CITATION IN THE CONSTRUCTION OF KNOWLEDGE: A COMPARATIVE ANALYSIS OF CITATIONS IN HARD AND SOFT DISCIPLINES¹

Construction of knowledge is generally recognized as a social activity in that it takes place within an academic community involved in the construction and development of a distinct knowledge. Writers and researchers who wish to contribute to the corpus of knowledge should not only publish their findings but also gain acceptance for their work. Since knowledge cannot be constructed and developed independent of the academic/discourse² community, writers need to situate their works in relation to the dominant discourse, the existing body of knowledge constituted of works in print or online. Moreover, they have to adhere to the conventions with regard to the structure of the research article, the citation system, style, spacing, word limit, etc. established by the expert/senior members of the discourse community (Jordan 1997; Lea and Street 1999; Dudley-Evans and St John 1998). One of the ways in which writers seek acceptance for their works is to situate their contributions within others published in their area of research. Acceptance is not complete, however, unless acknowledge the sources they use. An idea or piece of information from another source reported in a work with proper acknowledgement of the source is called Citation. Hyland (1990: 341) described it as "the attribution of propositional content to another source." Failure to acknowledge the source of idea or information may lead to charges of plagiarism.

In academic writing, that is, writing in print or online devoted to topics/areas of research that are of interest to the academic community done for the purpose of disseminating knowledge based on the findings of that research, citations play an integral role in mediating the relationship between a writer's argument and his or her discourse community. Analysis of Research Articles from Hard Disciplines and Soft Disciplines shows marked differences in the extent to which writers from these two major disciplines cite information from other works and the ways in which information from works is reported. Exploiting Swales' (1990: 148-154) division of citation forms into 'integral' and 'non-integral' and the functions of these two forms presented by Thompson and

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² Genre theorists such as Swales and Bhatia classify academic (and professional) communities as discourse communities which, as Swales (1990: 9) defines them, "are sociorhetorical networks that form in order to work towards sets of common goals. One of the characteristics that established members of these discourse communities possess is familiarity with the particular genres that are used in the communicative furtherance of those set goals." (see also, Bhatia 1993, 1999 and 2001).

Tribble (2008), this paper analyzes citations used in research articles in the fields of Engineering and Veterinary Science (Hard Disciplines) and in Social Sciences and Humanities (Soft Disciplines) to show how writers, by using these kinds of citations, represent information derived from other works and the purposes for which writers use these forms in their effort to construct new knowledge.

It is crucial at this point to consider the citation systems and the citation styles used in academic writing. The two kinds of citation systems used in academic writing are the Parenthetical system and the Note system. The parenthetical system includes abbreviated source information, for example, author³, year of publication and page number in parentheses in the article/work supplemented by complete source information in a list of Works Cited, References, or Bibliography at the end of the paper. The note system involves the use of sequential numbers in the text which refer to either footnotes (notes at the end of the page) or endnotes (a note on a separate page at the end of the article) which give the source detail. This system may not require a full bibliography, depending on whether the writer has used a full note form or a shortened note form. This system is rarely used for citing source information now. It is used for various purposes such as giving additional information on something discussed in the text but not particularly important for the main thrust of the argument; comparing/contrasting information; expressing gratitude to those who help the writer/researcher etc.

As for the citation style, hard and soft disciplines have distinct styles. The ACS (American Chemical Society) style is used in chemistry. Here, in-text citation is done in one of three ways: by a number, a superscript number or by author name and year of publication. The list of references titled Bibliography appears at the end of the paper in alphabetical order, if cited by author or in numerical order, if cited by numbers (Chemistry Library 2008). In the AIP (American Institute of Physics) style used in physics, references are numbered in the text and the reference list (Citation Format 2008; see extract 2 in the Appendix⁴). The IEEE (Institute of Electrical and Electronics Engineers) style used by the Institute of Electrical and Electronics Engineers citation numbers within square brackets (see extract 1 in the Appendix). The reference list is arranged by the order in which citations occur in the text and not by alphabetical order [Institute of Electrical and Electronics Engineers (IEEE) style examples 2008]. In the CSE (Council of Science Editors) style used by

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 $^{^{3}}$ In this essay, the term, author, is used to mean the one whose work from which information is cited, as against writer/researcher who cites that information.

⁴ Given in the Appendix are Extracts taken from research articles and their "References"/ "Works Cited". Extracts 1-3 (1 and 2 taken from Engineering journals and 3 from a Veterinary Science journal) are from hard disciplines, while 4 and 5 (taken from a Social Science journal and a Humanities journal respectively) are from soft disciplines (refer section titled 'Texts Analyzed').

most biologists, zoologists, earth scientists, geneticists, and other scientists, the author's name and the year of publication are given within parentheses in the text, keyed to a detailed reference list at the end of the article arranged in alphabetical order [CSE – Council of Science Editors (Citation/Sequence System).(2008); see extract 3 in the Appendix]. These are the citation styles used in hard disciplines.

Distinct citation styles are used in social sciences and humanities. The APSA (American Political Science Association) style is often used in social sciences (extract 4 in the Appendix).⁵ It lists the author's name, year of publication and page number(s) within the text, keyed to an alphabetical list of sources at the end of the paper on a References page (American Political Science Association Style Manual 1985). The Harvard referencing (or author-date system) involves a short reference (e.g., Smith 2000) with or without the page number being inserted after the cited text in parentheses and the full reference being listed at the end of the article (Harvard System of Referencing Guide 2007). The MLA (Modern Language Association) style is most often used in the humanities, particularly in English studies, comparative literature etc. The Harvard referencing is used within the text, keyed to an alphabetical list of sources on a Works Cited page at the end of the paper (MLA Formatting and Style Guide 2008); see extract 5 in the Appendix). Some citation styles such as The Chicago Manual of Style (abbreviated as CMS or CMOS) is used in hard disciplines and soft disciplines. It too involves a short reference in the text and the full reference being listed at the end of the paper (Chicago Manual of Style Citation Guide 2008).

Swales (1990:148), as already indicated has divided citations into two categories: integral and non-integral. In the former, the name of the researcher occurs in the actual citing sentence and plays an explicit grammatical role in the sentence, while, in the latter, the name of the researcher is stated either in parentheses or is referred to elsewhere by a superscript number or via some other device⁶ and therefore it plays no explicit grammatical role in the sentence. The main patterns of these two types of citation are illustrated with adapted examples in Table 1:

⁵ Owing to constraints of space, only a part of the "References" and "Works Cited" of extracts 4 and 5 is given in the "Appendix". Note, however, the complete "References" of extracts 1, 2 and 3 are given. Also, the authors of extract 2 have not given a title to the list of references.

⁶ For example, superscript number 3 in Nc and number 3 within brackets in Ne (see Table 1 below) refer to the third entry in the reference list (refer extract 2 and 1 respectively in the Abstract for these kinds of in-text citation).

	Integral		Non-Integral	
Ia	Babarutsi et al. (1996) showed that shallow water flows are influenced by bottom friction.	Na	Previous research has shown that shallow water flows are influenced by bottom friction (Babarutsi et al. 1996).	
Ib	The influence of bottom friction on shallow water flows was established by Babarutsi et al. (1996).	Nb	It has been shown that shallow water flows are influenced by bottom friction (Babarutsi et al. 1996).	+R
Ic	Babarutsi et al.'s theory (1996) claims that shallow water flows are influenced by bottom friction.	Nc	It has been established that shallow water flows are influenced by bottom friction. ³	
Id	Babarutsi et al.'s theory (1996) of bottom-friction influence on shallow water flows has general support.	Nd	Shallow water flows are influenced by bottom friction (Babarutsi et al. 1996).	
Ie	According to Babarutsi et al. (1996) shallow water flows are influenced by bottom friction.	Ne	Shallow water flows are probably influenced by bottom friction [3].	-R
		Nf	Shallow water flows may be influenced by bottom friction (but cf Molls and Chaudry 1995).	

Table 1: Integral and Non-integral Citations

The integral citations show the name of the researcher as subject (Ia), as passive agent (Ib), as part of a possessive noun phrase (Ic and Id) and as an adjunct of reporting, 'according to', (Ie). The non-integral citations show three parenthetical citations (Na, Nb and Nd), a superscripted one (Nc) and a numerical one (Ne). The last type of non-integral citation (Nf) is referred to "as 'contrastive' because they go against the drift of the conclusions being reached

in the sentence itself' (Swales 1990:149). Weissberg and Buker [(1990) cited in Thompson and Tribble (2008)] differentiate between 'author-prominent' and 'information-prominent' citations: integral citations are author-prominent, while non-integral citations are information-prominent.

The third column in Table 1 is marked +R or -R. The +R citations are those with reporting verbs; that is, the writer employs a reporting verb (show, establish, claim etc.) to introduce what is cited. The -R citations in the lower sections of Table 1, are the citations without reporting verbs in that the author does not use a reporting verb to introduce the information/finding(s) cited. Hyland (1999: 349) classified reporting verbs into three kinds according to the type of activity referred to. They are: i. Research (real-world) Acts which occur in Statements of Findings, for example, *observe, discover, notice, show etc.* and Procedures, for example, *analyse, calculate, explore etc.*; ii. Cognition Acts concerned with mental processes such as *believe, conceptualize, view, consider etc.*; and iii. Discourse Acts which involve verbal expression such as *discuss, argue, claim, state, point out* etc.

Studies of references to previous work tend to focus on providing an account of tense and aspect⁷ of these reporting verbs (see Swales 1990: 151). Research has shown that three tenses, namely the past, the present perfect and the present simple, are used in more than 90% of the citational statements. Ostler (cited in Swales 1990:152) proposes three hypotheses (illustrated with examples below) for explaining the use of these tenses based on the roles of such concepts as *generality* and *relevance* (note the underlined segments; the superscript numbers and the numbers within brackets in the examples here and those below refer to the respective entries of source information in the reference lists; and redundant information is omitted and indicated by ellipses):

- (i) The Present Perfect tense is used to claim *generality* about past literature, as in:
 - It <u>has been reported</u> that iron nitride films exhibit higher saturation magnetization.^{1, 2}

The past tense is used to claim *non-generality* about past literature, as in:

A similar parabolic differential equation <u>was studied</u> by Verdi and Visintin [4]. We remark that both solution methods <u>have</u> <u>deficiencies</u>.

(ii) The Past tense is used when it refers to quantitative results of past literature that are *non-supportive* of some aspects of the work described in the technical article, as in:

⁷Quirk and Greenbaum. (1979: 40) define tense as "the correspondence between our concept of time and the form of the verb" and aspect as "the manner in which the action is experienced or regarded (for example, as completed or in progress)."

Some magnetic models were also studied ... but they provided a more convenient method to the controller design than power losses analysis [12] - [14].

The Present tense is used when it refers to quantitative results of past literature that are *supportive*, as in:

... MnZn and NiZn spinel ferrite <u>are important materials</u> for high initial permeability applications ...¹

or non-relevant, as in:

The drawback of the di-polar approximation is that the shape effects of the particles <u>are totally neglected</u>.

(iii) The Present Perfect tense is used to indicate the *continued discussion* of some of the information in the sentence in which the Present Perfect tense occurs (emphasis in the original), as in:

Details of loop shapes <u>have been a frequent subject of</u> <u>modelling</u> which has ranged from \dots^{1-5} to \dots^{6}

Thompson and Tribble (2008: 95 -96) distinguish the following functions of integral and non-integral forms. In integral citations, they identify two types: the citations which control a lexical verb (called Verb Controlling) and those which do not (called Naming). In verb controlling forms, the citation, which comprises the author's name and year, acts as the agent that controls a verb, in the active or passive voice, as in 1 and 2 respectively:

1. Johns (1997) defines literacy as ...

. . .

2. Literacy is defined as ... by Johns (1997)

In naming citations, the citation is a noun phrase or part of a prepositional phrase. The distinction here is primarily grammatical, but the form also implies reification, such as when the noun phrase [or the prepositional phrase] signifies a text, rather than a human agent, as in 3:

3. The significance of Foucault's analysis of 'discursive formations' is analysed in Porter 1988.

Another example of reification is when the naming citation identifies a particular equation, method or formulation with individual researchers, as in 4:

4. Ladany's model, (Ladany 1975), simultaneously determines the size of maintenance personnel and preventive maintenance policy...

Here, the noun phrase, 'Ladany's model,' identifies the model developed by Ladany in the work published in 1975 stated within parentheses. An alternative type of naming citation is that which refers generally to the work or findings of particular researchers, as in 5:

5. Larsen (1974), using dental enamel, and Bhargva et al. (1991), using bone char, described the uptake as a simple first order process kinetics

Thompson and Tribble identify yet another type in integral citations which they call Non-citation in which there is a reference to an author but the name is given without year reference. as in 6:

6. In an earlier section Crookes has discussed ...

This is commonly used when the reference has been supplied in the text earlier and the writer does not want to repeat it.

Non-integral citations. on the other hand, perform a range of functions. The first function is to attribute a proposition to another author. This kind is called Source. The proposition might be a fact or a statement of what is known to be true, as in 7:

7. A language is a resource for making meaning ... (Halliday 1994: 16). The second type of non-integral citation is called Identification which identifies an agent within the sentence it refers to, as in 8:

8. The Greater Colombo flood project, (Atkins 1988) is an example of identifying parameters for designs.

Here, the information within parentheses identifies the author of the work (in which the Greater Colombo flood project is developed/described) referred to. The third type of citation is usually signalled by the inclusion of the directive "see" as in 9:

9. For a full discussion of the issues, see Smith and Martin (1981). This citation is called Reference which is similar to a source citation because it can provide support for the proposition made. This type is particularly common in reference to procedures or to detailed proofs of arguments which are considered too lengthy to be repeated. The fourth type is called Origin which indicates the originator or producer of a concept or product, as in 10:

10. A standard single-spin-flip Monte Carlo simulation is used,⁸... In this case the originator is the creator of the standard single-spin-flip Monte Carlo simulation, and superscript number 8 refers to the eighth entry of source information of the work in the reference list.

Finally, the extent to which writers use information from other works ranges from extended discussion of information to obligatory acknowledgement. They choose different ways to bring in information from other sources. Hyland (1998: 348) claims that choices largely concern the extent to which the report duplicates the original language event. He states three options of quoting information from other sources in texts: i. Short direct quotes (short segments from the original, as used by the author stated within quotation marks, often incorporated into sentences of the present text), ii. Extensive use of original wording set as Indented blocks or iii. Summary/Paraphrase from a single source. or generalization where material is ascribed to two or more authors.

Findings

This analysis of research articles from hard and soft disciplines (refer extracts 1-3) amply demonstrates clear disciplinary references with regard to the extent to which citations are used and the ways in which the information stated is represented, whether as direct quotations, indented blocks or summaries. Writers in Soft Disciplines (WSD) tend to employ more citations than Writers in Hard Disciplines (WHD) and the quantity of information cited in soft disciplines is relatively more than that cited in hard disciplines. WSD are likely to use integral citations with authors placed in the subject position, as in the first sentence in extract 4:

...Samuel P. Huntington (1988, 3 - 10) argued that ...

Most of the citations are of the + R kind in that the writer uses a reporting verb to introduce the information cited. Cognition reporting verbs such as *believe*, *conceptualize*, *view*, *consider etc.* and discourse reporting verbs such as *argue*, *claim*, *state*, *point out* etc. are used, as in the example above. They exploit all three options of bringing in information from other sources – direct quotes, indented blocks and summaries. The writer of extract 5 begins the article with a direct quote, "" Every society produces a space, its own space," writes Henri Lefebvre …" and the writer of extract 4 uses two indented blocks in paragraphs 2 and 3.

Unlike WSD, WHD are likely to use non-integral citations, as in the following sentences of extracts 2 and 3:

Examples of these proposed devices are magnetically tunable SAW oscillators¹ and parametric amplifiers.² (superscripted).

Sebaceous gland carcinomas are rare neoplasms of human beings (McKee *et al.*, 2005) ... (parenthetical).

The effect of this type of citation is that the salience of the author is reduced and the information becomes prominent (information-prominent as against the author-prominent citations in soft disciplines). The information quoted is often summarized and direct quotations and indented blocks are not used. Both +R and -R citations are found, and the former are those with research reporting verbs such as 'show', 'present', 'discover', 'observe' etc. (refer extracts 1, 2 and 3).

Discussion

Citing information is, in effect, mandatory in academic writing not only as a means of fulfilling the requirements of the discourse community in which knowledge is constructed but also as a strategy for strengthening knowledge claims. However, following from the analysis above, how writers present information from other sources is as important as the information they present. The analysis shows marked differences between the citations in soft disciplines and those in hard disciplines. The differences discussed above (refer Findings above) suggest that the way information from other sources is presented depends on the purposes for which writers use that information, which are closely related to the norms and concerns of the community. Hyland (1999) argues that "the differences in citation practices are related to the fact that academics actively

participate in knowledge construction as members of professional groups and their discoursal decisions are influenced by, and deeply embedded in the epistemological and social conventions of their disciplines." In soft disciplines citations are used to illustrate a point, for example, in religious studies, literature etc.; to substantiate claims; to provide justification for arguments; to move from one idea to another; to critique an author's stand point, showing its strengths and weaknesses to support or negate his or her position or to develop a new position. Moreover, in soft disciplines, as Hyland (1999: 353) observes, issues are more diverse and detached from immediately prior developments, unlike in hard disciplines (see below for details), and writers need to draw on a literature that often exhibits greater historical and topical dispersion. These purposes for which citations are used in soft disciplines account for the high incidence of integral citations, extensive use of direct and indented block quotations, the preference of cognition and discourse reporting verbs to research verbs etc.

It has been noted that a feature of hard knowledge is its relatively steady cumulative growth, where problems are typically seen as determined by the imperatives of current interests and new findings are generated by a linear development from an existing state of knowledge (Kolb 1981; Kuhn 1970 cited in Hyland 1999 352 - 353), as against soft disciplines in which "new knowledge follows altogether more reiterative and recursive routes as writers retrace others' steps and revisit previously explored features of a broad landscape" Hyland (1999: 353). Scientific claims, if accepted, are generally regarded as discoveries that strengthen an orderly and coherent sequence of explanations in a given problem area, each fitting another block in the incremental completion of a research puzzle and "citation in the hard disciplines is therefore a means of integrating new claims into current knowledge while drawing on it as supporting testimony, situating the new work in the scaffolding of already accredited facts" (Hyland 1999: 353–354). WHD, as against WSD, are more governed by current imperatives, and citations provide support by demonstrating the current work as 'valid' and the work cited provides a forceful warrant for the current research. Equally important is the common assumption in hard sciences that, by the correct application of the prescribed procedures, knowledge could be accomplished (for detailed discussion, see Hyland 1999). The importance of in the construction of hard knowledge explains why procedures impersonality/objectivity plays an important role in hard sciences: what is done, what is observed and what is accomplished are more important than who does it. These help to account for the low incidence of citations, the use of non-integral citations, summaries for bringing in information from other sources and research reporting verbs for introducing the information cited.

The use of citations in research articles, irrespective of the discipline, lays bare the fact that, in academic writing, the information presented is always embedded in earlier information. Writers of research articles, as members of academic/discourse communities working within the peripheries of their respective disciplines, are expected to situate their works in relation to the existing corpus of knowledge to which their works need to contribute. Citing information from other works which constitute this corpus of knowledge is important because it helps writers negotiate their knowledge claims and confirm them within these communities. There are marked differences in the extent to which they cite information and the ways in which they present the cited information, which depend on the purposes for which information is cited. These differences reflect clear disciplinary distinctions because citation practices are determined by 'the epistemological and social conventions of the disciplines'. An awareness of these differences will, however, help writers understand the motives underlying these differences and exploit the different ways in which information is cited in establishing a relationship between their works and the corpus of existing knowledge.

APPENDIX⁸

I. The IEEE (Institute of Electrical and Electronics Engineers) Style

1. I. INTRODUCTION

Nowadays, linear induction motors (LIMs) are widely used in different applications, especially in high-speed ground transportation[1], [2]. The main advantage of a LIM is the absence of gears or rotary-to-linear converters. Single-sided and double-sided are two forms of these of motors. Single-sided linear induction motors (SLIMs) are used more because of their simple structure (Fig.1). The secondary of a SLIM consists of a conducting plate backed by a ferromagnetic material (back iron). The SLIM with a double layer reaction rail fed by a constant current source has already been investigated in different papers [3] – [6]. The simplest method to analyze a LIM is by the use of an equivalent circuit. The steady-state analysis of a rotary induction motor is usually done by a classical equivalent circuit, while there is no unique circuit for the LIMs. The equivalent circuit of rotary induction motors cannot be applied to the LIMs, because of their specific phenomena.

One of the well-known models to analyze LIMs is the one suggested by Duncan [3]. In this model, first, the equivalent circuit parameters are obtained by the standard open and short circuit tests. Next, the end effect is taken into account by a proper coefficient and modification of the magnetizing branch. (Mirsalim *et al* 2002: 1365 - 1370)

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⁸ Again, owing to constraints of space, many of the entries in the "References" and "Works Cited" in extracts 4 and 5 are omitted and indicated by "[...]." However, those that appear in the extracts are included.

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II. The AIP (American Institute of Physics) Style

2. I. Introduction

Single-crystal magnetic garnet substrates and films have been traditionally employed in investigating magnetoelastic effects. Recently, there have been a few reports on potential device applications to these effects implementing the propagation of surface acoustic waves (SAW) in garnet films. Examples of these proposed devices are magnetically tunable SAW oscillators¹ and parametric SAW amplifiers.² In such applications understanding the variation of the SAW attenuation as a function of an externally applied magnetic field is essential.

We have carried an experimental investigation to study the magnetic field dependence of SAW attenuation in magnetic garnet films having substantial magnetic damping loss. These films also have strong uniaxial magnetic anisotropy perpendicular to the films. Thus different loss mechanisms associated with the SAW propagation in the garnet film in both the unsaturated and saturated states can be observed over a reasonable range of magnetic field strengths.

Previously we reported on the magnetic field dependence of the of the SAW phase³ and attenuation⁴ in garnet films. Results were reported for different *inplane* magnetic field orientations. In this paper we report on our recent effort in which we extended the SAW attenuation measurements to *out-of-plane* orientations. (Hanna and Murphy 1988: 4148 – 4150; emphasis in the original)

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⁶P.E Wigen et al., Proceedings of the Conference of Physics of Magnetic Materials (Mickiewicz University Poznan, Poland, 1981), p,7.

⁷J.P. Parekh and H. L Bertoni, J. Appl. Phys. **45**, 434 (1974).

⁸J.P. Parekh, J. Appl. Phys. **47**, 2228 (1976).

III. The CSE (Council of Science Editors) Style

3. Sebaceous gland carcinomas are rare neoplasms of human beings (McKee et al., 2005), dogs (Strafuss, 1976; Scott and Anderson, 1990; Goldschmidt and Hendrik 2002) and cats (Scott and Anderson, 1991; Goldschmidt and Hendrik 2002) and have occasionally been reported in rabbits (Port and Sidor, 1978; Suckow et al., 2002), and cattle (Matovelo et al., 2005). In the Mongolian gerbil (Meriones unguiculatus), the incidence of spontaneous tumours is relatively low, but increases in animals over 2 years of age (Percy and Barthold, 2001), and sebaceous carcinoma has been reported to be the most common tumour in males (Matsuoka and Suzuki, 1995). Human sebaceous carcinomas show positive cytokeratain (CK) immunolabelling with antibodies such as AE1 (CKs10, 14, 15, 16, 19) and LP34 (CKs 1, 5, 6, 8, 10, 14, 18) and with antibodies against CK8 and CK19 and epithelial membrane antigen (EMA); they show negative immunoreactivity, however, for CK1 and CK13 (McKee et al., 2005) and for carcinoembryonic antigen (CEA) (Gross et al., 2005). Nuclear accumulation of p53 protein and increased expression of c-erbB-2 have been described in human sebaceous carcinomas and may be associated with poor prognosis (Gross et al., 2005). Canine sebaceous carcinomas have been reported to show immunolabelling with the antibody 34BE12 (CK 1, 5, 10, 11) but not with AE1/AE3 (CKs 1-8) or CAM 5.2 (CK7/8) antibodies, or with antibody against CK10 (Gross et al., 2005). The present report describes the immunohistochemistry (IHC) of a sebaceous carcinomas in a gerbil (Meriones unguiculatus). (Gil da Costa et al. 2007: 301 - 303; emphasis in the original)

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IV. The APSA (American Political Science Association) Style

4. In his 1987 presidential address to the American Political Science Association, "One Soul at a Time: Political Science and Political Reform," Samuel P, Huntington (1988, 3 -10) argued at some length that political science ... is not just an intellectual discipline (but) also a moral one," and that "the impetus to do good in the sense of promoting political reform is ... embedded in our profession ." Therefore, "it is impossible to have political scientists in the absence of political participation, and political science has only developed with the expansion of political participation. In a society in which there is no participation — no competition for power — political scientists would have anything to do." It logically follows that "the connection between democracy has been a close and continuing one."

And this leads Huntington to his central proposition:

Where democracy is strong, political science is strong: where democracy is weak, political science is weak. Authoritarian societies may produce and in some cases have produced Nobel Prize-winning physicists, biologists, novelists and statesmen; they do not produce great political scientists. The emergence of democracy encourages the development of political science and the development of political science can and has in small ways contributed to the emergence and stabilization of democracy.

Theodore Lowi took up this same theme, arguing that

political science is usually the first discipline to be suppressed and the last to be revived when authoritarian regimes rule and then inevitably fail. Political science can be compared to the canary in the coal mines, whose sensitivity to poisonous fumes is an early warning that all individuals in that vicinity are in danger." $(Lowi 2003)^1$

There is, of course, plenty of empirical evidence to confirm these propositions, and presumably it is not a coincidence that political science has flourished especially in one of the largest and most vigorous democracies in the world, i.e., the United States, whereas, say, a country like China, whatever its successes in the fields of sports or the arts, is not especially well-known for its political science scholarship. (Heine 2006: 273 - 280).

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V. The MLA (Modern Language Association) Style

5. "Every society produces a space, its own space," writes Henri Lefebvre in *The Production of Space*. Lefebvre's sentence establishes a dynamic and intimate relationship between the society and the way it lives, creates and maps space. For, as he argues, space is no mere frame, nor a "form or container of a virtually neutral kind. … Space is social morphology : it is to lived experience what form itself is to the living organism , and just as intimately bound up with function and structure" (1991: 94).

Furthermore, space is not neutral but can be seen as the inscription of history, power, and language. To recall Foucault's words, space "is fundamental in any exercise of power" (in Soja 1989: 19). One of the obvious consequences of this inscription of ideology is that space splits and divides itself. Society, to pluralize Lefebvre's statement, produces its own spaces, striated by divisions as well as visible and invisible boundaries. This paper is concerned precisely with the pluralization and the verticality of the border the washer woman probably crossed. Viramontes climaxes the story with arrogant and phallic vision of separation — with new versions of bars. " guns taut and cold like steel erections" —confronting the woman and the children. (Manzanas-Calvo 2007: 113 – 129).

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