Appliable Approaches to Analyzing Texts in Academic Discourse

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By

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PREFACE

When the initial idea of developing this book was beginning to shape, our immature view turned to writing a text that offers tangible examples of text analysis. This stemmed from the belief that our discipline of applied linguistics is copious with perplexities that have to be disentangled, despite countless papers and books published, aiming to explicate problems of language learning. The need for a book with such characteristics is thus crucial and we could not be deterred from an alternative job; but to be fulfilled it necessitates coalescence of academic expertise, time and energy, and devotion, in this pressing condition, which until now have proved impossible to accomplish.

The book primarily addresses non-native speakers of English who are studying for masters and PhDs through the medium of English. Non-native researchers may also find some chapters of the book useful in academic writing and publishing. Being aware of the possible linguistic, rhetorical, and generic differences between disciplines of social sciences and natural sciences, we have offered examples of research that cover a wide array of disciplines such as linguistics, education, physics, etc. We know that the book does not provide full-blown guidelines that cater to academic writing across all disciplines. However, we believe the book sensitizes graduate students to the complexity and nuances of academic writing, so when they read or write content-specific texts, they may also attend to how language is used to communicate discipline-related content. They learn to dispense with the writing hassles and persuade their audience to continue reading without the risk of losing the thread of the meaning.

The title of the book, Appliable Approaches to Analyzing Texts in Academic Discourse, includes the word appliable rather than applied or applicable. This might be intriguing at the time that the term applied linguistics seems to have been established among the discourse community and many applied linguists argue that linguistics (or linguistics proper) "cannot therefore be an umbrella for all language activity" Davies & Elder, 2004, p. 5). Our selection comes after Halliday (2013, p.128) who explains his preference for the term as follows:

An appliable linguistics, as I understand it, is a theory which tackles problems and tries to answer questions – but questions that are asked, and

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problems that are raised, not by professional linguists so much as by other people who are in some way concerned with language, whether professionally or otherwise. There are large numbers of such people: educators, translators, legal and medical specialists, computer scientists, students of literature and drama, . . . ; and it is their 'take' on language that is being addressed, at least to the point of clarifying what sorts of questions can usefully expect to be asked, and whether or not there is any hope of coming up with an answer.

The chapters of this book grew out of research projects we defined for our PhD students for more than a decade. The book is first and foremost the outcome of fifteen years of intensive reading and teaching, with rich tasks that enable learners to substantiate what they have learned in each chapter.

Chapter One presents a thumbnail description of the term *science* and outlines briefly methods of scientific enquiry and classification of sciences.

Chapter Two presents a summary of the writing skill with a particular focus on academic writing. The chapter then discusses different approaches to writing followed by describing the growth of academic writing. The chapter concludes by explaining academic textbooks as a means of knowledge dissemination.

Chapter Three discusses phraseology as multiword expressions and their significance in language learning and language teaching. The chapter compares lexical bundles across different registers, genres, and disciplines and recognizes the importance of formulaic language and the possibility of a relationship between lexical bundles and the communicative functions of a text.

Chapter Four introduces corpus linguistics as an unbiased methodology for text mining. It then provides a classification of the corpora for diverse purposes. The chapter describes the different ways that corpora might be used in discourse analytic studies and is wrapped up by referring to some of the criticisms raised against corpus-based research.

Chapter Five argues the view that academic prose is essentially phrasal by nature. It explores a number of studies and introduces a detailed account of data commentary and reports a recent study on phrasal complexity features produced by English Language Teaching graduate students.

Chapter Six starts by viewing language as lexicogrammatical options from systemic functional linguistics. The chapter then continues to expand the notion of metaphor from Halliday's (1985) perspective and comes to a close by reporting nominalization use in research articles and textbooks in different disciplines and registers.

Chapter Seven discusses thematicity and refers to the definitional challenges of theme-rheme distinction from multiple perspectives. The chapter then categorizes themes into various types and refers to the approaches to defining theme from the Prague School of linguistics and from the systemic functional perspective. The rest of the chapter examines theme in different text types.

Chapter Eight proposes persuasion as a powerful resource that frames and organizes the attitudes and behaviors of people in a society. It introduces the media as a resource with considerable clout for enticing people and shaping their views and attitudes. The chapter expounds on the existing classifications of persuasion and explains the crucial function that inducing language plays in impelling the customers to buy a typical product.

CHAPTER ONE

WHAT IS SCIENCE?

1.1 Introduction

In academic writing, and indeed in linguistics itself, the idea of a scientific approach to research has become the norm. Academic publications prefer that papers approach the reporting of their research in a manner that resembles that of scientific discourse. Researchers increasingly find that they need to remove any individual commentary and arrange their findings in as *objective* a manner as possible. They adopt a third-person point of view to show that the objectivity of science is revealed by their selection of the point of reference. Sometimes this entails an approach to the organization of papers that start from conclusions, for example, and then proceed to outline the evidence for them. This form of argumentation is typical of the science genres which can be acquired by participating in academic networks. To what extent objectivity and selection of point of reference guarantee scientificity is a bone of contention among experts in scientific writing. But what do we mean by 'science' and how should we understand its origins and approaches?]

The word *science* is derived from the Latin *scire*, meaning to know and to experience (Close, 1965). In general, the word science is defined as the cumulative body of "knowledge about the structure and behavior of the natural and physical world based on facts that you can prove by experiments" (Oxford Advanced Learner's Dictionary) or behaviors that could be explained simply based on observable phenomena without making any reference to the mind or without addressing strict universal or logical statements. (e.g., theories, laws, and hypotheses). As Close states, one of the derivations of this word, *scientist*, was first coined by a moral philosopher, William Whewell, in 1840. The term substituted what was then called a *cultivator of science* or *natural philosophers* who initiated a method of inquiry which was later referred to as *the scientific method* (p. 21). Much later, at the beginning of the 20th century, a group of philosophers called logical positivists insisted on defining what is science from what is non-science by resorting to verifiable statements which they called synthetic

statements. Thus, they introduced verifiability as the criterion for sciences. According to this philosophy, theories and hypotheses are formed through individual observations or what Popper calls singular statements (Popper, 1977). This method of inquiry is called inductive inferencing. That is, universal (general) statements such as theories, laws, and hypotheses can be inferred from singular or particular statements. To put it bluntly, strict universal statements are evidence-based.

As an inevitable corollary, science was viewed as objective because reality was assumed to be objective. These modern materialist and cognitive scientists held that "because reality is physical, and because science concerns the investigation of physical reality, and because there are no limits on what we can know of physical reality, it follows that all of the facts in the universe are knowable and understandable by us" (Searle, 1992, p.11). They adopted a third-person point of view as the only solution to the study of the observable phenomena including the observable human behavior.

However, revolting against logical positivists for not being able to draw a line between science and non-science. Popper and Eccles argue that no matter how many singular statements, the conclusion arrived at in this way may not justify universal statements (Popper & Eccles, 1977). In other words, as they argued, inductive inferences, i.e. the result of particular experiences, cannot necessarily lead to universal statements. This, Popper argues, is the problem of induction, and "no matter how many instances of white swans we may have observed, this does not justify the conclusion that all swans are white" (Popper, 1977, 27). Popper went on to say that "inductive inferences, although not strictly valid, can attain some degree of reliability or of probability. According to this doctrine, inductive inferences are probable inferences" (p.29). ... "For it is not given to science to reach either truth or falsity... but scientific statements can attain continuous degrees of probability whose unattainable upper and lower limits are truth and falsity" (Popper, 1977, pp. 29-30). A scientist, as Popper (1977) states, sets forth a statement and tries to test that statement through scientific/logical discovery in a step-by-step fashion. He explains the testing of a theory as follows: "From a new idea, put up tentatively, ... conclusions are drawn using logical deduction. These conclusions are then compared with one another and with other relevant statements, to find what logical relations (such as equivalence, derivability, compatibility, or incompatibility) exist between them" (Popper, 1977, p. 32). Popper goes on to emphasize that this approach to scientific discovery has no resemblance to inductive logic: "I never assume that we can argue from the truth of singular statements to the truth of theories. I never assume that by force of 'verified' conclusions, theories can be established as 'true' or even as merely probable" (p. 33). Put

another way, the scientist tests the theory to see whether future observations verify the theory. This approach to the scientific methodology is called logical deduction or falsifiability.

Much earlier, Descartes (1649/1927 in Chomsky. 2000) claimed that methods of natural sciences should be applied to human sciences. Along the same line and within the domain of language, Chomsky (2000) held a biological view in the study of language, equating it with other body organs like eyes and ears. He argues that when a stimulus reaches the brain, neural commands are issued and they are carried to the related organ and the organ acts according to those commands. All this happens either in the environment or in the brain and is subject to experimentation. However, for instance, an oculist never asks how people should look at objects far away or a physiotherapist never suggests how to reach an object that is about a meter away from you. According to Chomsky (2000), such enigmas, including language use not language as a biological organ, deal with intentionality that falls outside the bailiwick of natural sciences and naturalistic inquiry.

Alternatively, a basic scientific method that emerges from modern science suggests the following steps: 1) a general problem, 2) collection of evidence, using proper means, to demonstrate the problem, 3) data organization, data sorting and data analysis, 4) generating and consequently pruning questions, 5) making inferences based on logical analyses, 6) generating/developing a theory. Much of what is done in areas like corpusbased linguistics follows this research approach. Unlike its early renditions, the more recent approaches make provisions for working with huge linguistic evidence using the software programs that enable researchers to make subsequent generalizations that have hitherto been almost impossible to make.

1.2 Classification of sciences

After years of inconclusive endeavors for establishing a perfect classification of science into a disciplinary structure—a classification that is consistent with all the facts of an individual's experience—there seems to be an evident consensus on the need for a pragmatic approach to this inquiry: instead of trying to establish a perfect classification, researchers had better search for the optimal scheme for a given practical purpose (Glanzel & Schubert, 2003). To this end, based on journal assignments, originally created for retrieval purposes, general and special libraries, publishers, encyclopedias, electronic databases, and internet-based information services have installed many classification schemes for scientific literature into appropriate subject fields. This kind of classification

which, as maintained by Glanzel and Schubert (2003), is "one of the basic preconditions of valid scientometric analyses" (p. 357), proved to have shortcomings when used in the context of research evaluation.

Due to these concerns over classification schemes, Glanzel and Schubert (2003), following a cognitive approach, based on the analysis of cognitive words and a scientometric approach that is setting the categories based on both the experience of scientometricians and external experts,) propose a two-level hierarchical classification scheme for three main discipline areas: *Sciences, Social Sciences*, and *Humanities*. Glanzel and Schubert's (2003) two-level scheme includes 12 first-level fields and 60 second-level subfields of the Sciences, as well as 3 major fields and 7 subfields for the Social Sciences and Humanities (see Appendix A). Coffin, et al, (2003) added one more major area, that of *applied disciplines*, and provided some representative examples for these four main discipline areas (see Appendix B)

1.3 Scientific English

Scientific discourse is a highly successful discourse whose discursive power in construing meaning is considered to be grounded in *grammatical energy*:

Scientific discourse is a very high-energy form. ... Scientific language has construed for us the vast theoretical edifice of modern knowledge, constantly expanding its meaning potential without, up to the present at least, showing any signs that its capacity for expansion is limited. (Halliday, 1997, cited in Webster, 2004, p. 182)

Founders of modern science in the west, i.e., the early humanists, as well as, the scholars of the humanistic types of learning were aware of the crucial role of language in their endeavors. English and French scholars' earliest effort was to develop "a form of shorthand, a writing system that would be simpler and more expeditious in codifying knowledge in writing"; and "neutral among the various languages, in the way that numerical symbols are" (Halliday & Martin, 1993, p. 6). Later, scientists pursued a more substantial aim, that of designing a universal *philosophical language*—a fully designed and artificial language, which was devised as a resource for "arriving at new knowledge, ... for enquiring and for thinking with...[for] constructing technical taxonomies." (Halliday & Martin, 1993, p. 6).

The construal of a particular form of reasoned argument, as Halliday and Martin (1993, p. 7) assert, has to do with the combination of two resources used in scientific English: lexical resources in the form of new technical terms, and grammatical resources in the form of nominal groups and

clauses. In other words, the "distinctive quality of scientific language lies in the lexicogrammar (the "wording") as a whole" (ibid, p. 4). These grammatical resources were not the invention of scientific writers, as Halliday (1993a) argues. In fact, scientists started to use those resources, already existing in English as vestiges of the Norman French, Latin, and Greek languages (Webster, 2013), for their rhetorical purposes: "to create a discourse that moves forward by logical and coherent steps, each building on what has gone before" (Halliday, 1993a p.70). Halliday further provides a summary of features called for by reasoned argumentations:

1. Nominal elements:

- a. form technical taxonomies
 - technological categories
 - methodological categories
 - theoretical categories
- b. summarize and package representations of processes
 - backgrounding (given material as Theme)
 - foregrounding (rhematic material as New)

2. Verbal elements:

- a. relate nominalized processes
 - externally (to each other)
 - internally (to our interpretation of them)
- b. present nominalized process (as happening)

In scientific English, it is through nominalizing that the concepts can be organized into taxonomies and that processes can be packaged into information and distributed by backgrounding and foregrounding. Therefore, while the content of the clause is represented by nominal groups, the verbal groups signal that the processes take place; or project the logical relationship of one process to another, either externally (\mathbf{a} causes \mathbf{x}), or internally (\mathbf{b} proves \mathbf{y}) (Halliday, 1993a, p.71).

1.4 Characteristics of scientific English

Scientific English is, therefore, a language devised by and for the experts. In scientific English, certain words, and certain grammatical constructions, project as more highly favored. It is through scientific jargon that the writer gives "extra value to his discourse by marking it off as the discourse of an intellectual elite" (Halliday, 1993a, p. 77) and establishes his or her own "prestige and authority" (ibid. p. 78). While scientific English represents textual and lexical interconnections explicitly, as Halliday (1993a, p. 74)

argues, it leaves many local ambiguities which stand out particularly (a) in strings of nouns among which the semantic relations (mainly transitivity relations) are inexplicit; and (b) in the relational verbs, which are often indeterminate.

Several features of scientific discourse were recognized as the underlying reason for the difficulties associated with learning it: interlocking definitions, technical taxonomies, special expressions, lexical density, syntactic ambiguity, grammatical metaphor, and semantic discontinuity (Halliday, 1993a, p. 78). During the past hundred years or so, the scientific discourse has come to be depersonalized (Hyland, 2006b). It has been acknowledged that personal projections have often been replaced by passives, for instance, *John argued that* ... was substituted by *John's argument was that* In fact, impersonal projections of relational verbs, as in *Smith's suggestion that* ... is confirmed by..., play a crucial role in construction of the internal steps in reasoned arguments: a process is not paired with one that is its cause, rather it is paired with a process which is evidence for it (Halliday, 1993a, p. 72). The schematic interpretation of this evolution of the grammar of technical English over the past centuries is illustrated in Figure 1, which shows the preferred format for construing physical phenomena.

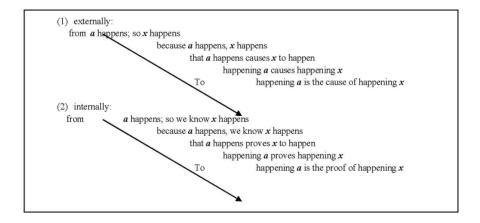


Figure 1. Grammar evolution in scientific English (from Halliday, 1993a, p. 73)

In the latest step in Figure 1, which happened in the 20th century, the causal relation comes to be nominalized, as in the transformation of *causes* and *proves* into *the cause* and *the proof*, respectively.

1.5 Textbooks and disseminating knowledge

Textbooks are generally recognized as prototypical examples of disciplinary paradigms. They are also viewed as repositories of (a) codified knowledge (Bhatia, 1993; Hyland, 2000), (b) rejected and accepted theories of disciplines (Hyland & Salager-Meyer, 2008), and (c) acknowledged facts of disciplines (Hyland, 2000). Therefore, while the central role of research articles in constructing new knowledge across different disciplines is highly valued, a textbook is a context where the multiple voices reflected in earlier texts are condensed into a single expert voice (Hyland & Salager-Meyer, 2008). This dichotomy is addressed in Connors' (1986, p. 190) assertion:

In most developed intellectual disciplines, the function of texts has always been essentially conservative: textbooks, which change with glacial slowness, provide stability amid the shifting winds of theoretical argument. They serve as sources for the proven truths needed for students' basic training while advanced scholarship extends the theoretical envelope, usually in journal articles.

The common purpose textbooks serve in academic contexts is reflected in Hyland's (2000, p. 104) provision of the typical features of the textbook genre irrespective of the discipline it is associated with:

Textbooks are indispensable to academic life, facilitating the professional's role as a teacher and constituting one of the primary means by which the concepts and analytical methods of a discipline are acquired. They play a major role in the learners' experience and understanding of a subject by providing a coherently ordered epistemological map of the disciplinary landscape and, through their textual practices, can help to convey the values and ideological assumptions of a particular academic culture.

This view helps novice students to construct a conception of textbooks as the concrete realization of the knowledge and methods of their disciplines. In addition to producing this disciplinary image and transferring new unknown knowledge, textbooks serve as models of literacy practices: they indicate the ways through which the discipline states and argues what it knows. The textbook genre can be conceived of as a hybrid genre at the intersection of pedagogic and scientific discourse. They provide a medium for writers to disseminate discipline-based knowledge to both experts and novices (Hyland, 2000). Offering models of disciplines for a group of readers who are meant to be initiated into a new world of the disciplinary community (Bhatia, 1993), textbooks represent disciplinary orthodoxy (Hyland & Salager-Meyer, 2008), and define normal science (Hyland, 2000, p. 105).

1.6 Systemic Functional Linguistics and scientific English

In Halliday's (1994b, 2004a) Systemic Functional Linguistics (SFL), language is considered to be fundamentally about meaning-making. It builds on the idea that language users construe meaning and produce texts in various contexts—context of situation, referred to as register and context of culture, referred to as genre (Liarde't, 2013, p.162)—through a series of choices of "what goes together with what" and of "what could go instead of what", referred to as syntagmatic relations and paradigmatic patterns, respectively (Halliday & Matthiessen, 2004, p. 22). This model of language that envisions meaning in the dichotomous context of register and genre, though disputable even among the Sydney School community, can be examined in relation to three general components of language or metafunctions—ideational, interpersonal, and textual—that are used respectively to construe and organize human experience, enact social relationships, and construct the text (Halliday, 2004a).

Unlike colloquial and spoken language, academic language is distinguished by the use of technical lexicogrammatical features including complex, intellectual, dense, and specialized lexes, and grammatical peculiarities like thematicity, relational processes, agentless structures, evaluative that-clauses, etc (Biber, 2006a; Christie & Derewianka, 2010; Halliday, 1993b; Hyland, 2009a). The abstraction of academic discourse is achieved by the conscious shrouding of the participant (Halliday & Martin, 1993). The idea is that any state or succession of states we are located in is an abstract manifestation of a process (Halliday, 1994b). Lexical density, defined as the yardstick of close-knit information in a text, is concerned with "how tightly the lexical items (content words) have been packed into the grammatical structure", may go considerably higher in scientific writing (Halliday & Martin 1993, p. 83).

The features mentioned above pertaining to academic discourse are elaborately described by SFL as a strong linguistic stockpile that "simultaneously builds cohesion, foregrounds meanings in static nominal groups, and backgrounds personal and subjective voice" (Liarde't, 2013, p. 163). This strong linguistic repertoire for construing scientific discourse is known as grammatical metaphor which will be discussed in chapter 6.

1.7 Global English, international English, or world Englishes

Webster (2013) makes an analogy between the process of language standardization and internationalization or globalization. Like a regional dialect that moves beyond its confines to develop into a standard language for national communication and administrative purposes, a global language also moves beyond its national boundaries by being adopted by speakers of other languages who may still maintain certain properties of their native language when they use it. One consequential outcome of this promotion to a standard language is developing new registers and broadening its meaning potential. A global language seems to follow the same path to promotion.

The promotion of a language from a native language to a global language is not a new phenomenon in world languages. Centuries ago, Latin was used by activists for communication and functional purposes and it was gradually urged by formalists for didactics and the teaching of pedantic rules of language (Rivers, 1981). In ancient times, Persian was the dominant means of communication and documentation in Old Persia, India, Pakistan, and several other parts of the world.

In today's world, a vast range of people can be said to belong to a second community, culture, and language, in addition to their native language community, and due to the global nature of English, this second language around the world has turned out to be the very English. The global character of English has defined the conventions of business areas and scientific disciplines (Widdowson, 2012). There is no doubt today that English plays a dominant role in the academy throughout the world even though critics might argue that the expansion of academic English has atrophied other languages. This language –English- enables researchers with different native languages to participate in the activities of their discipline and impart knowledge and information. This has led to a kind of English that is known as global English (Webster, 2013) which fosters communication between members of different language varieties. In the process of the vocabulary development of a global language, Webster argues for four factors that account for the semiotic potential expansion: 1) new word-making principles, 2) new lexical sets, 3) new meanings, and 4) new registers (p.90). Webster calls them semogenic strategies that describe the open-ended nature of language (p.92). Put another way, this global language is used to create new meanings and new functions that do not necessarily exist in the language before its promotion.

In another sense, as Webster (2013) maintains, English has been labeled a world language, an international language, a lingua franca, and as of late, world Englishes. This refers to the English that is used for goods and services and for information among former British colonies in some Asian and African states such as India, South Africa, Singapore, Hong Kong, etc. in addition to the United Kingdom, the United States, Canada, and Oceania where English belongs to their native communities. Webster cites an

English expression, from Braj Kachru, that emerged in Indian English as a result of the interaction of English with the culture of the Indian community. Examples of this kind of language development with the semogenic potential to become part of the international language abound.

The swing of the pendulum and the resulting growth of the two trajectories of global and international English indicate the political and military hegemony of Britain and, much later, the United States, the economic influence of the United States on the world (Phillipson, 1992), the promotion of English language teaching to a huge financial enterprise, the use of English as a medium for the representation of the identity, customs and values of a community (Widdowson, 2002, p. 382) and, more recently, the emergence of the internet, which has affected almost all aspects of life and individuals at large. Want it or not, this is the glorious time for the expansion of English though how long this situation continues borders on quixotic. The sociopolitical, economic, military, and educational status of the world 100 years from now might turn out to push English downstairs and another language upstairs as all languages have the potential for semogenic expansion if such needs arise.

1.8 The influence of academic English

English, as a universal language, may now be spoken by more nonnative speakers than native speakers and English, as a worldwide academic language, is considered to bring academic prestige and promotion. This language spread has resulted in overshadowing other languages. Publishing a book or an article in English might warrant academic tenure. In some countries like Iran, PhD students have to publish a paper derived from their dissertations before they are formally permitted to defend their dissertations. In some contexts, acquiring academic promotion depends on how many papers or books one has published in English with prestigious publishers. In Iran, for instance, journal gatekeepers are encouraged not to publish papers in Persian but to accept English-based papers, and to index their journals in international databases such as Scopus, Social Science Citation, Web of Science, etc.

In addition to these developments in English language use, an enormous number of students study academic subjects in English medium universities. A growing number of these international students now pursue their studies in Anglophone countries such as Australia, the United States, and Canada. They either choose to stay in their host country or a third country and try their chances for occupation after their graduation or they return to their homeland assuming that their degree from an Anglophone university would

be recognized as more creditable and thus a privilege for finding a modest job. Likewise, many universities in non-Anglophone countries now accept international students and present subject-specific courses in English. The admission of these students, besides its pecuniary benefits that can compensate for governmental funding, improves the international status of the university. A recent surge of students from regional countries in the Middle East, predominantly from Iraq, Yemen, Lebanon, and Syria, pursuing higher education degrees register in Iranian universities as fee-paying students. Some of these students are granted a full scholarship from the Iranian universities and the dominant medium of disciplinary instruction in some, though not all, universities is English. These universities are competing for ameliorating their infrastructure and removing restrictions or bending academic laws so that they would be able to attract more non-Iranian students.

1.9 The import of the spread of English

Today, nobody can deny the import of the supercilious spread of English in academic settings, but it is worth underscoring some of the major consequences of this proliferation.

- 1. The growing superiority of English in academic settings has diminished the role of other languages. This pandemic use of English has played an inexorably crucial role in devouring other languages.
- 2. The tendency to publish papers in English-medium journals for more visibility has eroded the journals that publish papers in other languages. The reluctance of researchers to publish their research findings in local journals has motivated the gatekeepers of these journals to switch to English to receive submissions from both local and international researchers.
- Access to knowledge generated in other languages often becomes difficult. Even the impact of researchers documenting their findings in other languages is likely to be limited to their linguistic community, depriving them of the global dissemination of their knowledge and achievements.
- 4. As the use of English among non-Anglophone members in academic settings is promoted, opportunities for the growth of academic language in other languages are demoted.
- 5. In Iran, like in some non-Anglophone countries (Wilson, 2002), international PhD students are given the alternative to audit English classes or study Persian before they are permitted to enter the PhD

- program. Along the same line, they are given the choice of writing their dissertations either in Persian, the language of the host university, or in English.
- 6. Publishing papers in well-reputed and ISI-indexed journals assumes citing English language publications to which other scholars have access and their reliability can easily be assessed.
- 7. Originally launched by the Institute for Scientific Information (ISI) in 1964 and now possessed by Clarivate Analytics (Hyland, 2006). the expanded version of the Science Citation Index (SCI) embraces more than 22,200 established journals across more than 260 disciplines of science and technology from 1900 to the present. This web of knowledge comprises Science Citation Index Expanded with over 9,200 creditable journals across 178 scientific disciplines, Social Sciences Citation Index including over 3,400 popular journals across 58 social sciences disciplines. Arts and Humanities Citation Index, comprising more than 1,800 journals across 28 disciplines, Emerging Sources Citation Index, with over 7,800 journals across 254 disciplines, Book Citation Index, including over 104,500 firstrate books supplemented by thousands every year, and Conference Proceedings Citation Index, from over 205,000 conference proceedings (https://clarivate.com). English is said to encompass over 95 percent of all publications in SCI (Hyland, 2006).
- 8. Research has promulgated the influence of culture on academic communication. That is, the expectations one has of a text depend on the writing culture within which one has received instruction and acquired knowledge. The rhetorical strategies that we use to organize a text, as well as the text's finished organization, have a direct bearing on our cognitive constructs (e.g. Connor, 2002; Hinkel, 2002; Jalilifar, 2021). Saying it differently, academic writing represents our writing culture and our different rhetorical and linguistics characteristics which might transfer from first to second language contexts (Canagarajah, 2002).

In comparing the economic texts produced by Finnish and Anglo-American researchers, Mauranen (1993a) reflects on the writing preferences of the two groups. Her analysis reveals that the writer of an English economic text seems to develop a more vivid picture of a reader in mind than the writer of a Finnish economic text. Comparatively, native English writers employed more markers of engagement and anticipation to involve their readers in their discourse. Her research showed that while Finns preferred strategies like periphrasis, expecting readers to infer from their discourse what

had not been explicitly stated, English writers valued strategies of explicitness, leaving little room for reader interpretation. These differences in using rhetorical writing strategies might manifest different conceptions of contexts in the minds of Anglo-American and Finnish writers—one being culturally heterogeneous and one being a homogeneous context (Mauranen, 1993a). Awareness of these rhetorical writing preferences across languages is required for successful communication in a second language.

In a broader sense, Moreno (1996) brings up several factors that can guarantee successful communication: text type (e.g., narration), text type (e.g., narration), text genre (e.g., a review article or a case report), subject matter (e.g., mathematics), participants (e.g., lecturers or tutors), situational-variety (i.e., register), tone (e.g., serious or hilarious), channel (illustration), format features (e.g., length or intertextuality), point of view (e.g., objective), global communicative event (e.g., sharing results from research), setting (e.g., a classroom), general purpose of communication (e.g., writer's perspective), global rhetorical strategy (e.g., demonstrating a theory), overall subject matter or topic (e.g., forensic medicine), level of expertise (e.g., novice writers), global superstructure (e.g., problem-solution), predominant text-type (e.g., argumentation).

- 9. A further challenge in the course of publishing requires non-native writers of English to fully abide by the linguistic and rhetorical criteria established by journal gatekeepers who come down very hard on those who transgress the conventions of practice. If the content is approved by the reviewers, the manuscript is usually sent back to the author for the language to be refurbished by a native speaker of English. Many journals reject manuscripts submitted by non-Anglophone researchers for possible publication unless the authors acknowledge that their manuscript has already been revamped by an English speaker. This requirement holds for all disciplines but perhaps more so for social sciences and humanities. Having been a committee member for promotion and tenure in my university for several years, my personal experience of reading a lot of ISI-indexed research articles published by my colleagues from other disciplines reveals the caprices involved in reviewing these articles for language blunders. Evidently, awareness of those factors mentioned above by Moreno (1996) can heighten the likelihood of publishing their research in an English journal.
- 10. About the influence that English has had on individuals, it is perhaps possible to regard three types of researchers: Anglophone researchers,

non-Anglophone researchers in inner-circle countries, and non-Anglophone researchers in the periphery. It appears that the latter group owns the least privilege for publishing with high-stakes journals.

1.10 Does the expansion of English mean the seclusion of other languages?

Want it or not, the status of English has now changed from being restricted to a national language to being diffused to the academic language beyond the confines of its local territory, greasing the wheels of communication (Webster, 2013). This new status has opened up whole new vistas for English. Besides being a national language of a few countries, English is now the all-embracing academic language across the board, creating opportunities for academics to socialize in the written world. To many researchers whose concern is primarily to address their global discourse community, academic English is now their world of primeval socialization, and contrary to Bisong's claim that other languages are not jeopardized by the expansion of English (1995), I argue that the domain of activity of other languages has inevitably undergone attrition and their potential to broaden their boundaries has consequently been stymied.

The proliferation of English in academic settings has led to the dominance of the English academic culture. The spread of English at the global level has marginalized other languages and their rhetorical conventions, giving the second language academics a lower social position vis-à-vis the native speakers of the dominant language. This is revealed in myriad shapes in academic contexts. One example of this native English privilege can be observed in inviting keynote speakers to international gatherings for presentations. In the Iranian academic setting, for a conference to be formally registered as international, the organizers need to invite important figures from the inner-circle countries. The presence of these figures galvanizes the conference and social events around it to the extent that lots of participants are thinking of standing beside these important persons and taking photos as memories to take with them from the conference. And for days, they might cherish those moments they have been with a core in their discipline. This is while the local Iranian researchers with a respectable academic impact might keep a low profile. Another instance of this linguistic hegemony, or what Phillipson (1992) calls linguistic imperialism, is the reluctance of Iranian researchers in publishing in local academic Persian journals. To maintain yearly tenure or to academically receive a promotion, researchers in Iranian universities are