Science. *Canadian Journal of Sociology* . 8(2): 199-227.
- Cummings, L. L. (1996), “The Development of Doctoral Students: substantive and emotional perspectives.”, in Frost, P., Taylor, S. (Eds), *Rhythms of Academic Life*, Sage, Newbury Park, CA, pp.147-51.
- Flick, U. (2004) *An Introduction to Qualitative Research*. 3rd edition. Sage, Thousand Oaks, CA. 443 p.
- Geertz, C. (1973). *The interpretation of cultures: Selected Essays*. Basic Books, New York, NY, 470 p.
- Heffner, A. G. (1979). Authorship Recognition of Subordinates in Collaborative Research. *Social Studies of Science*, 9, 377-384.
- Hinings. C. R. & Greenwood, R. (1996), “Working Together”, in Frost, P., Taylor, S. (Eds), *Rhythms of Academic Life*, Sage, Newbury Park, CA, pp.225-237.
- Floyd, S.W., Schroeder, D.M., and Finn, D.M. (1994) “Only If I'm First Author”: Conflict over credit in management scholarship. *Academy of Management Journal*, 37(3): 734-747
- King, G., Keohane, R, Verba, S. (2001). *Designing Social Inquiry*. Princeton University Press, Princeton, NJ, 300p.

- Kohlberg, L. (1969). "Stage and sequence: The cognitive-developmental approach to socialization." In: D. A. Goslin (Org.), *Handbook of socialization theory and research*, New York, Rand McNally. pp. 347-473.
- Kramer, R.M., Martin, J. (1996), "Transitions and turning points in faculty-doctoral student relationships", in Frost, P., Taylor, S. (Eds), *Rhythms of Academic Life*, Sage, Newbury Park, CA, pp.165-80.
- Lukes, S. (2008). *Moral Relativism*. Picador, New York, NY, 208 p.
- Manton, E. J., & English, D. E. (2008). An Empirical Study of Gift Authorships in Business Journals. *Journal of Education for Business*, 283-287.
- Mauss, M. (1967). *The Gift: forms and functions of exchange in archaic societies*. New York: Norton.
- Menard, S. (2001). *Applied logistic regression analysis*. Sage University Papers Series on Quantitative Applications in the Social Sciences. Thousand Oaks, CA: Sage, 111p.
- Möllering, G. (2006). *Trust: Reason, Routine, Reflexivity*. Bingley, UK. Emerald Group Publishing. 230 p.
- Patton, M. (2002) *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage, 598 p.
- Raz, J. (1999). *Engaging reason : on the theory of value and action*. Oxford ; New York: Oxford University Press. 336 p.
- Reynolds, H. T. (1984). *Analysis of nominal data*. Beverly Hills, CA: Sage, 85 p.
- Rousseau, D. (1994). *Psychological Contract in Organizations: understanding written and unwritten agreements*. Newbury Park, CA: Sage. p.
- Suchman, M. C. (1995) "Managing Legitimacy: Strategic and Institutional Approaches", *Academy of Management Review*, Vol. 20, No. 3, pp. 571 - 610.
- Swidler, A. (2001a). *Talk of Love: How Culture Matters*. Chicago: Chicago University Press.
- Swidler, A. (2001b) "What Anchors Cultural Practices" in Theodore R. Schatzki, Karin Knorr Cetina and Eike von Savigny (eds.), *The Practice Turn in Contemporary Theory*. London: Routledge, pp. 74-92.
- Tashakkori, Abbas & Teddlie, Charles. (1998) *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Sage, Thousand Oaks, CA. 185p.
- Tenenhaus, M. (1985) An analysis and synthesis of multiple correspondence analysis, optimal scaling, dual scaling, homogeneity analysis and other methods for quantifying categorical multivariate data. *Psychometrika*, 5(1): 91-119.
- Thevenot, L. (2001) "Pragmatic regimes governing the engagement with the world." In: Schatzki, T. R.;Knorr-Cetina, K., et al (Orgs.). *The practice turn in contemporary theory*. New York, NY, Routledge, pp.56-73.
- Tilly, C. (1984). *Big Structures, Large Processes, Huge Comparisons*. Russell Sage Foundation, New York, NY, 176 p.
- Whetten, D.A. (1989): "What constitutes a theoretical contribution?", *Academy of Management Review*, 14(4): 490-495

Williamson, Oliver. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press. 286 p.

Wuchty, S.; Jones, B. F.; Uzzi, B. (2007). "The Increasing Dominance of Teams in Production of Knowledge". *Science*. 316(5827):1036 - 1039

Van de Ven, A. (2007). *Engaged Scholarship: a guide for organizational and social research*. Oxford, Oxford University Press, 330 p.

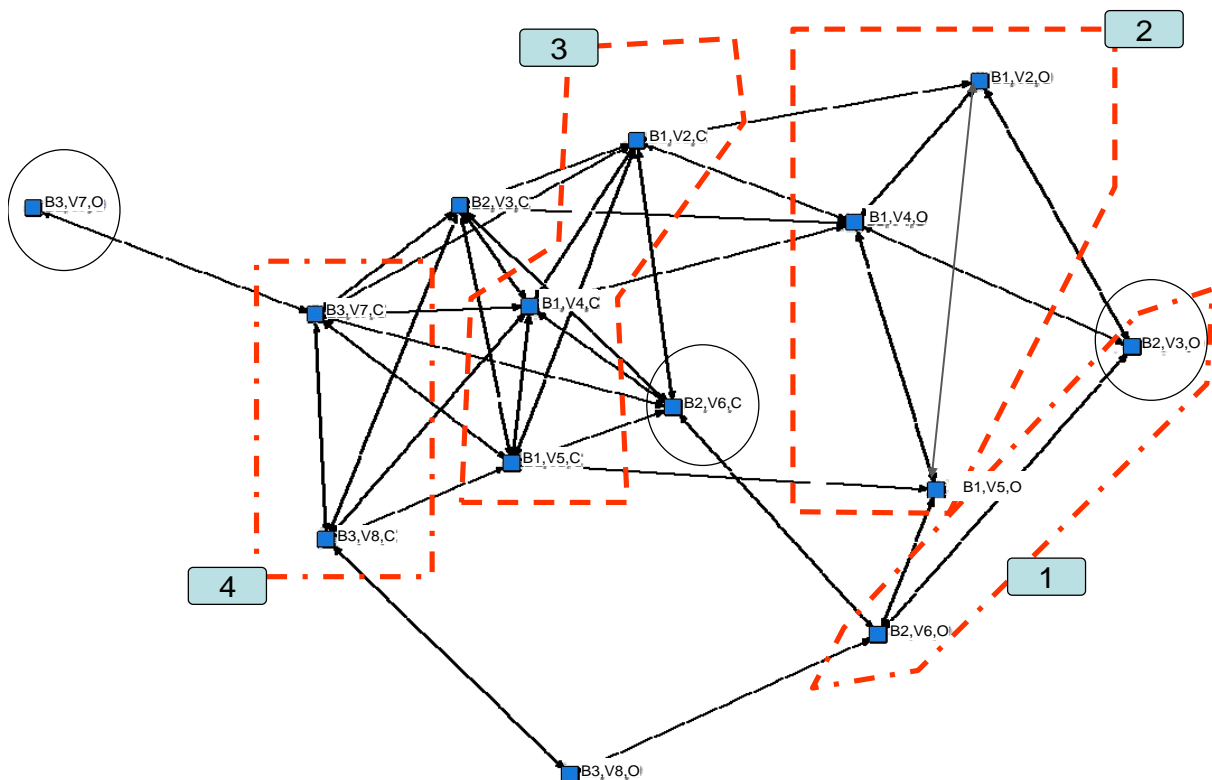
Van Dyne, L. (1996). Mentoring relationships: A comparison of experiences in business and academia. In P. J. Frost & M. S. Taylor, (Eds.), *Rhythms of academic life: Personal accounts of careers in academia*, Sage, Newbury Park, CA, pp.158-63.

Yeung, King-to. 2005. "What Does Love Mean? Exploring Network Culture in Two Network Settings." *Social Forces* 84: 391-420.

Zerubavel, E. (2006). *The elephant in the room : silence and denial in everyday life*. New York: Oxford University Press.

APPENDIX

Figure 1 – Relations among the transformed variables



Notes: “B” stands for block; “V” stands for vignette; “O” stands for opinion; and “C” stands for community. We refer to nodes in the Bi, Vj, O or Bi, Vj, C nomenclature, where *i* varies from 1 to 3, and *j* varies from 1 to 8.

Table 1 – Cross-tabulation between Opinion and Community for each vignette

	Opinion	Community			
		“a”	“b”	“c”	Total
Vignette 1	“a”	0%	0%	1%	2%
	“b”	1%	21%	16%	37%
	“c”	2%	20%	39%	61%
	Total	3%	41%	55%	N= 235
Vignette 2 (Block 1)	“a”	5%	8%	6%	18%
	“b”	1%	49%	15%	65%
	“c”	0%	5%	11%	17%
	Total	6%	61%	32%	N= 222
Vignette 3 (Block 2)	“a”	18%	19%	18%	55%
	“b”	1%	22%	11%	34%
	“c”	1%	4%	7%	11%
	Total	20%	45%	35%	N= 215
Vignette 4 (Block 1)	“a”	26%	24%	20%	70%
	“b”	1%	16%	4%	22%
	“c”	0%	1%	7%	9%
	Total	28%	42%	31%	N= 209
Vignette 5 (Block 1)	“a”	18%	14%	10%	42%
	“b”	3%	30%	11%	44%
	“c”	2%	3%	8%	14%
	Total	24%	47%	30%	N= 206
Vignette 6 (Block 2)	“a”	6%	21%	8%	35%
	“b”	1%	33%	11%	46%
	“c”	0%	3%	16%	19%
	Total	8%	58%	34%	N= 206
Vignette 7 (Block 3)	“a”	24%	9%	9%	42%
	“b”	4%	22%	8%	34%
	“c”	1%	3%	19%	24%
	Total	29%	34%	37%	N= 204
Vignette 8 (Block 3)	“a”	16%	18%	21%	54%
	“b”	1%	10%	10%	21%
	“c”	1%	1%	23%	24%
	Total	18%	28%	54%	N= 156

Note: The numbers in each cell refer to frequencies in percentage, absolute number of respondents in the bottom right corner of each vignette’s section. Frequencies in bold are the highest totals (for **Opinion** total column, or **Community** total line, or **Opinion by Community matrix**) or the highest cross-tabulated frequency on the respective vignette.

Table 2 – Correlation matrix of the transformed variables

Vignette	V2,O	V2,C	V4,O	V4,C	V5,O	V5,C	V3,O	V3,C	V6,O	V6,C	V7,O	V7,C	V8,O	V8,C
B1,V2,O	1													
B1,V2,C	0.359	1												
B1,V4,O	0.342	0.300	1											
B1,V4,C	0.096	0.417	0.371	1										
B1,V5,O	0.300	0.115	0.348	0.162	1									
B1,V5,C	0.078	0.473	0.222	0.419	0.335	1								
B2,V3,O	0.363	0.094	0.307	0.198	0.215	0.125	1							
B2,V3,C	0.184	0.555	0.340	0.546	0.268	0.418	0.229	1						
B2,V6,O	0.205	0.218	0.183	0.133	0.333	0.215	0.212	0.216	1					
B2,V6,C	0.130	0.490	0.175	0.466	0.242	0.503	0.101	0.464	0.478	1				
B3,V7,O	0.156	0.214	0.172	0.159	0.110	0.153	0.256	0.188	0.251	0.195	1			
B3,V7,C	0.026	0.340	0.062	0.332	0.088	0.316	0.020	0.373	0.121	0.335	0.493	1		
B3,V8,O	0.136	0.081	0.107	0.070	0.178	0.075	0.134	0.146	0.303	0.239	0.204	0.147	1	
B3,V8,C	0.023	0.238	0.195	0.320	0.159	0.334	0.110	0.383	0.149	0.300	0.233	0.363	0.313	1

Notes: “B” stands for block; “V” stands for vignette; “O” stands for opinion; and “C” stands for community. Correlations in bold were considered relevant to the study under the criterion of being equal to or greater than 0.30.

Table 3 – Multinomial logistic regression for the opinion for vignette 3

<i>B2, V3, O</i>		Parameter Estimate
"b"	<i>Constant</i>	-3.156**
	<i>B1, V2, O "b"</i>	3.194**
	<i>B1, V2, O "c"</i>	0.283
	<i>B1, V4, O "b"</i>	1.236**
	<i>B1, V4, O "c"</i>	1.410
	<i>B2, V6, O "b"</i>	1.779**
	<i>B2, V6, O "c"</i>	1.105*
	"c"	<i>Constant</i>
<i>B1, V2, O "b"</i>		17.983**
<i>B1, V2, O "c"</i>		19.324**
<i>B1, V4, O "b"</i>		0.600
<i>B1, V4, O "c"</i>		1.607*
<i>B2, V6, O "b"</i>		1.741*
<i>B2, V6, O "c"</i>		1.656*

Notes: "B" stands for block; "V" stands for vignette; "O" stands for opinion; and "C" stands for community. The reference category for the response variable is "a". The reference category for the predicting variables is "a". 206 observations.

Table 4 – Multinomial logistic regression for the opinion for vignette 6

<i>B2, V6, O</i>		Parameter Estimate
"b"	<i>Constant</i>	-2.197**
	<i>B1, V5, O "b"</i>	0.177
	<i>B1, V5, O "c"</i>	-0.014
	<i>B2, V3, O "b"</i>	2.067**
	<i>B2, V3, O "c"</i>	1.868*
	<i>B2, V6, C "b"</i>	1.728*
	<i>B2, V6, C "c"</i>	1.490*
"c"	<i>Constant</i>	-2.743*
	<i>B1, V5, O "b"</i>	-1.115*
	<i>B1, V5, O "c"</i>	0.224
	<i>B2, V3, O "b"</i>	1.236*
	<i>B2, V3, O "c"</i>	1.982*
	<i>B2, V6, C "b"</i>	0.860
	<i>B2, V6, C "c"</i>	3.286**

Notes: "B" stands for block; "V" stands for vignette; "O" stands for opinion; and "C" stands for community. The reference category for the response variable is "a". The reference category for the predicting variables is "a". 188 observations.

Exhibit 1 – Vignettes offered to respondents

<p>Vignette 1: SUPERVISEE and SUPERVISOR share the tasks related to the elaboration of the article “Simmel and the Secret Santa”. SUPERVISEE writes up the empirical section, while SUPERVISOR helps SUPERVISEE in the analysis, conclusion writing and theoretical framework. The article is not related to the SUPERVISEE’s thesis.</p>
<p>Vignette 2: SUPERVISOR and SUPERVISEE send the article “Beta-Coefficient Calculation in Art Markets” to a conference. SUPERVISEE wrote the paper’s theoretical, empirical and conclusion sections, based on his research under supervision of his SUPERVISOR. The article is part of SUPERVISEE’s thesis.</p>
<p>Vignette 3: SUPERVISEE writes a course’s final paper and asks to her SUPERVISOR whether it is worthy submitting to the conference “Life-World and the Cruelty of Everyday Life”. SUPERVISOR advises that it is worth submitting, and suggests the insertion of few references.</p>
<p>Vignette 4: SUPERVISEE writes up a chapter of his thesis called “Wittgenstein in the Consumption of Symbolic Goods” and intends to submit it to a conference. Due to several time constraints, SUPERVISOR is unable to read the work.</p>
<p>Vignette 5: Upon the completion of the thesis “Prolegomena for the Scientific Conditions of Co-Authoring in Emerging Fields” and correspondent commemoration, SUPERVISEE reviews alone the thesis chapters, leading to their publication in scientific journals.</p>
<p>Vignette 6: PROFESSOR asks STUDENT to submit a final course’s papers to a conference with his name as a co-author. During the course, PROFESSOR provided several relevant bibliographical references, which the STUDENT included in the paper.</p>
<p>Vignette 7: SENIOR RESEARCHER and M.A. STUDENT are not located in the same institution. Nonetheless, STUDENT sends his working paper “The Circular Archipelago of Kulak” to SENIOR RESEARCHER and asks for his improvement tips. SENIOR RESEARCHER sends back a ten lines long advice e-mail, implying that he appreciated the paper. The STUDENT improves the paper and sends it over to a conference.</p>
<p>Vignette 8: RESEARCHER “A” holds a contract with a book editor. The book will be called “Blau for Managers”. “A” invites RESEARCHER “B” to participate with a chapter in this book. The chapter elaboration, however, is under B’s complete responsibility.</p>

Note: translated from the original questionnaire in Portuguese

Exhibit 2 – Expected choices for vignettes

Block	Vignettes	Expected Choice	Rationale
1 (highly ambiguous and high power asymmetric situations)	Vignettes 2, 4 and 5	<ul style="list-style-type: none"> • “c”* (mostly vignette 2) • “a” probably more present at Vignettes 4 and 5* 	Standard supervisor-supervisee relationship with high ambiguity regarding the advisor’s contribution. Vignettes 4 and 5 are less ambiguous.
2 (non-ambiguous and high power asymmetry)	Vignettes 3 and 6	<ul style="list-style-type: none"> • “a”* • “b” (compulsory co-authorship recognition in power asymmetric) 	Situation involving a focal author (supervisee or student) with low ambiguity regarding the contribution of non-focal

		situations)	author. Non-focal author holds prominent authority position (supervisor or discipline professor).
3 (non-ambiguous and low power asymmetry)	Vignettes 7 and 8	<ul style="list-style-type: none"> • “a”* • “c” (negotiation allowed in extrinsic exchange orientation, without Power asymmetry) 	Situation involving a focal author with low ambiguity regarding the contribution of non-focal author. Non-focal author holds no explicit power over focal author.

Notes: “a” means that focal researcher should be the only author; “b” means that focal researcher should be the first author; and “c” means that focal author and non-focal author must negotiate the co-authorship recognition. Vignette 1 not included in any block.

* Intrinsic exchange orientation