Discovery Starts Here?
The "Pulsar Paper", Thirty Years On – An Ethno-bibliometric Note

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Introduction

"The ineluctable modality of the visible: at least that if no more, thought through my eyes", James Joyce (2000 [1922]:45).

The "pulsar paper" was published 30 years ago. The anniversary of an important text frequently provides an opportunity to assess or, at least, appreciate its academic influence. In the limited scope of this note, we cannot hope to offer a review article. Instead we would like to reflect upon what such a review or appraisal may mean and amount to, especially against the background of a parallel development in the period considered: the rise of evaluative bibliometrics via citation counts, rather than sustained reading, as a distinct set of procedures for assessing, by way of *proxy*, the academic influence of a text, thus identifiable as a "Citation Classic®"[1].

Evaluative bibliometrics, notwithstanding or precisely because of the "trust in numbers" (Porter, 1995) it seems to rely upon, is becoming a normal and ordinary practice in many quarters of the social sciences. As such, it has been repeatedly and cogently criticized, but, it has to be noted, without much effect on its development. Most of the criticism has targeted the opaque production of bibliometrical data and their institutional use (e.g., for "performance assessment"), leaving almost ignored the phenomenon of their practical reception, interpretation and understanding by academics working in the charted field. One exception is Gläser and Laudel (2007), who contend that the widespread use of its central techniques has resulted in "amateur bibliometrics", which falls short of scientific and professional rigor[2].

Instead of offering a descriptive account or additional critique of the uses and abuses of bibliometrical data by professional bibliometricians and university leaders, we propose to explore what W. Sharrock and B. Anderson (this issue, p. 47) term the "analytic potentiality of ignorance". They focus on discovering work in mathematical reasoning – that is, the intricate work through which, after an initial experience of "alienness and separation", the novice practitioner *cum* ethnographer of "encountered math" progressively finds a distinctive "organisation to activities, knowledge and practices", thereby revealing "some of the ways that bodies of knowledge and associated activities make themselves accessible, comprehensible and

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[1] To a point where readers, even if the text hasn't been cited explicitly, may immediately identify it (e.g., Garfinkel et al., 1981). Contrarily to what the registered trademark symbol suggests, this identification doesn't hinge upon the purchase and use of a particular commercial product, such as the use of the "Science Citation Index®" (*SCI*). Rather, the usability of the latter appears to trade on ordinary academic competencies, as at least this introductory paragraph suggests.

[2] For an alternative approach in terms of SSK, see Woolgar (1991), or a statistical critique, see Adler et al. (2008) and for a historical appreciation, see Garfield (1998).

utilizable by anyone who comes to them" (ibid.)[3].

Sharrock and Anderson's elegant shorthand for the investigated phenomenon is worth repeating: "*culture as display*" – that is, "an organisation made available in and for reporting" (ibid., p. 48, emphasis added).

Accordingly, this note attempts to turn bibliometrical data, as obtained and displayed, into an explicit topic of attention. This is done by inspecting, from within the practical courses of reading that the encountered data afforded us with (Livingston, 1995a), what a first (ethno-) bibliometric appreciation of the pulsar paper's academic influence may amount to. This reflectively analytic focus, most probably, should call into question any reductively enumerative tracking of "academic influence" by bibliometric proxy, an issue taken up in conclusion[4].

The tentative work of a citation search and its heuristic potential

As textual material, bibliometrical data may be considered as "cultural objects" that are made meaningful through distinctive and distinctively identifiable reading practices[5].

At present, we will account for the mundane read-ability of a list of articles citing the pulsar paper in terms of R. Watson's (1997:89) analytic distinction between how a text - here: a citation list - is organized so as to pre-dispose its readers for an "expected reading" (**I**) and how it is

(or may be) actually read, in line with or against that expectancy or "preferred reading" (**II**). In other words, we have attempted to figure out what *reading proposal* the citation list afforded us with, before engaging in and reflecting upon *particular courses of reading* the pulsar paper's academic influence "into" and "out of" the list. "Evaluative bibliometrics" is thus examined as an "epistopic" (Lynch, 1993) in and of *ad hoc* reading practice.

Which list? Space limitations invited us to focus on one single, list-generating operation and an initial, default selection of its bibliometric results: the first two pages of citations listed for the pulsar paper, as performed on 12 November 2011. The citation search is one of the basic operations, made available and accessible through the searchable database of the *Web of Knowledge*® (*WoK*), the bibliographic database hosted and regularly updated by the Institute for Scientific Information® (ISI)[6].

Our choice of the *WoK* for this note was based on its leading position in bibliometrics worldwide, as well as its ready availability at our home institutions. As yet, we haven't taken into account that search results may vary according to institutional subscription level (see Derrick et al., 2010). Simply, we delegated the citation search to one of us for him to share his results, whatever they may turn out to be. Our attention, indeed, was attracted to the *WoK* by an advertisement on its website: "Discovery starts here" (see http://thomsonreuters.com/content/news_ideas/articles/science/6541361). This note, then, is a first attempt, on our behalf, at figuring out what the promising advertisement may amount to in terms of list reading practices: what would a

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[3] For a recent emphasis on the heuristic potential of the novice stance, see Livingston (2008:132).

[4] For a recent discussion and empirical investigation of "numero-politics" in various areas of science and society, see Martin and Lynch (2009).

[5] Ethnomethodological studies of reading include Barthélémy (1999); Bovet (1999); Livingston (1995); McHoul (1982); Watson (1997, 2009); Widmer (1999).

[6] The database includes, in addition to the *SCI*, the "Social Sciences Citation Index®" (*SSCI*) and the "Arts and Humanities Citation Index®" (*AH&CI*). For a short history of the ISI and its promotion of citation statistics, see Cole (2000).

"bibliometrical discovery" consist of? How could it be come upon? What could, should or shouldn't be made of it?[7]

I. Tacit, yet intelligible: the displayed list as a reading proposal

The bibliometrical results that we obtained are displayed as a list of bibliographical references to twenty texts that cite another text – at present, Garfinkel et al. (1981). The generated list is readable, i.e. its reading makes it meaningful, even if some textual elements may be obscure. Any reading of the obtained list seems to be based on our common ability to make sense of the display of alphabetical and numerical signs on a material support (computer screen, paper sheet, etc).

To begin with, we shall describe the invited or preferred reading that the obtained display of bibliometrical data can be shown to propose – at least under the assumption that a reading proposal can be identified in spite of the essential openness of textual material[8].

The technologies and politics of reading are plural (Livingston, 1995b). Bibliometrical data assume and promote *one* such technology. This technology can be temporarily glossed as a "politics of counting" (Martin and Lynch, 2009), oriented towards accountability *via*

accountancy: "citations only, count what counts" or "count, don't read", and, finally, "read what counts", as we may accentuate it[9].

In short, bibliometrical results hint at an accountable and accountably "academic influence" of a text through the counting of citing texts. As A. Martin and M. Lynch point out, "to count is to classify as well as to enumerate" (ibid., p. 246). Hence, the suggested influence, at first sight, cannot but appear as a confusing creature whose prominent features we shall discuss further in conclusion. This section, in turn, focuses upon the tacit *reading proposal* by the generated list of bibliometric results. That proposal will be described in terms of a set of rules and procedural steps. This mode of presentation should not be understood as a misplaced claim on (say) the rule-governed nature of bibliometrics as its putative ontology. We rather and more simply expect it to clarify our description of the main features of the reading proposal as encountered[10].

Step 1: Ordering the items of the list

When confronted with the list, the first puzzle to solve, as it happened to be ours, may be "why that now?" – that is, why is this item the first in the list, why this the second, and so on. In other words, since items are (presumably) not listed at random, how are they ordered? A situated inquiry is required in answer to that question. It implies to look at the first and second items, at least, and to find an accountable ordering of them. The solution can be found quickly when consulting the field called "PD", which appears to stand for "Publication Date". It is possible to match the ordering of the items in the list

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[7] If his/her home institution makes accessible the ISI's WoK, the interested reader can go to http://apps.webofknowledge.com/UA_GeneralSear ch_input.do?product=UA&search_mode=GeneralS earch&SID=R2MOAjiMn2nFpIOAl3H&preference sSaved=., enter "pulsar" in the *Topic* field and "Garfinkel" in the *Author* field, and then obtain the citation list for the requested author(s). Our first search result enumerated 205 *WoK* citations for the pulsar paper. Our descriptive analysis will be focused on the two first pages thereof, corresponding to the last twenty citing texts (as of 12 November 2011).
[8]"The contingent character of reading […] suggests the corollary idea of texts being organised so as to reduce the expectable indeterminacy of its tasks" (Sormani and Benninghoff, 2008:262).

[9] On the relationship between accountability and accountancy, see also Lynch (2011), Rawls (2002).
[10] The listed steps, in other words, elaborate various "step conditions" for a preliminary understanding of the generated bibliometric list. On the notion of "step condition", see Baccus (1986).

with the decreasing chronology of the PD's: "MAY 2011", "MAR 2011", etc. This ordering can be formulated as **rule 1**: "*most recent citing text first*"[11].

The invited reading is thus focused on the present, or (most) recent, "impact" of the cited text – the mechanistic shorthand for "academic influence" in bibliometric *lingua franca* (see, e.g., Cole, 2000). This default format requires additional manipulation in order to display the first citing texts up to the most recent ones. This feature establishes a temporal distance between the cited text and the citing texts, which provides for the possibility of a reading of the list (relatively) independent from the cited text. We'll return to this possibility in the second section of this note, when we distinguish between "reading from the citing texts" and "reading from the cited text".

Step 2: Ordering bibliographical information

Rule 1 offers reasons for the ordering of the items in the list, but puzzles may appear which have to do with the internal logic of each item. It immediately appears that all items are organised by a recurrent structure of fields, reduced to one or two capital letters, followed by their specification. From that simple observation, **rule 2** can be proposed: "*identically displayed bibliographic information for each citing text*".

Fields such as "AU" or "TI" are almost transparent, through the reflexive relation with the textual objects that follow them as at-first-glance-recognisable authors' names

and article titles. Other fields allow only a provisional guess, while some remain intractably obscure. Note that the presence of cryptic elements does not alter the readability of the list, through recourse to such practices as "let it pass" (Garfinkel, 1967), or prospective-retrospective reasoning that temporarily leaves aside obscure elements (Cicourel, 1973)[12].

At the same time, the partial "un-readability" or "unavailability" of the list makes it appear as a technical object, which as such is submitted to specific and unknown uses and purposes. This feature of the list is made salient by the reading of subsequent fields and related items providing additional information, presumably on the conference (title, date, location and organiser) where the paper was first presented. In other words, the logic of the selection of relevant information is not (entirely) self-explicating, though, once again, it does not prevent making sense of the list.

Step 3: Clarifying the database

In this regard, the displayed order of the elements that compose each item of the list makes some cryptic elements more salient than others. The first field – "PT" – may appear as a puzzle as it did to us, in that the first element could be expected to be readable at first glance. Though not immediately identifiable, it can reasonably be guessed as standing for "Publication Type". The guess seems to be confirmed by the fact that all items have the same "PT" or "Publication Type", namely: "J", which reasonably stands for "Journal". Hence **rule 3**: "*consider only journal articles*".

This rule must be the most commented upon of *WoK* rules. Two issues, at least,

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[11] The default display implies that month in a year is used as the relevant temporal unit for ordering texts. The ordering is made on the basis of calendar time, as opposed for example to time related to the cited text, such as n years and n months after its publication. Second, other temporal units such as days in a month, days of the week, semesters, years, decades, etc. are not deemed relevant.

[12] For a related discussion of how similar "let it pass" moves seem to be built into citation databases from the outset, see Carlin (2007:92-94).

have been widely discussed in this respect: first the reasons for including or excluding journals in the database, a particular issue being the language bias towards English-speaking journals ("worldwide" being arguably reduced to "Anglo-Saxon"). The second issue has to do with the focus on journal articles, at the expense of books, chapters of edited books, etc. Note in this respect that the provision of the "Publication Type" field implies that non-journal publications may be listed, too. The rule as stated appears then more as an empirical result of the generated list and the reading it invites, as of 12 November 2011, than as an aspect of its default display as such, once and forever (i.e., as constitutive of a now "closed" *WoK* database)[13].

Rule 3 provides explanations to possible limitations of the generated list, such as the absence of known citing texts. In other words, rule 3 specifies the generated list as "the citing texts in a limited database", rather than all citing texts. Note however that the list is not explicitly specified as such, inviting thus an unwarranted generalisation of the generated results[14].

Step 4: Reducing intertextuality to "cite/not cite"

Another implicit generalisation, potentiating an unwarranted conflation (see conclusion below), appears in the relationships established by the list between cited and citing texts. The list does not provide any information on the context, reason, type or even page number of the citation, hence **rule 4**: *"no information on citation within citing text"*.

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[13] A preference rule seems thus to be involved, rather than a constitutive one (see Greiffenhagen and Sharrock, 2009).
[14] It is not impossible to find on the *WoK* website a list of the journals that are included in the database. This, however, is far from simple, at least *that* list is not available "at a click or two". Take this remark as one of our "product enhancement" requests.

The rule assumes that this information does not matter. Otherwise, the rule should assume, for instance, that any cited text would contain only one citable element, and that any citable element would be cited in a univocal way. Furthermore, it should assume that the difference between (say) "quoted passage" *in* a text and "bibliographic reference" at the *end* of it doesn't exist or matter much. As arguable as all three assumptions appear to be, the stated rule may explain that the politics of reading implied by bibliometrical data is likely to favour the writing of scientific papers, reduced to a single and easily citable argument, within an established field (a point returned to in conclusion, too).

Step 5: Displaying the citation record of the citing text

While the information on the citation does not seem to matter, the citation record of the citing texts, as indicated by the "TC" field, is shown to matter, since they are systematically displayed. **Rule 5** can be stated as follows: *"information on citing texts as being cited themselves"*.

The rule offers a recursive application of the tool, in that what has been done with the cited text can now be done with any of the citing texts. This recursive application may contribute to the constitution of a *WoK*-based "scientific corpus" or "official record of science", to the definition of an "influential text" as a "Citation Classic®", apparently beyond the remit of *WoK*, despite the reductively quantitative "citation threshold → citation classic → influential text" model that seems to be implied. The manifest recursiveness of rules, at any rate, provides for a "double cumulativity" of articles *and* citations, *via* list-generation.

To sum up the tacit *reading proposal* of a citation list in so many tentative rules and procedural steps is one thing, the thing we

attempted in this section. To work out just how that proposal may orient, or be relied upon in, a *particular reading* of (say) the latest *WoK*-retrieved citations for the pulsar paper (*qua* our "Garfinkel pulsar" citation search) is another, the one engaged in the next section[15].

II) Explicit, yet interpreted: the displayed list as read

Imagine the citation list generated for the pulsar paper were a musical score. What kind of music could be played from it? We didn't have any serious or enduring problem in reading and using the list; reading and using the list, as it seems, would involve *taking for granted* the described "technology of reading" and "politics of counting" that it implied, presented as a finite set of rules and procedural steps. Conversely, our reliance upon the so-usable list, as both a source of "raw data" and an instrument of inquiry, made possible at least two types of inquiries, each starting out from within the "*cited text/citing texts" relationship*. These two courses of reading the pulsar paper's accountable "academic influence" via its bibliometric score, in and as the encountered list, will be examined in what follows (**A&B**).

A) *Starting out from the "cited text"*

One of us read the citation list, from the outset, in the light of what he considered to be the "central message" of the pulsar paper. This particular reading implied consulting the list of articles citing the "pulsar paper" in the light of that paper, respectively in the light of what was to be considered, for the purposes of consultation, as the paper's key message, as a "paradigm text" (Carlin, 2007:97).

That message could be glossed, by memory, as the paper's focus on the "embodied working up of the eventual discovery like a potter's object", its focus on the "first time through and irreducible technical specificity of that working up", the "locally produced accountability and historicity of the achievement", its "irreducibility to a discursive account", etc.

This remembered reading of the "pulsar paper's central message" could then be used as a mundane yardstick (see Amerine, Bilmes, 1988) to inspect how the paper was used by any of the citing texts on the seemingly sole basis of their displayed titles, authors, journals, etc. – that is, via a selective use of rule 2, where type and degree of selection would hinge upon the initiated search[16].

To see how this line of reading proceeded, let us turn to the first item of the citation list generated for the pulsar paper. The item was and can be displayed as follows:

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FN Thomson Reuters Web of Knowledge
VR 1.0

PT J
AU Maynard, Douglas W.
TI On "Interactional Semantics" and Problems of Meaning
SO HUMAN STUDIES
VL 34
IS 2
SI SI
BP 199
EP 207
DI 10.1007/s10746-011-9188-7
PD MAY 2011
PY 2011
TC 0
Z9 0
SN 0163-8548
UT WOS:000292933900005
ER
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Reading the displayed item in terms of the relevance provided by the cited text (i.e., its "central message") offered both a

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[15] As Sharrock and Anderson succinctly put it, "the text projects an intended reader, but actual readers may not match the intended one" (this issue, p. 53).

[16] Instructed reading, at present, seems to have been tied to a particular self-categorization (i.e., "presumably informed reader of the really read pulsar paper"). On "reading really", see Livingston (1995a, b).

reading assistance and puzzle box: it could lead to a series of puzzles, indeed[17].

Surely, since a directed reading was engaged in, it helped to select, order and prioritize the bits and pieces of information to be taken into account. Given our interest in the "uptake" of the pulsar paper, elements of bibliographic information, such as title, author, journal became more important than (say) year of publication ("PD"), pagination ("BP-EP"), etc.

Yet, when used as clues to figure out how and why the journal article cited the "pulsar paper", its title presented our first test-reader with a puzzle: indeed, in what respects should the pulsar paper be relevant, specifically, to "'interactional semantics' and problems of meaning"? Especially considering Garfinkel et al.'s focus on the "embodied working up of the eventual discovery like a potter's object" and its "irreducibility to a discursive account". If "interactional semantics" *in general* is to be discussed, how does it fit with the pulsar paper's emphasis on "quiddity" *in particular* – the "here and now", "this and that" of any encountered phenomenon? A possible answer could be found in the quotation marks around "interactional semantics"; these hint at the discussible character of such semantics in general, and thus invite, as the same title might have suggested, to further examine problem*s* of meaning, where the plural would hint at the specificity of each problem examined, in line with our first test-reading of the "pulsar paper".

The title, then, could and should be read as an invitation to track down and read the citing article: what problems of meaning are considered there in particular? What contribution does the "pulsar paper" allow the citing author – "Maynard, Douglas W." – to elaborate so as to (e.g.) deepen the treatment of the problems considered? Etc.

The citing paper just considered seems to make a contribution to examining a general issue ("interactional semantics", even if in quotation marks), rather than to propose a particular study of science or scientific practice (as the "pulsar paper" did). The journal where the citing paper, authored by "Maynard, Douglas W.", was published confirms this: *Human Studies* (see the field titled "SO", presumably standing for "source"). Shils' complaint[18], *mutatis mutandis*, may thus apply – despite Garfinkel et al.'s warning against and consequences drawn from that complaint, concerning the risk of characterizing the general features of a social practice (its "social character"), instead of specifying the distinctive competencies involved in a particular domain (what Livingston later calls "domain-specific skills", 2008).

Be that as it may, our first test-reader sustained his cursory consultation of the citation list. Hence his question:

"How about the other papers in the list?"

The next two were titled: "Pragmatism and Ethnomethodology" (by "Emirbayer, Mustafa", co-authored by "Maynard, Douglas W.", our first author) and "On Latour's Social Theory and Theory of Society, and His Contribution to Saving the World" (by "Lindemann, Gesa"). These two following articles seemed to be both of general interest again, and that in "theoretical" terms rather than "empirical" ones – if ironically, as in the second case.

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[17] The presently reported reading of the citation list skipped the heading of the list: "FN Thomson Reuters Web of Knowledge VR 1.0". This, unfortunately, seems to be standard practice, at least if judged by P. Weingart's observation that the privatized character of the ISI(®), having become a business company noted at the stock exchange, is rarely raised as a topic of academic concern (see Weingart, 2005, 2010).

[18] Shils' complaint went as follows: "By using Bales Interaction Process Analysis [to analyze tape recordings of jury deliberations] I'm sure we'll learn what about a jury's deliberation makes them a small group. But we want to know what makes them a jury" (Garfinkel et al., 1981:133).

Note that the question asked – "how about the other papers in the list?" – suggests that in starting consulting the list, and that in the light of the pulsar paper and its most recent citing article, our first reader seems to have found/tested a procedure of reading the list ("in this or that way") with likely dividends ("making sense of it, apparently").

The other papers of the list, by and large, could thus be identified as having a *particular empirical* focus, yet not within the field of science studies. Citations of the pulsar paper appeared to have been made, indeed, by an article devoted to trust in surgery (list item n° 4), another one on "9/11 and practical historians" (n° 5), yet another one on "studying information needs" (n° 6). Furthermore, the pulsar paper, in some way or other, seemed to have been judged relevant with respect to "curating contemporary art" (n° 7), the technically enhanced, collaborative analysis of ancient texts (n° 8), "The Computer as a 'Partner' in Institutional Talk" (n° 9), "The Anomalous Foundations of Dream Telling: Objective Solipsism and the Problem of Meaning" (n° 10), the making of television news (n° 11), "9/11 Revisited: 'Doing History' in Political Discourse" (n° 12), Diagnostic Work (n° 14), "Counting Things and People: The Practices and Politics of Counting" (n° 16), "Video Recording Practices" (n° 17), as well as the study of authority and authorship (n° 18)[19].

Would the citation of the pulsar paper by studies other than science studies demonstrate its relevance beyond science studies (where it might have had its initial "influence")? Despite the heterogeneous list items, our first test-reader didn't go beyond Shils' complaint to ask that

question. By contrast, another one of us ventured into a course of reading that might have led him, and might lead us, to broach just that question.

At the outset, as he figured, the pulsar paper offered a rich ensemble of memorable themes, rather than one "paradigm case" or "central message". Among these themes, he listed "transcendent objects", "noticeable absence (usually credited to Sacks)", "gestalt contextures (the wonderful metaphor about foliage!)", "members' devices", "discovery and discovering work", "laboratory work", "etc." Far from being a "unitary" paper, it seemed, for him at least, to offer plenty of reasons to be used and cited, reasons that couldn't be answered as easily as list consultation would suggest. Hence his questions:

"Is the pulsar paper the provider or source of a major organising principle to any of the listed current papers? Does it figure as an acknowledgement of a prior study in a particular area? Is it an attempt to 'shine in reflected glory', as Gilbert (1977:116) described citation practices? Is it exemplifying or supporting a methodological, theoretical, epistemological argument? (…)"

These questions cannot be answered at present. Whatever their respective answers may turn out to be, it should be recalled here that it would be pointless to cite all the texts that were used one way or another in the writing of a new text (see, e.g., Hicks and Potter, 1991). A list of bibliographical references always implies practical and situated choices to cite or not to cite, to include or to obliterate. This, then, suggests a second way to read the encountered list, one explored by the third co-author of this note, our last test-reader.

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[19] Where did list item and citation n° 13 go? What about n° 19 and 20? Readers, if interested, are invited to retrieve these items or even extend the search by doing their own citation search. For instructions, see note 7 above.

B) Starting out from the "citing texts"

A set of fields for bibliographic items – that's what the last one of us, as the third test-reader in row, basically saw (and what we may see now too, at least for the first item of the list). These fields, as he put it, "don't give much away" in the sense that "they are placeholders for (numeric) bibliographic details, journal IDs, publication dates, page numbers and the like".

As he further explained,

"what I saw was author, title, journal title; 'seeing' these, however, meant to bring a corpus of existing knowledge to my reading of these three fields; and thus I made (and sometimes did not make) some semblance out of the overlaps of these three fields, as reticulated objects so to speak – that is, I made sense from a reflexive relation between author, article title, and journal title. I had encountered a number of these authors, some of these papers, some of these journals before, and these encounters were salient to me in looking at potential articles of interest on the basis of relevance judgements, such as: 'Ooooooooooh, a new Maynard paper'; 'Ooooooooooh, a new paper on pragmatism', etc."

This reading implied consulting the list, via its items, not on the basis or in the light of the "pulsar paper". This could be done through the bracketing of the "common denominator" which allows all items to figure in the list, such that the list can be a list, a list of something – at present, the "twenty most recent papers citing the pulsar paper".

Whilst this second kind of reading was made possible by the *"cited text/citing texts" relationship* (made available or, at least, expressible via rules 1-5), it became relevant in the light of the obtained results: these, indeed, range across several domains or areas of empirical and theoretical interest to a point where the commonly cited "pulsar paper" could be treated as an uninteresting contingency (such as the "blue", "black" or "green eyes" of professionals from different sports).

This second way of reading the list, then, *could* stop at its items, considering them on their own terms, and forgetting about their belonging to the list. It was of course still possible to imagine in what way the "pulsar paper" could have proven relevant for the citing text. Simply, it seemed to have become an "optional" matter, rather than an "obligatory" one[20]. This contingent "stopping at list items" afforded a further, though related reading and sense-making possibility, namely: to categorize assembled items in terms of at least one field (e.g., "PT, publication type") that is and must be common to them (given rule 2). This reading procedure generated and proceeded on the basis of "fielded items", so to speak. It seems to have been the procedure engaged in by our third test-reader, as he reported upon interpreting the items gathered on the first page of our cited author search:

"Regarding the *journals*, okay it's only 10 items per list but we're looking at a small set, aren't we? 3 Human Studies, 2 Qualitative Sociology. Along with JoP and CSCW, these are expectable titles, for me they are among the 'usual suspects'. I'm not surprised these contain a reference to Garfinkel. I've heard of ZfS but thought it was the German 'mainstream' journal, so am surprised at its inclusion as a reference in a paper that it published".

In this type of reading, then, the "fielded items" appear to be used as placeholders or indices for articulating conventional distinctions within an academic field (e.g., "German 'mainstream'" versus, possibly,

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[20] On the "optional" / "obligatory" distinction, see Widmer (1991).

"US avant-garde"). The same kind of "articulation work" could be done by recourse to other items, once "fielded". *Author* names could thus be used to distinguish between "plausible citations" from ethnomethodology (e.g., by "Koschman et al.", "Leudar and Nekvapil") and "implausible" ones from, say, information science (e.g., "X's paper is the elephant in the kitchen for me"). Interestingly, however, "zooming in" on *titles* rendered it difficult sometimes to read academic or disciplinary distinctions "in" and "out" of the citation list. As our third test-reader wondered:

> "'The anomalous foundations of dream telling' ---- oh my goodness, who on earth would publish this!? Oh, Human Studies.. It's by Richard Hilbert??!! This I must read! But where does the Pulsar fit in?".

In the first type of reading any citing text was examined in the light of the recalled, unique and possibly "paradigmatic" relevance of the "pulsar paper" (Garfinkel et al., 1981). This could be done, as it now appears, on the exclusive basis of citing article *titles* (at the exclusion of other fields, notably "AU(thor)" and "SO(urce)"). At present, however, our last reader's occasional focus on titles seems to run against the grain of his quasi-inductive reading, "starting out from the 'citing texts'" – at least when and, possibly, whenever they are, but fail to, "stand for" this or that academic field, faction or fad. Conversely, "source" and "author" may be invoked to "repair" and sustain the initiated course of reading[21].

Conclusion

A note has been drafted. Preliminary as it should appear, it allowed us to examine the

meaningful display of bibliometrical data, and aspects of their use in and for the single case of the lately "cited pulsar paper", as available to us via a *WoK* citation search. At least two types of "bibliometric discoveries" can be said to emerge from within the first courses of reading examined.

First, inquiries may be launched on selected items of the citation list. These inquiries can, for instance, be conducted by retrieving and reading the citing texts in order to discover or, at least, determine how, why, for what purpose, etc. they cite the pulsar paper. Second, the list makes possible the (re-)discovery of the citing texts themselves, that is, independently of their citing the pulsar paper. One discovers, for instance, that author X has published a paper titled Y in the journal Z. In other words, the *WoK* slogan "discovery starts here" makes sense, insofar as "here" glosses the engagement in the practice of reading bibliometrical data, presently examined via one of their presentational formats: a citation list, the one obtained for "Garfinkel H* 1981".

Adopting a novice stance and cultivating the "analytic potential of ignorance" proved heuristic for identifying the reading proposal advanced by the list, at least in two ways. First, the very identification of the reading proposal may precisely be a source of trouble for the novice, as it happened to be for us. Not being able to rely on specifically bibliometrical reading capacities, the novice is left to general reading capacities. Second, as troublesome as the resulting course of reading may turn out to be, it makes all the more salient the reading operations that characterize "reading bibliometrically". An analogy may be drawn here with Garfinkel's breaching experiments: as awkward as they were to their victims, they revealed

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[21] Under the assumption, this time, of an alternative self-categorization (i.e., "presumably well-informed scholar of the charted academic field").

ordinary structures of morality (Garfinkel, 1967) [22].

Bibliometrics can be characterized as *counting* texts in the double sense discussed by Martin and Lynch:

"The work of counting involves determination of *what counts as* a possible object in the field counted. […] To count something is to make it *accountable* as a member in a class of relevant objects. In this sense of the word, 'counting' is both a calculative operation in which numbers are used, and also a case-by-case determination of *what* to count and, correlatively, of what *counts as* something to be counted" (Martin and Lynch, 2009: 246).

Evaluative bibliometrics proposes to assess "academic influence" through the counting of citing and cited texts, where the citing texts are counted on the basis of their including or not a particular bibliographical reference, the cited text[23]. What the citing text actually does with the cited text in the specific argument where it appears does not count, and even *should* not count, since bibliometrics has to disregard it, if it wants to be able to achieve the distinctive counting it consists of – at least as far as *WoK*-based "best practice" is concerned. Characterizing this form of counting is less a critique of bibliometrics than an elucidation of its manifestly predominant "politics of counting". Yet, were we to pursue our

investigation, we might turn it into the first step of such a critique.

In fact, our initial encounter with the citation list led us, at times, to the tentative adoption of a critical stance. This conclusion, in turn, may assist us in spelling out some of the criticisms hinted at. For instance, the apparent reduction of "intertextuality to 'cite/not cite'" operations may be briefly re-examined (see above, section **I**, step 4). This reduction, in particular, may lead to a conflation of the two types of bibliometric discoveries just pointed out. The reduction, then, consists in treating the eventual discovery of "citation rationale", requiring both the retrieval *and* reading of the citing text(s), as equivalent to the initial function of "information retrieval" only, where the citing text is simply located. The adopted novice's stance has allowed us to point out and, now, to criticize this shortcut - once more. In that sense, our reflective exercise calls into question any reductively enumerative tracking of "academic influence" by bibliometric proxy, as initially ventured[24].

Further research may (re-)consider the ordinarily embedded character of bibliometric list reading practice. Of special interest here is how the use of bibliometrical data and citation counts, in particular, may (have) influence(d) and even transform(ed) social science research practices, such as "reading", "assessing the influence of a text", "teaching", "reviewing a paper for publication", "evaluating a candidate for a position", etc. As we commented above, the "politics of counting" implied in the display of *WoK* results is liable to favor the writing of

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[22] Incidentally, the troublesome experience of the novice's reading may constitute a perspicuous setting for the respecification of Watson's analytic distinction between a text's reading proposal and the text as read (Watson, 1997:89).

[23] As was mentioned at step 3, the database limitation is a first, upstream, determination of what texts count or not. As a result of both counting operations, texts (books, journals not on the "Master Journal List") outside the database and texts not including the particular bibliographical reference are not counted as relevant to assess academic influence.

[24] Once again? The novice is rarely a pioneer. To begin with, E. Garfield (1998) reminds us that the "Science Citation Index®" (*SCI*) was originally devised for purposes of information retrieval, rather than research assessment. Various remedial efforts have been undertaken since (e.g., Duncan et al., 1981; Peritz, 1983; Shotton, 2010).

papers reduced to a single and easily citable proposition, within an established field, rather than (say) a contentious piece calling into question the very field within which readers may wish to place it. Among many others, this conjecture emerges in and because of the rise of evaluative bibliometrics as an ordinary social science tool. One key problem, then, appears to be that the tool configures its user(s), rather than the other way round.

Thirty years on, the "pulsar paper" may be read as an invitation to understand scientific achievements from within the lived work of their situated course. This topic constitutes a gap in the literature on bibliometrics. The present note attempted to start to fill this gap by examining the discovering work implied in the reading of bibliometrical results.

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