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Can methodological requirements be fulfilled when studying concealed or unethical research objects? The case of astroturfing

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Abstract: Scientific soundness is key in the development of research designs. Methodological choices bear the responsibility to demonstrate its obtainment. However, it is challenging to abide by these standards while dealing with hidden, masked or unethical objects. In this article, we share the various strategies employed to aim at a sound scientific process in spite of astroturfing's characteristics and of the methodological orientations it dictates. Facing the dilemma between the importance of scientific value and the richness of inductive and exploratory approaches, we question the influence of positivist research standards in communication studies. We fear these requirements may limit their development.

Keywords: astroturfing, methodology, exploratory research, scientific paradigm

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De la difficile application des standards méthodologiques aux objets de recherche camouflés ou à l'éthique discutable: le cas de l'astroturfing

Résumé: La quête de la scientificité est au cœur du design d'une recherche et les choix méthodologiques en sont majoritairement tributaires. Toutefois, les objets de recherche masqués ou à l'éthique discutable posent des défis particuliers. Cet article expose les stratégies déployées en dépit des caractéristiques de l'*astroturfing* et des orientations méthodologiques qu'il impose. Le dilemme entre les exigences de la scientificité et la richesse des approches inductives et exploratoires, en fût la toile de fond. Nous terminons en questionnant l'influence exercée par le paradigme

positiviste sur les études en communication, craignant qu'il en restreigne le développement plutôt que de le stimuler.

Mots-clés: *astroturfing*,   méthodologie,   recherche   exploratoire,   paradigme scientifique

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1. Methodological Standards in Communication Studies

Communication studies are a relatively new field of study and sometimes, struggle to define themselves for being so closely related to other disciplines (sociology, psychology, etc.). One way for a discipline to gain credibility is to demonstrate its scientific soundness. For a long time, the idea of scientific research has been related to natural science. It advocates science as an objective process relying on experimentation that succeeds to predict conclusions, determines causal relations and demonstrates theories empirically (Hempel, 1966). Today, scientific paradigms are numerous and this traditional paradigm is sometimes referred to as positivist epistemology (Kuhn, 1999). This particular vision of science is deeply inlaid in popular belief and in scholar's vision of research. Even if communication studies objects' and subjects' differ from those of natural science, they aim at the same general goals: validity, generalization and theory building.

In the last decades, it was demonstrated and recognized that scientific processes can be adjusted to topics, fields and research objects, and still create valid data leading to generalization and theory. It can be illustrated by the endorsement of qualitative research (Savin-Baden, 2013) and of inductive approaches such as grounded theory (Corbin, Strauss, 2008). Although they do not lead to confirmatory results, they are considered as valid and useful. Yet, some scholars perceive these approaches strictly as preliminary steps, providing insights for a truly sound scientific methodology, which relies on a hypothetical-deductive design. This ambivalent acceptance of these epistemological and methodological approaches causes a few complications to communication studies' aim at scientificity. It is particularly true in the investigation of cloaked, concealed or unethical communication strategies, which constitute an emerging research topic.

In this article, we share the methodological questioning experienced while researching a hidden research object: astroturfing. We defend the idea that for some objects or subjects, scientific value can and should be envisioned differently than the pathway paved by natural sciences. We also hope to open a discussion about the invisible but present pressure on scholars to respect some methodological standards and its impact on researchers' choices, which inevitably affects our societies.

2. The Astroturfing Phenomenon

Astroturfing is an American neologism referring to the creation of fake grassroots strategies. Coined in the mid 80's by Lloyd Bentsen, then senator of Texas, the term is used to compare authentic grassroots campaigns to other public relations, political or advertising campaigns that pretend to emanate from citizens, but do not. Astroturf® being the brand name of synthetic grass used on sports fields, this pun was quite ingenious. Indeed, many politicians, scholars and professionals adopted it. An astroturfing strategy is characterized by two specific facts. First, its true source is hidden. Second, it suggests that citizens created it and/or that it strictly defends citizens' interests, without pursuing other self-serving goals. Actually, actors who refuse to show their credentials or admit their real goals initiate these strategies.

Numerous cases of astroturfing are denunciated daily. Ghostwriters sending letters to editors (Oostveen, 2008), massive support for a project staged by using databases, people hired to demonstrate support in the streets (Gittlitz, 2013), people paid to write fake reviews on products or services on crowdsourcing sites (Lee *et al*., 2013), creating a front group (Johnson, 2009), etc. Astroturfing is not an entirely novel phenomenon. « This sort of operation was almost unheard of fifteen years ago, yet in the US today 'where technology makes building volunteer organization as easy as writing a check' it has become 'one of the hottest trends in politics' » (Faucheux, 1995, p. 20), but the field's observation tells us it might have been an upsurge in the last few decades (Boulay, 2012b).

Many reasons lead us to choose astroturfing as a research object. The need to study astroturfing is obvious since its strategies usurp citizens' identity. Doing so, not only does it disseminate deceitful messages in the public sphere, but it also benefits from the credibility and empathy usually attributed to citizens' participation and communications. These advantages ease the influence of government, media and public opinion, through agenda-building or agenda-setting (Boulay, 2012a). Accordingly, astroturfing bestows power to several actors without the knowledge of others. Finally, these strategies may have several incidences on democratic processes and democracy itself, whose cornerstone is the citizen, its rights, values, opinion, etc. (Boulay, 2013).

3. Research Design Creation and Execution

3.1. *Astroturfing's Features as a Research Object*

By essence, astroturfing has unusual specifications for a research object. Its success is based on secrecy and its initiators want to stay anonymous. The effective astroturfing strategy is the one nobody notices. Moreover, many observers consider

it an unethical strategy. Consequently, no organization or professional will voluntarily share its latest coup or best practice[1]. Hence, the only way to study astroturfing is to rely on denunciations.

Astroturfing's features lead to a few methodological challenges. First, no piece of literature offers a research design dedicated to astroturfing as a phenomenon or one that could inspire us in the study of concealed communication strategies. Another difficulty is that no definition is consensual in the literature. Moreover, many other expressions were invented to refer to astroturfing or similar strategies (undercover marketing, sock-pupetting, front groups, flogging, cloaked websites, etc). We decided to focus on the practices identified as astroturfing. This allows us to define clearly the field of study and limits researcher's subjectivity in the data gathering. However, the research's biggest challenge is finding data about astroturfing cases. McNutt and Boland explain this difficulty: "These will be difficult entities to study because they are identified only when they become ineffective. Standard approaches to […] sampling won't work. […] Insiders would probably consider this as client confidentiality or trade secrets." (2007, p. 7).

Indeed, direct observation or interviews are not possible. The research can only be based on denunciations from secondary sources (whistleblowers, journalists, activists, politicians, citizens, etc.). Hence, we need to remember that each source has its own agenda and therefore a bias.

3.2. *An Inductive, Exploratory and Qualitative Research*

Needing to develop our own research design, we opted for an inductive, exploratory and qualitative approach. There are many conceptions of induction and opinions about it (Peirce, 1868; Holland (Ed.), 1986), but it generally refers to a scientific process primarily developed around the field or data sources and guided by them, even through the interpretation (Corbin, Strauss, 2008). Our vision is closely related to Mill's (1843) where induction is a research process based on experiment, a step toward generalization. We see it as an important part of a scientific process.

These standpoints oriented us toward an exploratory research design. "Researchers explore when they have little or no scientific knowledge about the group, process, activity, or situation they want to examine, but nevertheless have reason to believe it contains elements worth discovering" (Stebbins, 2001, p. 6). It is a fruitful methodological approach and one of the less restrictive. We see this type of research as a step toward concatenation, which could validate the choices made during exploratory research and, at some point, allow predictive hypothesis (Burton & Steane, 2004, 18). However, exploratory designs bring many challenges because

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[1] There is one exception in the article signed by Lyon & Maxwell (2004), where they discuss the return on investment of three strategies: lobbying, bearhugging and astroturfing.

of the numerous decisions to be taken throughout the project, without similar studies to draw from.

Closely related to inductive approaches are qualitative approaches. They are preferred to quantitative approaches when the need is to comprehend a situation and find the most significant elements in it (Mongeau, 2008, p. 30). Data emerging from qualitative research are especially rich because they rest on opened data collection techniques instead of closed ones. The virtue of such data is that they might reveal facts, imply correlations or even, a main idea or concept, contributing to a general understanding (Grawitz, 2001, p. 554-555).

Inductive, exploratory and qualitative approaches are the best of choices to study a barely known, secret or hidden research object. These epistemological and methodological choices give the researcher a lot of liberty and some may say, many opportunities for subjectivity to enter the scientific process (Taft, 2004, p. 99). Regarding subjectivity, we support Maxwell's viewpoint that "it is not possible for an account to be independent of any particular perspective" (2002, p. 43). Yet, this does not mean we do not acknowledge the influence of subjectivity. Rather, we conceive the role of the researcher as betterment in the research, as Ward Shofield presents it. "The goal is *not* to produce a standardized set of results […]. Rather, it is to produce a coherent and illuminating description of and perspective on a situation […]" (2002, p. 173).

3.3. *Research Design*

The main research goal is to get a better understanding of the astroturfing phenomenon and hopefully, to sketch a preliminary description of it. To do so, we need to reveal a maximum number of cases to analyze and to compare. Doing so, we could get a glance at some explanations of the phenomenon, an important step toward confirming causal relations (Grawitz, 2001, p. 631). In the next paragraphs, we summarize the research design we developed and focus on the precautions we took to overcome the possible critics that could arouse regarding exploratory and qualitative researches, as well as the features of the chosen object. As a scholar, it is crucial to work with tools, techniques and processes that will be considered valid by fellow researchers.

The starting point is to gather information about astroturfing cases. We selected the World Wide Web as our documentary source. The Web is a platform giving us access to multiple sources, emanating from many actors of society. In the case of an exploratory research, the sample quality and representativeness are paramount of the research and to lead to greater data reliability (Gilles, 1994, p. 54). To generate a large, inclusive and diversified sample, we searched on the Google engine with the words 'astroturfing' and 'astroturf'. The search engine produced a list of 1000 URL linked to pages referring to astroturfing. We read the documents related to 170 links

out the first 500 links. They were selected systematically and randomly (Bardin, 2007, p. 127), to refrain from introducing the search engine's bias in our sample. Each document that referred to an astroturfing case and whose source's authenticity could be validated was selected and put aside.

Throughout this first encounter with the data, we built 61 cases, each supported by at least two documents. The 178 documents composing the sample are of various natures: articles from traditional media (newspapers, magazines), extracts from websites, publications from private, associative or community organizations, extracts from blogs, social media or publications from interest groups, think tanks, etc. This variety is positive because qualitative researches relying on multiple information sources tend to be more representatives (Taft, 2004, p. 106). It is also reassuring to the fact that the sources biases are offset by each other.

Documents offer an abundance of information from which data is extracted. We organized our analysis around variables usually related to communication theories (Lasswell, 1942; Shannon, 1948). Each of the 13 variables we studied became an open question to the cases and brought us information items. Categories, which are considered a result in exploratory research, were pulled from these numerous items. Categories offer fundamental intelligence about astroturfing. Because of their significance, we decided to validate them. We then orchestrated a second phase of analysis using the second half of the 1000 URL we drew out of www.google.ca, and meticulously respected the steps followed for the first stage. This process provided us with 370 new documents, 38 new cases, and no new category. This confirms the saturation of the categories, which also validates the size and representativeness of the corpus (Mongeau, 2008, p. 94). This is very significant because the more representative the sample, the more generalizable the results (Stebbins, 2001, p. 40).

Facing a corpus created in two phases, we validated the quality of the content analysis by checking the coding stability as suggested by Krippendorf (1980, p. 130-154). Hence, we coded the totality of the information items for a second time and less than 1% of the coding changed. Finally, we are confident in the validity of the results because the variables attendance rate was excellent. In total, the research was based on 548 documents, constituting 99 cases of astroturfing.

In sum, many decisions were made and actions undertaken to design a research as sound as possible scientifically speaking. But still, it was impossible to verify the truthfulness of the information conveyed by the data because we worked with secondary sources. Yet, during the research process we realized that such corroboration was not necessary perforce. In most cases, the content of the documents was quite explicit as to how they proved the existence of astroturfing: IP addresses cited, scans of official documents, video captations, etc. In addition, the majority of denunciations came from traditional media (*The New York Times, The Guardian, La Presse*). Our consideration for their professionalism secures us as to the veracity of the facts they disseminate. In the end, even if we had interviewed the

people implicated, they would have denied their part in the astroturfing strategy, as is usually the case when they face the media.

4. Looking Backward from Another Standpoint

The dilemma between the need to properly adapt the research design to the object and to respect the methodological standards requested by institutions, peers and journals, has been a constant preoccupation during the research. We felt we were mingling two research paradigms, not being truly scientific and not entirely assuming an inductive and exploratory approach. We know we could have wagered for the latter. Indeed, many scholars argue that scientificity may stand somewhere else than in the traditional, positivist scientific paradigm. From their perspective, validity and generalization can be interpreted in many ways. For Brinberg & McGrath, "Validity is not a commodity that can be purchased with techniques… Rather, validity is like integrity, character and quality, to be assessed relative to purpose and circumstances" (1985, p. 13). The quest for validity demonstration is also of less importance for Wolcott who postulates that in qualitative research comprehension is far more important than confirming relations (1990, p. 146). For him, validity is rather a state of mind, an end. Goetz & LeCompte construe validity in qualitative research through comparability and translatability (1984, p. 228). Comparability is also important to Ward Shofield who defines it as "the degree to which components of a study - including the units of analysis, concepts generated, population characteristics, and settings - are sufficiently well described and defined that other researchers can use the results of the study as a basis for comparison." (2002, p. 179). Translatability is the need for an exhaustive description of the researcher's theoretical standpoints and the methodological techniques selected, so it can be taken into account by others, as they make their own opinion about the research.

Results' generalization is one of research's main ambitions. Gained by a thorough sampling, aleatory corpus creation, unbiased data gathering and objective analysis process, generalization does not imply that there is only one best way to get to data. More than that,

"They [researchers] do not expect other researchers in a similar or even same situation to replicate their findings in the sense of independently coming up with a precisely similar conceptualization. As long as the other researchers' conclusions are not inconsistent with the original account, differences in the reports would not generally raise serious questions related to validity or generalizability" (Ward Shofield, 2002, p. 174).

Hence, generalization rests on a research design more than on its results.

Stebbins (2001) asserts the value of exploratory researches, even if he avers the impossibility to verify an exploratory research's validity, saying their results are always hypothetical (Stebbins, 2001, p. 40). "The question of validity in exploratory research, which goes at times by the name of credibility, refers to whether a researcher can gain an accurate or true impression of the group, process, or activity under study and, if so, how this can be accomplished" (Stebbins, 2001, p. 48). He argues that it is only through concatenation that the researcher can gain confidence (or not!), that his previous researches were valid.

In sum, theoretical stance about requirements to ensure validity and generalization are multiple. We deem that each research object, design or technique has to be evaluated independently. All these authors made us realize that wanting to prevent critiques; we took precautions that were probably not necessary. Even if the research was challenging, dealing with a hidden object and very little amount of scientific knowledge available, we could have adopted these standpoints to defend another methodological pathway.

5. Which Aftermath for Communication Studies and the Societies they Contribute to?

Conducted as described earlier, the research received positive feedback by peers. The project was commended for investigating an occult and unethical object, for the profusion of collected data and for the many research tools it offered to other scholars (models, typology, categories, and so on) Still, the fact that it is based on secondary sources is always considered a weakness. This inevitable research characteristic, which is shared by many (if not all) unethical or masked research objects, casts a doubt about the research's soundness and its results.

On the bright side, it confirms our instinct's relevance. It also reinforces our decision to weave as much verification as possible in the research design. That pressure we felt could be felt by other scholars and, under some circumstances, may have further influence. Emerging scholars or teams submitting for major funding may not risk being dismissed for methodological reasons. Could methodological requirements restrict the variety of research objects to the extent of leaving some out of our scope? The quest for scientificity can creep in tiny and big decisions but its repercussions on research development are impossible to measure. We fear the limits researchers impose themselves may cause more harm than good to knowledge development.

This self-censorship can impact on communication studies development, but more importantly it limits the enlightenment it can bring to society. The particular case of astroturfing is revealing. In the communication industry, be it in public

relations, political communication or marketing communications, astroturfing is an open secret (Krashinsky, 2009). The lack of publicity about it profited to the organizations that initiate or manage these strategies, detrimental to doubly cheated citizens whose identity is usurped (Fitzpatrick, Palenchar, 2006) and who receive fraudulent messages conveyed under fake identities (Cho et *al*., 2011; Sweester, 2012).

This article is not advocating for the exclusion of methodological requirements in communication studies. It simple argues that, as a scholar community, we need to accept and stimulate all types of research if we do not want the quest for positivist scientificity to dictate scholars' work and research programs.

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