

The Journal of English Language Pedagogy and Practice  
Vol.10, No.20, pp.92-129, Spring & Summer 2017

## **Towards the Development of a Socially-Informed, Process-Oriented Model of Research in Metadiscourse**

**Davud Kuhi**

*Department of English Language, Maragheh Branch, Islamic Azad University, Maragheh, Iran*

\*Corresponding author: davudkuhi@yahoo.com

.....  
Received: 2016.8.13

Revisions received: 2016.11.27

Accepted: 2017.2.1  
.....

Online publication: 2017.2.20

### **Abstract**

Since the early development of interest in the interpersonal dimensions of academic communication in the 1980s, the analytic potentials of the concept of metadiscourse have motivated a large number of investigations. Although these analytic potentials have facilitated the study of diverse academic genres, there has always been a risk of detachment of textual analyses from the contextual origins and motivations. In some cases, this detachment has been so observable that the true discursal nature of the interpersonal dimensions of academic communication has been reduced to classifications of a large number of pure textual properties. As a reaction to this reductionist trend, the present article provides a preliminary framework within which the contextual origins of metadiscourse features can be understood. It is suggested that if the findings of metadiscourse research are meant to be interpreted in meaningful ways, they should be contextualized within such process-oriented frameworks.

**Keywords:** metadiscourse, socially-informed model, process-oriented model, research

---

## Introduction

Parallel to the developments of EAP programs over the last five decades, a considerable amount of scholarly activity has been conducted and reported in academic journals and books concerning the description of academic discourses in English (see Flowerdew, 2002). This strong motivation has driven EAP into the stream of a theoretical enrichment and development (e.g., see Dudley-Evans & St John, 1998; Hutchinson & Waters, 1987) which starts with *Register Studies* of the 1960s and 1970s, focusing on linguistic properties of different functional varieties or registers (e.g., see Barber, 1962; White, 1974; Chiu, 1972; Gustafson, 1975). This movement paved the way for the development of another theoretically richer movement in both Europe (see, for example, Allen & Widdowson, 1974) and the United States (see for example, Selinker, Lackstrom & Trimble, 1973). What then (i.e., the 1970s) became known as *Grammatical-Rhetorical Model* of analysis of academic/scientific communication provided a deeper understanding of how so called 'lower level' textual choices are determined by some 'higher level' discoursal/functional choices.

The 1980s witnessed a revolutionary attempt by Swales' redefining the classic concept of genre in EAP context. A large number of scholars were and still are contributing to the development of the concept of genre (see, for example, Christie & Martin, 1997; Martin, 1992 who have approached the concept from a *Systemic Functional* perspective; and also see Miller, 1994; Freedman, 1994; Freedman & Adam, 2000 who have approached the concept from a *New Rhetorics* point of view); however, Swales' work seems to have launched the most massive interest in genre in EAP (see Hyland, 2006).

In his earlier attempts to introduce the concept of genre into EAP research, Swales emphasized the concept of "communicative purpose" (Swales, 1990) as a defining feature, but his later attempts (see Swales, 2004) resulted in the introduction of a metaphorical complex which identified genres in terms of *frames for action, language standards, biological species, prototypes, institutions and speech acts*.

In addition to the development of an independent tradition of research in itself, the social conception underlying the theory of genre has also informed some other current movements in academic discourse studies (e.g., corpus-

based studies of academic discourse, contrastive-rhetorics-based studies of academic discourse and ethnographic investigations of academic discourse (also see Hyland, 2006 for a comprehensive review of these current issues). In light of these developments, cultural conceptions have been injected into academic discourse analyses and we have been informed that what non-native participants of academic communication bring with themselves in terms of knowledge and expectations may be very different from natives'. The historically transmitted and systematic networks of meanings which allow us to understand, develop and communicate our knowledge and beliefs about the world all penetrate into the very structure of our discourses and creates visible differences in terms of the macro and micro structures of academic discourse.

The concept of metadiscourse was born in such a theoretical journey. The birth of the idea of metadiscourse in academic discourse studies should be seen as the outcome of the forces in the context of academic discourse analysis which lead the scholars towards the development of a true social model. Bazerman (1998, p. 15) highlights the influence of these forces as by the force of our own reflexive gyrations, we have been gaining glimpses of a few dimensions in which the language of knowledge operates. These glimpses are starting to show us how much language is part of complex webs of human activity and meaning making. (p. 15)

The theoretical developments outlined above had incontrovertibly indicated to us that scientific/academic language is no unitary or stable thing; it is "evolving and multiple, emerging in relation to the specialties, projects, methods, problems, social configurations, individual positioning and other dynamics that drive scientific activities" (Bazerman, 1998, p. 16). The theoretical development outlined above had clearly demonstrated that academic discourse is a social construct, and its success is at least partly accomplished through strategic manipulation of rhetorical elements and producers of academic discourse are concerned about not only how to demonstrate the propositional content of their discourse but also how to present their claims appropriately within the particular social context of the target community (Swales et al., 1998).

#### **Statement of the Problem: Theoretical Ambitions and Practical Realities**

An unfortunate phenomenon which has dominated the whole history of academic discourse analysis is the gap between the theoretical ambitions of the

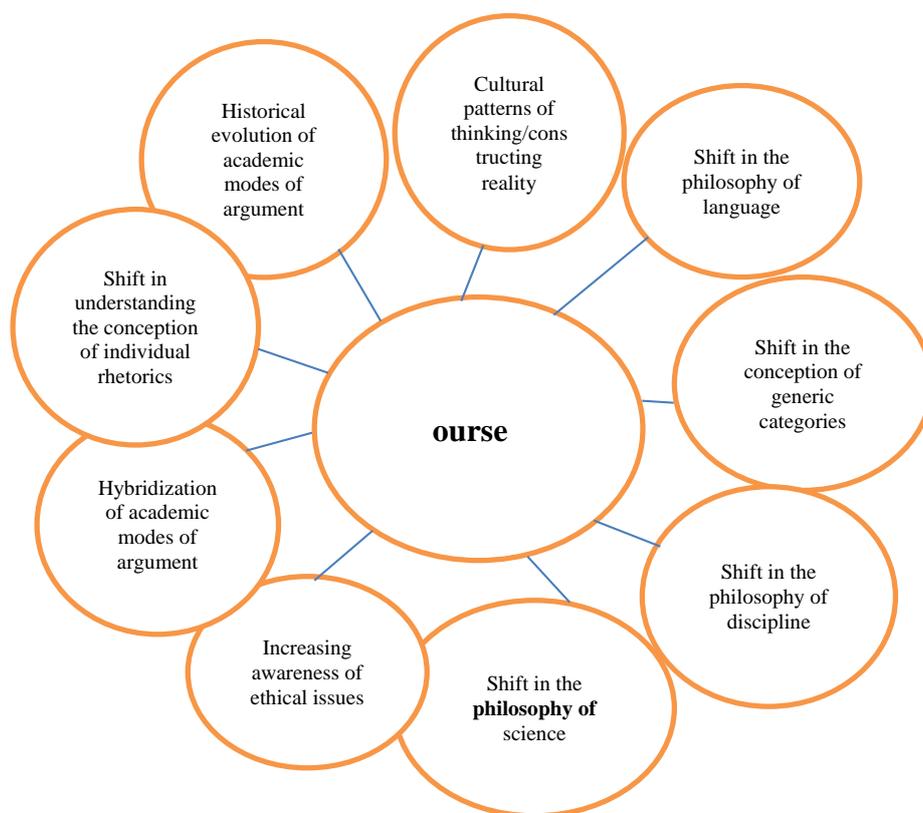
scholars who have contributed to the development of models and the practical realities of the analyses. The fact is that analytic procedures have never been able to successfully and ideally accomplish the theoretical desire of the models, i.e., depicting the true social nature of academic communication. Metadiscourse research cannot be seen as an exception in this regard. In fact, what began as a way to penetrate into the social layers of academic communication and certainly resulted in tremendous achievements also runs the risk of producing no more than what pure text analyses do. It seems to me that in its current phase of development, what metadiscourse research needs (more than being concerned with textual classification issues) is the development of a coherent contextually-informed and process-oriented framework within which the findings of text analyses can be better interpreted. There are instances of research which really reflect this understanding and I have dealt with them in the forthcoming sections; however, my emphasis is that the more multi-dimensional, the better. We need to explore metadiscourse from a true ethnographic perspective and this necessitates multi-layered analyses for which I have tried to propose a framework.

### **What Constitutes Metadiscourse Research? A Socially-Informed Framework for Research**

What I have been trying to say is that in order for research to constitute metadiscourse research, the researcher should be able to go beyond textual properties and penetrate into the social context which has given rise to those textual features. Then, what we require from metadiscourse research is more than classifications of textual manifestations of metadiscourse. Without this we could run the risk of reducing metadiscourse research into a product-oriented paradigm of investigation. I have already attempted to develop such a model (see Kuhl & Behnam, 2011); however, I feel that, at the moment, we have a better understanding of the nature of the social processes which trigger metadiscourse use. The theoretical developments accompanied with further empirical evidence are now helping us see the social and contextual picture more vividly, and this has necessitated further attempts to develop more sophisticated models.

Motivated by this necessity, the present paper proposes a framework within which the findings of metadiscourse can be better interpreted. In fact, I believe

that the relationship between metadiscourse features and these factors should be seen as a dialectical relationship. In other words, I suggest that since the very emergence of metadiscourse is the outcome of the influence of these factors, the true meaning of metadiscourse features should be understood in light of them. Figure 1 outlines the different dimensions of this contextual framework.



*Figure 1.* A preliminary contextual framework for understanding metadiscourse research

Of course, one significant fact which should be highlighted is that these dimensions do not and cannot develop in isolation without being informed by the findings of other dimensions. In other words, a coherent picture of the nature of metadiscourse would emerge when metadiscourse is approached from a variety of dimensions. In fact, many of the instances I have included in my

forthcoming review under different trends of research have, in practice, incorporated multiple dimensions of analysis.

**Metadiscourse and Shift in the Philosophy of Language.** Probably the most fundamental perspective from which the findings of metadiscourse research should be understood is that of linguistic philosophy. Although the concept of metadiscourse is the outcome of a discursual conception of academic communication and it has more explicitly emerged from a Systemic Functional approach to discourse (particularly from Hallidayan philosophy of language; see, for instance, Halliday 1973/2004), I argue that not all discourse-based approaches will be of equal significance in defining the metadiscoursal character of academic communication. Here, we need to be more specific about the characteristic of an approach which will more appropriately lend itself to an interpretive framework. An appropriate interpretive framework for metadiscourse research should avoid a representational philosophy of human communication in which discourse and reality are conceived to be operating independently from one another, and the operation of discourse is reduced to a mere representative, reflective function. Reducing discourse to a transparent instrument which reflects realities as they are denies the essence of the concept of metadiscourse. Instead, we need a reality-constitutive perspective in which the blurred boundaries of discourse and reality are recognized (e.g., see Shi-Xu, 2005; Lecerle, 2006), a perspective within which instrumentality, that is, “*I speak language*”, can be replaced by the Heideggerian possibility of “*language speaks I*”, and within which the principle of transparency can be replaced by the principle of opacity. We will find these alternative principles more explicitly stated in and in line with the claims of a critical approach to discourse analysis (see, for instance, Fairclough, 1992; Fowler, 1981; Candlin, 1997; Foucault, 1972); hence, I can more explicitly suggest that metadiscourse research should be defined and interpreted in light of CDA principles (and not many of other functionally-oriented approaches to discourse). The reason why I see CDA more appropriate for interpreting metadiscourse research is that the methodology CDA provides is in line with the very claims that gave rise to interest in the concept of metadiscourse (I cited some of these claims above). In fact, the essence of metadiscourse research lies in the assumption that academic knowledge is a social construct, and hence, it is constructed in the complex

webs of human activity and social process of meaning making. Metadiscourse research assumes that the act of knowledge construction and meaning making in academic communication should be seen as a social practice; therefore, the reality of the knowledge constructed in academic communication cannot be seen as independent from the identities of the interlocutors, their interpersonal relationships in the social structure of the academy, and their cultural backgrounds.

**Metadiscourse and Shift in the Philosophy of Science.** All aspects of human experience in general and science and academic study in particular become possible through and are fundamentally based on acts of classification. If we can reserve the concept of science as a means of building knowledge and interpretations, we can claim that this becomes possible largely through a process of defining boundaries between conceptual categories, labeling and naming those categories and the relationship among them. Classification, labeling, and naming are linguistic acts in nature and in fact as Lee (1992) rightly argues it is through language that classification becomes possible. Defined from such a point of view, language ceases to be a neutral medium for the transmission and reception of already constructed knowledge. Language is the key ingredient in the very construction and constitution of knowledge (Jaworsky and Coupland 1999). In light of this understanding, we have gradually been getting rid of some misconceptions. These misconceptions may have their roots in the feelings of "alienation" we have developed towards the discourse of science (e.g., see Halliday, 1993/2004).

In fact, the shift we notice here from the mentioned 'alienation' towards a constitutive way of characterizing the role of language in building scientific knowledge paves the way for interpreting the findings of metadiscourse research. One excellent example of this direction of contextualizing metadiscourse research can be found in Crismore and Farnsworth (1989). This research has concentrated on one of the highly prestigious and influential scientific texts, Darwin's *The Origin of Species*, and has traced Darwin's use of modality markers (hedges and boosters), attitude markers and commentary in this text. An interesting finding of this research is that it has resulted in identifying 890 instances of such metadiscourse markers in Chapter *One of The Origin of Species*, which sets out a framework for the book and Chapter Four, which presents the theory of natural selection. The significance of this research

lies in the fact that what used to be seen as an influential scientific text and counts as a representation of pure hard science is nothing but the voice of a cautious scientist who resorts to metadiscourse to indicate the relative uncertainty of his claims. Based on the patterns of metadiscourse use in *The Origin of Species*, Crismore and Farnsworth have attempted to develop an image of a scientist which fundamentally differs from the impressions developed by the above-mentioned alienation.

Metadiscourse, therefore, cannot and should not be approached from a realist scientific perspective, which characterizes knowledge as something emerging from our direct access to the external world, i.e., through experiment, induction, observation and falsifiability, to look at the issue from Kuhn's (1970) perspective; nature cannot speak to us directly and interpretation of events in the natural or social world always depends on the assumptions scientists/academics bring to the problem. Instead, metadiscourse should be understood in light of a social constructivist position which, in opposition to the theories of positivism and empiricism, questions the idea of an objective reality.

**Metadiscourse and Shift in the Philosophy of Discipline.** One major contribution of the development of the concept of genre in the last three decades has been highlighting the significance of the concept of "discourse community" (see Swales, 1990). In Swales' thinking, what constitutes the functional value and the macro and micro structural properties of a specific genre arises from the "communicative purposes" established and determined by the parent members of a discourse community. As a constitutive component of academic genres, metadiscourse features can be understood and interpreted in light of such an understanding.

The notion of discourse community helps to specify culture by "reducing huge national or ethnic conglomerates to a human scale" (Hyland 2005a, p. 138) and provides a descriptive and explanatory framework for how meanings are socially constructed, taking into account the forces outside the individual which contribute to guiding purposes, establishing relationships and ultimately shaping discourse. When Becher (1989) described disciplinary communities as 'tribes', he meant to identify them as separate cultures, each with its norms, bodies of knowledge, categorizations, sets of conventions, and modes of inquiry. What we need to highlight here is that academics cannot step outside

the beliefs of their social groups to tell us ‘what the world is really like’ but have to draw on conventional ways of producing agreements. Within each disciplinary ‘tribe’, individuals acquire a competence in specialized discourses: how to create a convincing reader-writer environment, how to persuade the audience and how to frame ideas in ways which appeal to appropriate community recognized relationships. One consequence of this would be that community constraints on discourse both restrict how something can be said; academic writing would be characterized as a situated activity and effective use of metadiscourse would be the outcome of writers’ observation of appropriate interpersonal and intertextual relationships. Hence, to understand the pragmatics of metadiscourse, it must be contextualized in the disciplinary communities which give it meaning. Recognition of this dimension of the nature of metadiscourse has stimulated a huge wave of studies in this perspective and produced one of the richest areas of metadiscourse application in academic discourse analysis. Table 1 provides a summary of some typical community-based studies of metadiscourse:

Table 1  
*Some typical community-based investigations of metadiscourse*

<b>Study</b>	<b>Metadiscourse Feature Investigated</b>	<b>Disciplinary Focus</b>
Swales et al. (1998)	imperatives in research articles	10 disciplines from traditional science, social science, humanities
Hyland (2002a)	directives in research articles and textbooks	11 hard and soft disciplines
Hyland(1999b)	citation practices in research articles	8 hard and soft disciplines
Hyland (2002d)	reporting practices in research articles	8 disciplines in pure sciences, applied sciences, humanities and social sciences, applied social sciences
Hyland (2000)	Interactional features of published peer reviews	8 hard and soft disciplines

---

Hyland (2001a)	Self-mentions in research articles	8 hard and soft disciplines
Hyland's (2001b)	addressee features in research articles	8 hard and soft disciplines
Harwood (2005a)	personal pronoun <i>I</i> and inclusive and exclusive pronoun <i>we</i> in research articles	4 hard and soft disciplines
Hewings & Hewings (2001)	<i>it-clauses</i> with <i>extraposed</i> subjects in research articles	A range of disciplines (Astrophysics/Astronomy, Geography/Environmental Sciences, Business Administration, and History)
Hyland & Tse's (2004)	metadiscourse in L2 postgraduate students' dissertations	Hard and soft sciences
Hyland & Tse (2005)	<i>Evaluative that</i> in dissertation and journal abstracts	6 hard and soft science disciplines
Hyland (2008b)	Self and other representation in research articles	8 hard and soft sciences
Estaji & Vafaeimehr (2015)	Interactional metadiscourse markers	Mechanical and electrical engineering research papers

---

A number of key general themes emerge from these and other similar studies:

- Metadiscourse choices serve to reinforce the epistemological and social understandings of writers by conveying an orientation to a particular ethos and to particular practices of social engagement with peers.
- Writers in broad domains of knowledge have different ways of persuading readers to accept their results.

- There is an uneven distribution of metadiscourse features in hard and soft science fields, which points to the rhetorical constraints of different disciplinary practices.
- Variation between academic disciplines helps to refute the notion of homogeneous academic writing and refines our notion of functional variation.
- Through the identification of areas of disciplinary difference, we are able to uncover the epistemology – what is valued as significant and how those values are signaled – of different academic areas.
- Differences in metadiscourse patterns can offer an important means of distinguishing discourse communities and accounting for the ways writers specify the inferences they would like their readers to make.
- Metadiscourse plays a significant role in explicating a context for interpretation, and suggesting one way in which acts of communication define and maintain social groups.
- Metadiscourse is an aspect of language which provides a link between texts and disciplinary cultures, helping to define the rhetorical context by revealing some of the expectations and understandings of the audience for whom a text is written.
- The significance of metadiscourse lies in its role in explicating a context for interpretation, and suggesting one way in which acts of communication define and maintain social groups.
- Controlling a disciplinary appropriate level of personality in a text is central to building a convincing argument as it demonstrates the writer's awareness of both the readers of the text and its consequences.
- Writers in different disciplines represent themselves, their work and their readers in different ways, with those in the humanities and social sciences taking far more explicitly involved and personal positions than those in the science and engineering
- Rhetorical practices are inextricably related to the purposes of disciplines.
- While natural sciences tend to see their goal as producing public knowledge able to withstand the rigors of falsifiability and developed through relatively steady cumulative growth, the soft knowledge domains are more explicitly interpretive, producing discourses which

often recast knowledge as sympathetic understanding, promoting tolerance in readers through an ethical rather than cognitive progression.

These and similar studies highlight the fact that academic discourses, in general, and the metadiscoursal features of academic discourses, in particular, are intimately bound to the social activities, cognitive styles and epistemological beliefs of particular disciplinary communities. The way knowledge is understood by the members of a discourse community, what is taken to be true by these members, and how such truths are arrived at, are all instantiated in a community's discourse conventions. These conventions link texts with disciplines through linguistic choices (including the metadiscoursal choices).

**Metadiscourse and Cultural Patterns of Thinking/Constructing Academic Knowledge.** Another contextual dimension with rich potentials for interpreting the nature of metadiscourse, in general, and interpreting the findings of metadiscourse research, in particular, is cultural dimension. The concept of culture provides us an ethnolinguistic and institutional perspective (see Sarangi & Roberts, 1999) in which the ways of writing and speaking academics bring with themselves from their home context can be understood. Here, we should think in line with Lantolf (1999) and Street (1995) who see culture as a historically transmitted and systematic network of meanings which help and allow us to understand, develop and communicate our knowledge and beliefs about the world. One implication of this assumption would be that what is seen as logical, engaging, relevant or well-organized in writing, and what counts as evidence, conciseness and coherence, may differ across cultures. Affiliation to different cultures may potentially result in different senses of audience and self as a text producer, different preferences for ways of organizing texts, different writing processes and different social values of different text types (Hyland, 2006). If cultural factors have the potential to influence our perceptions, language, learning and communication, we can claim that they also have the power of shaping metadiscourse use. In fact, this is culture that makes available to us ways of organizing our perceptions and expectations and engaging our audience in texts. This understanding has motivated a large number of researchers to investigate metadiscourse from a

cross-cultural perspective. Table 2 provides a summary of some typical culture-based investigations of metadiscourse:

Table 2  
*Some typical culture-based investigations of metadiscourse*

Study	Metadiscourse Feature Investigated	Cultural Focus
Mauranen (1993)	Metatext in economics texts	English vs. Finnish
Breivaga, Dahl & Flottum (2002)	traces of self and others in research articles	English, French and Norwegian
Mc Enry & Kifle (2002)	epistemic modality in argumentative essays	Eritrean university students vs. British schoolchildren
Dahl (2004)	writer manifestation in research articles	English, French and Norwegian
Thue Vold (2006)	epistemic modality markers	English, French and Norwegian
Adel (2006)	metadiscourse expressions in learners texts	Swedish, American and British English
Kuhi, Tofigh, Babaei (2012)	Self-representation in engineering research articles	English vs Iranian
Heng & Tan (2010)	Metadiscourse in two written corpora	Malaysian undergraduate students
Anwardeen et al. (2013)	Metadiscourse in argumentative writing	Malaysian tertiary level students
Letsoela (2013)	Metadiscourse in students research projects	Undergraduate students of National University of Lesotho
Ruspita (2014)	Metadiscourse in persuasive texts	Indonesian EFL learners
Attaran (2014)	Metadiscourse in ESP articles	Iranian vs. native English writers

A number of general themes emerging from these and similar studies include:

- There is no monolithic view of academic writing, and metadiscourse is not uniform across languages.
- Cultural factors shape our background understandings and are likely to have a considerable impact on what we write and how we organize what we write, and our responses to different communicative contexts.
- Differences in rhetorical preferences are the result of cultural factors and are in some specific cases likely to be more important than (or as important as) disciplinary preferences.
- Affiliation to different cultures may result in adopting different realizations of responsibilities in academic discourse (e.g., reader-responsible vs. writer-responsible)
- Findings of culture-based investigations of metadiscourse can prevent culturally based misunderstandings and misjudgments.
- It is important and informative to relate the findings of culture-based metadiscourse research not only to the theory of contrastive rhetorics but also to the context of language learning.
- Though much of the difference in metadiscourse use may derive from culture, the way in which this influence takes place can be positive or negative, enabling as well as limiting.

**Metadiscourse and Shift in Understanding the Conception of Individual Rhetorics.** Much of what is seen as an agreed-upon, social convention of meaning making in an academic discourse community may emerge from a parent member's personal rhetorics. In fact, parent members of an academic community play a significant role in both 'what-to-says' and 'how-to-says' of that community. In a number of metadiscourse investigations to be discussed below, we notice how these features are strategically manipulated by the giants of academic discourse communities and how this strategic investment on metadiscourse plays a significant role in establishing their authority and competence. In fact, part of what establishes an academic as a parent member lies in his intelligent manipulation of discourse, and metadiscourse performs vital functions in this regard: it promotes rational appeals when it explicitly links ideas and arguments; it relates to credibility appeals where it concerns the

writer's authority and competence; and it addresses affective appeals when it signals respect for reader's point of view (these functions reflect three major means of persuasion which have characterized persuasive discourse since the time of ancient Greece: ethos, pathos and logos). While Crismore and Farnsworth's (1989) research on Darwin's use of metadiscoursal features in *The Origin of Species* (discussed above) can be considered as an excellent example of this way of contextualizing metadiscourse research, we can review some of the most influential studies of this type here in more details:

Hyland's (2008a) investigation identifies self-mention, hedging and attitude markers, reader engagement and considerateness as the main characteristics of John Swales' rhetoric and concludes with the view that this is a disciplinary voice informed by a keen assessment of his readers and representing an independent creativity shaped by accountability to shared practices. Swales' writing shows that we are not automatons individuals blindly following the dictates of disciplinary socialization or the prescriptions of style manuals. The creation of an authorial persona is clearly also an act of personal choice, where the influence of individual personality, confidence, experience, and ideological preference all enter the mix to influence our style.

In an interesting study of this type, Hoey (2000) investigates persuasive rhetoric in the language of Noam Chomsky. Hoey believes that besides the theoretical rigor of the linguistic approach offered by Chomsky, what makes Chomsky and generative-transformational linguistics dominate the field lies in Chomsky's skillful manipulation of rhetorical resources. According to Hoey, Chomsky pre-empts criticism of his ideas through a clever use of evaluation, in particular by evaluating negatively any reader whose assumptions about language and about the discipline of linguistics differ from Chomsky's own. Also, Chomsky's evaluations are so embedded in the structure of the clause and that of the discourse that they are difficult to challenge. Of course, this is not the use of evaluation that distinguishes Chomsky's writing from the rest of linguists; rather, this is the overuse of evaluation, the interweaving of them with situational elements, and the presentation of arguments without basis that makes him unique in manipulating rhetorical devices. In Chomsky's writing, the presentation of evaluation is in such a way that evidence is not required to support. Chomsky's writing, according to Hoey, attacks alternative position and

adopts a threatening tone towards any reader whose views of linguistic theory or method is different from his own.

Henderson's (2001) study of exemplification strategies in Adam Smith's *Wealth of Nations* is another instance of studies which have focused on how great writers and thinkers utilize interpersonal resources in order to create more persuasive discourse. Henderson examines samples of writing drawn from the opening chapters of the *Wealth of Nations* in order to establish how Smith develops and uses examples. The study finds three broad categories of examples in Smith's text: current examples, historical examples and hypothetical examples. Henderson's attempt to relate Smith's use of examples to the wider discourse and indicates that the recurrent use of examples creates a balance between theoretical propositions and social possibilities. Mingled with the spoken language sense hidden in Smith's work, this gives Smith's discourse a systematic and 'teacherly' approach, based on an understanding of what a lecture is and what is required pedagogically to convince others of the effectiveness of an argument.

**Metadiscourse and Historical Evolution of Academic Modes of Argument.** Reactions against the John Swales' earlier (e.g., see Swales, 1990) conceptualizations of genre in terms of a sole criterion, i.e. communicative purpose (see criticisms made by scholars like Bhatia 1993, 2001 ) have motivated Swales to adopt a "metaphorical endeavor", and acknowledge that " ... we should see our attempts to characterize genres as being essentially a metaphorical endeavor, so that the various metaphors that can be invoked shed, in varying proportions according to circumstances, their own light on our understanding" (Swales, 2004, p. 61). In so doing, he identifies the following metaphors as helpful in understanding genre (pp.61-8). Swales argues that these metaphors offer a rich and multifaceted view of genre which captures its complex and varied nature. Figure 2 represents the metaphors-based characterization of the concept of genre:

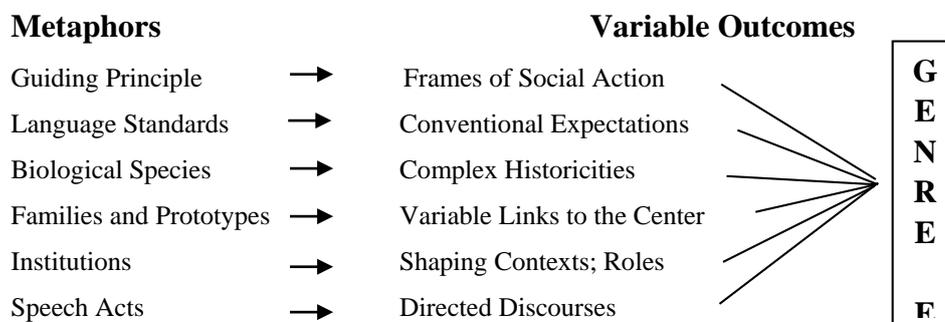


Figure 2. Metaphors-based characterization of genre (Swales 2004, p. 68)

As the metaphor-based conception explicitly demonstrates, genres are understood to evolve and change in response to changes in the needs of the discourse community (Dudley-Evans, 1994). This view does not see genres as fixed and static; rather genres are seen as changing and emerging over time (Miller, 1994). This conception of genre is also supported by Berkenkotter and Huckin (1993) who present a set of principles for genre based on a synthesis of a number diverse theoretical orientations (including Giddens's Structuration Theory). The principles are:

*Dynamism:* Genres are dynamic rhetorical forms that are developed in response to current recurring situations in a community. They serve to give the community coherence and meaning. Genres change over time in response to needs.

*Situatedness:* our knowledge of genres is derived from and embedded in our participation in the communicative activities of daily professional life.

*Form and content:* genre knowledge embraces both form and content . . . .

*Duality of structure:* as we draw on genre rules to engage in professional activities, we constitute social structures [ . . . ] and simultaneously reproduce these structures.

*Community ownership:* genre conventions are signals of a discourse community's norms, epistemology, ideology and social ontology. (p.4)

One major implication of the view developed above for the study of the generic features of academic communication in general and metadiscoursal

features in particular would be to locate the development of metadiscourse awareness in a diachronic dimension. This dimension would develop on the basis of the assumption that as genres themselves go through a process of diachronic evolution in the course of time to meet the changing and evolving needs and expectations of the host discourse communities, features constituting genres (such as metadiscourse features) would go through the same diachronic evolution process. Hence, one further interpretive option available for the researchers active in metadiscourse analysis would be investigating the chronological variations of these features seen in academic genres and highlighting how these variations are interwoven with the changing social practices of specific discourse communities. Of course, this is something rarely acknowledged in the literature of metadiscourse studies. During the last few years, this gap has motivated me to conduct a number of metadiscourse investigations based on this assumption.

In a good example of this type of research, Kuhi and Dust-Sedigh (2012) demonstrated the diachronic evolution of metadiscourse resources in English chemistry research articles written by American and Iranian authors. The corpus comprised of 160 chemistry research articles (80 from *Journal of American Chemistry Society, JACS*, & 80 from *Iranian Journal of Chemistry and Chemical Engineering, IJCCE*) published between 1991-2010. The investigation indicated a diachronic evolutionary pattern: there was a considerable growth in the frequency of metadiscourse features in the articles of both journals during the two decades.

In another study, Kuhi and Mousavi (2015) focused on the diachronic development of a number of metadiscourse features (hedges, boosters, attitude markers, engagement markers, and self-mention) in the discussion section of research articles in applied linguistics published between 1980-2010. Significant differences were observed in the frequency of occurrence of these features in different periods. Generally, there was a noticeable diachronic pattern in the frequency of occurrence of metadiscourse features within the investigated time period. As we move ahead in the course of time, a heavier use of metadiscourse features is observed.

It seems to me that this dimension of the interpretation of the nature of metadiscourse has not yet received due attention from the researchers, and

future research in this dimension can provide deeper insights on the way metadiscourse is adjusted to the evolving needs of different discourse communities in the course of time.

**Metadiscourse and Hybridization/Marketization of Academic Modes of Argument.** In Kuhi (2014), I have proposed a theoretical framework within which the influence of the commodification trends in modern academy on the discursive practices of academy has been discussed. I have argued that commodification of higher education displaces the creation and dissemination of knowledge from the social sphere to the sphere of economic production and that scientific work can only be supported in conditions of surplus and it is the allocation of surplus which links universities and academic communities to their host societies (Hyland, 2009). This has made modern academia competitive and conflictual and has enveloped science in a 'promotional' and 'consumer' culture (Harwood, 2005a). This predominance of commercial values urges disciplines to adopt roles in production of capital and one consequence of such a value system would be evaluating the success and achievement of academic communities on the basis of the standards of utility: universities are expected to negotiate knowledge as a commodity valued by societal paymasters (Gibbons & Wittrock, 1985). At least for us, as people accustomed to looking at social realities of human life from the kaleidoscope of language, what happens in modern academy, in general, and the process elaborated upon above, in particular, cannot exist independently from a constitutive and constructive functioning of discourses: that discourse is a central component of the process of commodification and marketization in modern academia. The mentioned proposal has resorted to the Althusserian concept of "chain of interpellation" (1971, 1974), illustrating the constitutive function of discourse in the process of commodification:

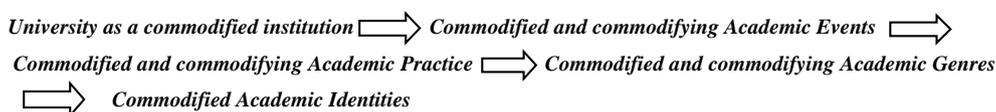


Figure 3. Commodification process in academic contexts

The proposed model aims to show the ways marketing desires creep into academic discourse and influence different dimensions of academic discourse including its micro and macro features (see, for instance, Yakhontova, 2002; Kheovichai, 2013; Taylor, 2001 & Lynch 2006). Of course, sometimes this shaping and constitutive force goes beyond shaping micro and macro features and results in the emergence of hybrid genres. These hybrid genres are shaped by the intersection of two competing discourses: the discourse of academy whose major function is dissemination of academic knowledge and marketing discourse whose main function is promoting the product of academy (for examples of such hybrid genres, see Sanigar, 2013; Teo, 2007).

In Kuhi (2014) I have demonstrated that, amongst other discursive features, metadiscourse resources play a significant role in this commodification practice. They are shaped by the process and they also contribute to the further development and circulation of the process. One good example of research which has demonstrated the role of metadiscourse resources in this process is Harwood (2005a; 2005b) which investigates the penetration of promotional and market-driven features into academic discourse by concentration on the self-promotional functions of self-mention in research articles. Harwood suggests that such promotional devices can be used to market the research from the start, underscoring novelty and noteworthiness in the introduction as they help create a research space.

I personally believe that the majority of investigations on the metadiscursive features of academic genres can be approached from this point of view; however, I have found little attempts on the part of researchers to contextualize their findings within this framework. Hence, I recommend this as a future direction for researchers.

**Metadiscourse and Shift in the Conception of Academic Genre Categories.** Throughout this paper, I have claimed that a central characteristic of metadiscourse is its context-dependency: there is a close relationship between the use of metadiscourse and the norms and expectations of those who use it in particular settings. One way this contextual specificity is particularly apparent is the distribution of metadiscourse across genres: there are important genre differences in the extent to which interpersonal resources are used (Nelson, 2008). This fact is even acknowledged in mainstream genre research

which has moved from simple constituency representations of genre staging to examine clusters of registers, style, lexis, and other rhetorical features to an interest in the interpersonal dimensions of academic and technical writing (Hyland, 2002c). This research has sought to reveal how persuasion in various genres is not only accomplished through the representation of ideas, but also by the construction of an appropriate authorial self and the negotiation of accepted particular relationships.

Since their first attempts, metadiscourse analysts have been concerned with the basic question whether genre affects the use of metadiscourse in the first place and whether it exerts an influence on both the amount and the types of metadiscourse found in a text. For instance, Vande Kopple (1985, p.88) raised the question about the relation of metadiscourse and genre variation some twenty-four years ago: "Are some kind of metadiscourse more appropriate than others – or even necessary – in some kinds of texts?" Also, Crismore (1989, p.61) coined the term 'metadiscourse continuum' with the aim of describing the variation of metadiscourse in texts. Crismore assumed that the amount of metadiscourse varies across genres, for example, with respect to linguistic signals of interaction between the writer and the imagined reader. He also speculated on the variation of metadiscourse across genres, claiming that metadiscourse is used very little in operating instructions, technical manuals, science writing, and laws but is used more frequently in humanities, literary criticism, personal narratives, arguments, memoirs, and personal letters. In other words, it is used in any discourse where ideas are filtered through a concern with how the reader will take them. Although not empirically tested, this could give a rough indication of that metadiscourse can vary across genres. However, today our claims about the nature of this relationship are not based on pure speculations; they have been replaced by empirical studies and thanks to the findings of empirical research, we can now suggest a meaningful relationship between metadiscourse and genre and claim that the "nature of contract between the writer persona and the imagined reader varies across genres" (Adel, 2006, p.142). We believe that the variation resulting from generic differences helps writers and speakers to respond to and construct the context in which language is used. Therefore, it can be argued that it is a social act rather than simply a string of linguistic items, and this means that its use will vary enormously depending on the audience, the purpose and other aspects

of the social context. In other words, the use of metadiscourse can be considered as one of the many ways in which genres vary, and variation of different academic genres in terms of metadiscourse use should be considered seriously since it can help show how language choices reflect the different purposes of writers, the different assumptions they make about their audiences, and the different kinds of interactions they create with their readers. This intricate and intimate relationship has not escaped the attention of researchers and there is a tremendous wave of studies which seek to highlight the nature of this relationship.

Due to the significant role of research article in academic life (Swales, 1990), it is not surprising that this genre has attracted the most research and different dimensions of metadiscourse have been explored in the research articles of different disciplines. Table 3 illustrates a list of some typical metadiscourse research focusing on research articles:

Table. 3

*Metadiscourse in Research Article*

Research	metadiscourse feature investigated
Swales <i>et.al</i> (1998)	imperatives
Hyland (1996a, 1996b, 1996c)	hedging
Hyland (1999b)	citation
Hyland (2002b)	self-mentions
Hewings and Hewings (2001)	metadiscoursal functions of it-clause
Breivega, Dahl, Flottum (2002)	traces of self and others
Dahl (2004)	textual metadiscourse
Harwood (2005a)	inclusive and exclusive pronouns
Harwood (2005b)	self-promotional self-mentions
Hyland (2005a)	stance and engagement
Flottum (2005)	polyphonic visibility
Thue Vold (2006)	epistemic modality
Hyland (2007)	code glosses

In light of the assumptions outlined above, metadiscourse researchers have also been naturally attracted to other academic genres. Table 4 provides a list of some typical investigations:

Table. 4  
*Metadiscourse in other academic genres*

Research	academic genre	metadiscourse feature investigated
Hyland (1994)	EAP writing textbook	hedging devices
Hyland (2000)	scientific letter	boosters and hedges
Myers (2001)	undergraduate essay	personal views
Hewings and Hewings (2001)	student essay	metadiscoursal functions of <i>it-clauses</i>
Hyland (2002b)	undergraduate essay	author pronoun
Latawiec (2012)	oral discussions and persuasive essays	evaluative, organizing and intersubjective features
Gholami et al (2014)	EFL learners' argumentative essays	misuse of textual and interpersonal features
Dobbs (2014)	middle grade persuasive writing	organization and stance signals

Although the literature abounds with samples of genre-based investigations which concentrate on single genres, we can also find good examples of comparative studies. These investigations attempt to indicate that metadiscourse use is sensitive to the social status and interactional mechanisms of academic genres and there is no stable and uniform convention dominating all academic genres. Table 5 summarizes a number of typical comparative studies:

Table. 5  
*Metadiscourse in other academic genres*

Research	comparative scope	metadiscourse feature investigated
Hyland (1999a)	research article vs. introductory textbooks	interactive and interactional
Hyland (2002a)	textbooks vs. research articles vs. student reports	directives
de Oliveira & Pagano (2006)	scientific article vs. popular science article	citation practice
Hyland (2004a) and Hyland & Tse (2004)	Master's vs. PhD dissertations	interactive and interactional
Hyland (2002b)	research articles vs. L2 student essay	first person pronouns
Hyland (2005c)	Project reports vs. research articles	engagement markers
Hyland's (2002a)	research articles vs. textbooks vs. student essays	directives
Hyland & Tse (2005)	masters vs. doctoral dissertations	that-clauses
Kuhi & Behnam (2011)	research articles vs. handbook vs. scholarly textbook vs. introductory textbook	interactive and interactional

The interest in understanding the ways metadiscourse use is affected by the communicative purposes of the participants of academic communication has sometimes moved beyond looking at genres themselves as holistic constructs and penetrated into the cross-sectional examinations of genres as well. Hunston's (1994) study of persuasive nature of research article is one of the earliest studies which looks at different parts of the mentioned genre in terms of their persuasive functions. To Hunston, the main goal of experimental reports is persuasion. The aim is to persuade the academic community to accept the new knowledge claims and to adjust its network of consensual knowledge in order to accommodate those claims – "potentially a radical and face-threatening operation" (p.192).

A good account of cross-sectional variations of metadiscourse in research articles can be found in Kuhi, Yavari and Sorayyaei (2012). This investigation which applied Hyland's taxonomy of metadiscourse on the four rhetorical sections of research articles in applied linguistics revealed that metadiscourse features were utilized differently in these sections: a higher frequency of interactive features was observed in the Introduction section, whereas a relatively higher frequency of interactional features was observed in the Discussion section of the articles.

Hyland's (2000) study of abstracts as significant carriers of a discipline's epistemological and social assumptions allows us to see how individuals work to position themselves within their community. Mainly focusing on the generic patterns of this academic genre, the investigation results in a classification of rhetorical moves in article abstracts, whose appropriate rhetorical structure is claimed to facilitate the persuasiveness of the genre. . However, in order to reveal how abstracts fulfill their interactional functions, the investigation moves beyond the move structure to show how writers highlight the significance of their work and claim insider credibility. Amongst the findings of the qualitative analysis of the corpus, Hyland refers to instances where writers claimed significance by opening their abstracts with a promotional statement which was a clear indication of the writers' desire to depict their credibility as informed colleagues, bona fide members of the discourse community who are able to speak with authority on the subject.

A number of significant themes can be summarized as the contributions of a genre-based dimension of metadiscourse research:

- Genres are dynamic rhetorical forms that are developed in response to current recurring situations in a community. This development is reflected in the frequencies and distribution of metadiscourse in different academic genres.
- Variations in the use of metadiscourse across different genres reflect the different roles these genres play in the social structure of disciplinary activity.
- Variation in the use of metadiscourse across different genres contains clues about how these texts are produced and the purposes they serve.
- Metadiscourse is grounded in the rhetorical purposes of writers and is sensitive to their perceptions of audience, both of which differ markedly among different academic genres.
- There is an intimate relationship between discourse practices and the social organization of disciplinary communities, and these communities crucially influence the ways that writers typically argue and engage with their readers.
- Effective academic communication is seen in terms of a community-oriented deployment of appropriate linguistic resources to represent writers, their text and their readers;

- 
- The act of convincing an academic audience of the reliability of one's arguments means making linguistic choices which that audience will conventionally recognize as persuasive. However, the means of 'doing persuasion' differ across genres.
  - "A producer's contract with a receiver is not general, but subject to quite sharp genre fluctuations" (Swales 1990, p.63).
  - Genres could be characterized by "reference to the degree to which the discourse is textualized" (Widdowson 1984, p.75) (or, in the terms employed here, the extent to which writers draw on interactional resources).

**Metadiscourse and Increasing Awareness of Ethical Issues.** The final dimension I recommend for a meaningful interpretation of the findings of metadiscourse research is the way the use of such features can be approached from an ethical point of view. In different models of metadiscourse resources developed so far, evidentials have been categorized among textual or interactive resources (see for instance Hyland 2005). This classification, if not socially interpreted, may give rise to the misconception that evidentials are merely performing a textual or interactive (i.e. comprehension facilitation) function in academic texts. Though not completely rejecting the possibility of this function, I suggest that evidential component of metadiscourse be approached from a more social perspective. The departure point of this proposal lies in Swales and Feak's (2004) suggestion that evidentials should be interpreted functionally in terms of a social credit system in academic contexts. In fact, the way other scholars' voices are reflected in a piece of academic text is, amongst other things, an indication of the awareness among the members of a specific discourse community that they should have their share and investment in the social credit system of the academy and that this is a cooperative investment system which should be respected by all members.

Though not necessarily motivated by this understanding, a large number of researchers have analyzed academic genres in terms of their evidential component. Table 6 depicts some typical ones:

Table. 6  
*Research on the evidential component of academic genres*

Research	generic scope	evidential feature investigated
Thompson & Ye (1991)	academic papers	evaluation in reporting verbs
Thompson (2000)	PhD thesis	citation practices
Thompson (2001)	PhD thesis	citation practices
Thompson & Tribble (2001)	EAP material	citation
Thompson (2005)	PhD thesis	intertextual reference
Thomas & Hawes (1994)	medical journal articles	reporting verbs
Petri'c (2007)	L2 student writing	direct quotation
Mansourizadeh & Ahmad (2011)	non-native expert and novice scientific writing	citation practices
Helali Oskouei, & Kuhi (2014)	native and nonnative master's thesis	citation practices
Kuhi & Mollanaghizade (in press)	research articles by natives and non-natives	citation practices

### **Acknowledging the Glitters of Context-aware Research, Implications, Further Precautions and Considerations**

Before any attempt to wrap up this article with a number of concluding remarks, I should acknowledge a considerable body of recent European research in which we can encounter the glitters of context-aware kind of analysis I argue for. Some recent examples of this context-aware and culturally-oriented approach can be found in Bennet (2013), Mur-Duenas's (2007a, 2007b), Mur-Duena and Šinkuniene's (2016), Akbas (2012), Gotti's (2012) and Flottum, Dahl and Kinn (2006). In these studies, metadiscourse research findings have been interpreted in the wider social processes I have been outlining. The major contribution we may expect from such socially-oriented research I have proposed is that research on metadiscourse needs to interpret its findings in terms of the contextual origins which give rise to its use. Researchers should try to go deeper in these processes and make clear the connections between textual practices and contextual factors. No one contextual dimension would suffice to meet this need. I have to emphasize again and again that textual practices should be approached from multiple dimensions: discipline, culture, genre, rhetorics, diachronism, philosophy of science, ethics, etc. In other words, what I have been suggesting is a true ethnographic perspective which sees metadiscourse use *in vivo* and *in situ*. This perspective should give greater emphasis to what people in academic contexts

do, locating metadiscoursal acts of communication in the behavior of groups and employing methods which are interpretive and truly contextualized.

To conclude this paper, I would like to raise some issues as precautions in conducting metadiscourse research:

- *Metadiscourse research on non-academic/non-scientific discourse*: since the concept of metadiscourse and its related analytic models have emerged from investigations of academic discourse, the current models of metadiscourse are highly sensitive to textual and discoursal features of academic communication, and hence should be approached with skepticism in being applied to non-academic discourses. An absolute pattern-imposing approach can result in damaging the true nature of interpersonal functions in different discourses.

- *Metadiscourse research on spoken communication*: the concept of metadiscourse and its relevant analytical frameworks and classifications have mainly emerged from investigations of written academic discourses, and hence may not be suitable for the investigation of spoken academic or non-academic discourses. Spoken discourse shapes the interpersonal features of texts in different manners due to different contextual factors dominating oral communication.

- *Non-linguistic metadiscourse markers*: interpersonal meaning of communication can be negotiated by devices other than verbal, textual features. More particularly, while investigating spoken academic/non-academic discourses, non-linguistic devices of establishing interpersonal relationships should be taken into considerations.

- *Metadiscourse research and the necessities of triangulations*: the analysis of academic/non-academic texts in terms of features establishing interpersonal relations between interlocutors should be supported by interviews with the participants of these communicative events. In many cases, the participants themselves may have judgments and justifications about the use of metadiscourse features which fundamentally differ from those of the analysts.

- *Metadiscourse and pedagogical applications and implications*: since the ideal goal of investigations on metadiscourse is developing the awareness of academic/ scientific writers about the significance and constitutive function of these features, studies in this field cannot turn their back to what happens in

EAP pedagogy. Findings should be made relevant and meaningful for the users of these studies in pedagogic domains (good examples of such attempts can be found in Camiciottoli, 2003; Moreno, 2003; Mei & Alison, 2005; Rodrigues Junior, 2003; Hyland & Hyland, 2001; Kuhi, Sorayyaei Azar, Shomoosi & Shomoosi 2012; Kuhi, Asadollahfam & Amin, 2014; Kuhi, Asadollahfam & Dabbagh-Anbarian, 2014).

### References

- Adel, A. (2006). *Metadiscourse in L1 and L2 English*. John Benjamins Publishing Company.
- Akbas, E. (2012). Exploring Metadiscourse in Master's Dissertation Abstracts: Cultural and Linguistic Variations across Postgraduate Writers. *International Journal of Applied Linguistics & English Literature*, 1(1), 12-26.
- Althusser, L. (1984/1971). *Essays on ideology*, trans. Ben Brewster and Grahame Lock, London: Verso.
- Althusser, L. (1990/1974). *Philosophy and the spontaneous philosophy of the scientists & other essays*, ed. Gregory Elliott and trans. Warren Montag et al., London: Verso.
- Anwardeen, N., Luyee, E.O., Gabriel, J.I., & Kalajahi, A.R. (2013). An analysis of the usage of metadiscourse in argumentative writing by Malaysian tertiary level students. *English Language Teaching*, 6(9), 83-96.
- Attaran, A. (2014). Study of metadiscourse in ESP articles: A comparison of English articles written by Iranian and English native speakers. *International Journal of Learning, Teaching and Educational Research*, 5(1), 63-71.
- Barber, C.L. (1962). Some measurable characteristics of modern scientific prose. In C.L. Barber, F. Behre, U. Ohlander, Y. Olsson, S. Stubelius, J. Soderlind & P. Zandvoort (Eds.). *Contributions to English syntax and phonology*, (pp.21-44). Goteborg, Sweden: Almquist and Wiksel.
- Bazerman, C. (1998). Emerging perspectives on the many dimensions of scientific discourse. In J.R. Martin & R. Veels (Eds.), *Reading science: critical and functional perspectives on discourses of science* (pp. 15-28). London and New York: Routledge.
- Becher, T. (1989). *Academic tribes and territories: intellectual inquiry and the cultures of disciplines*. Milton Keynes: Society for Research in Higher Education and Open University Press.
- Bennet, K. (2013). English as a lingua franca in academia: combating epistemicide through translator training. Stefania T. (Ed) *English as a*

- lingua franca: Implications for translator and interpreter education*, special issue of *The Interpreter and Translator Trainer (ITT)*.7(2): 169-193.
- Berkenkotter, C., & Huckin, T. N. (1993). Rethinking genre from a socio-cognitive perspective. *Written Communication*, 4, 475-509.
- Bhatia, V. (1993). *Analyzing genre: language use in professional settings*. London: Longman.
- Bhatia, V. (2001). Analyzing genre: some conceptual issues. In M. Hewings (Ed.), *Academic writing in context* (pp. 79-92). The University of Birmingham: University Press.
- Breivega, K.R., Dahl, T. & Flottum, K. (2002). Traces of self and others in research articles: A comparative study pilot study of English, French and Norwegian research articles in medicine, economics and linguistics. *International Journal of Applied Linguistics*, 12(2), 218-239.
- Bunton, D. (1999). The use of higher level metatext in Ph.D theses. *English for Specific Purposes*, 18, 41-56.
- Camiciottoli, B.C. (2003). Metadiscourse and ESP comprehension: an exploratory study. *Reading in a Foreign Language*, 15(1), 15-33.
- Candlin, C. N. (1997). General editor's preface in B.L. Gunnarsson, P. Linell and B. Nordberg (Eds.), *The construction of professional discourse* (pp. ix-xiv). London: McMillan.
- Chiu, R. (1972). Measuring register characteristics: a prerequisite for preparing advanced level TESOL programs. *TESOL Quarterly*, 6(2), 129-141.
- Christie, F., & Martin, J.R. (Eds.). (1997). *Genre in institutions: social processes in the workplace and school*. New York: Continuum.
- Crismore, A. (1989). *Talking with readers: Metadiscourse as rhetorical act*. New York: Peter Lang.
- Crismore, A., & Farnsworth, R. (1989). Mr Darwin and his readers: exploring interpersonal metadiscourse as a dimension of ethos. *Rhetoric Review*, 8(1), 91-112.
- Dahl, T. (2004). Textual metadiscourse in research articles: a marker of national culture or of academic discipline? *Journal of Pragmatics*, 36, 1807-1825.
- Dobbs, C. L. (2014). Signaling organization and stance: academic language use in middle grade persuasive writing. *Reading and Writing*, 27 (8), 1327-1352.

- de Oliveira, J.M., & Pagano, A.S. (2006). The research article and the science popularization article: a probabilistic functional grammar perspective on direct discourse representation. *Discourse Studies*, 8(5), 627-646.
- Dudley-Evans, T. (1994). Genre analysis: an approach to text analysis in ESP. In M. Coulthard (Ed.), *Advances in written text analysis* (pp. 219-28). London: Routledge.
- Dudley-Evans T., & St John, M. J. (1998). *Developments in English for specific purposes: a multi-disciplinary approach*. Cambridge: Cambridge University Press.
- Estaji, M., & Vafaeimehr, R. (2015). A comparative analysis of interactional metadiscourse markers in the Introduction and Conclusion sections of mechanical and electrical engineering research papers. *Iranian Journal of Language Teaching Research*, 3 (1), 37-56.
- Fairclough, N. (1992). Introduction in N. Fairclough (Ed.), *Critical language awareness*. London: Longman.
- Flottum, K. (2005). The self and the others: polyphonic visibility in research articles. *International Journal of Applied Linguistics*, 15(1), 29-44.
- Flottum, K, Dahl, T., & Kinn, T. (2006). *Academic voices*. John Benjamins Publishing Company.
- Flowerdew, J. (Ed.) (2002). *Academic discourse*. Longman.
- Foucault, M. ( 1972). *The archeology of knowledge*, Trans. Smith, S. London: Tavistock.
- Fowler, R. ( 1981). *Literature as social discourse: The practice of linguistic criticism*. London: Batsford Academic.
- Freedman, A. (1994). "Do as I say"? The relationship between teaching and learning new genres. In A. Freedman & P. Medway (Eds.), *Genre and new rhetoric*. London: Taylor and Francis.
- Freedman, A., & Adam, C. (2000). Write where you are: situating learning to write in university and workplace settings. In P. Dias & A. Pare (Eds.), *Transitions: writing in academic and workplace settings*. Cresskill, NJ: Hampton Press.
- Gholami, J., Rafsanjani Nejad, S., & Looragipoor, J. (2014). Metadiscourse markers misuse: A study of EFL learners' argumentative essays. *Procedia-Social and Behavioral Sciences*, 98(6), 580-589.
- Gibbons, M., & Wittrock, B. (Eds.) (1985). *Science as a commodity*. London: Longman.
- Gotti, M. (2012). Cross-cultural aspects of academic discourse. *Brno Studies in English*, 38(2), 59-78.
- Gustafson, M. (1975). *Some syntactic properties of English law language*. Department of English, University of Turku, Turku.

- Halliday, M.A. K. (1973/2004). The functional basis of language. In J.J. Webster (Ed.), *On language and linguistics* (pp. 298-322). London and New York: Continuum.
- Halliday, M.A.K. (1993/2004). Writing science: literacy and discursive power. In J.J. Webster (Ed.), *The language of science* (pp. 119-225). London/New York: Continuum.
- Harwood, N. (2005a). We do not seem to have a theory... The theory I present here attempts to fill this gap : inclusive and exclusive pronouns in academic writing. *Applied Linguistics*, 26/3, 343-375.
- Harwood, N. (2005b). 'Nowhere has anyone attempted .... In this article I aim to do just that': A corpus-based study of self-promotional *I* and *we* in academic writing across four disciplines. *Journal of Pragmatics*, 37, 1207-1231.
- Helali Oskouei, M.H., & Kuhi, D. (2014). The use of citations in academic writing: Analysis of introduction section of Iranian and native English master's theses. *Journal of Social Issues and Humanities*, 2(3), 216-220.
- Henderson, W. (2001). Exemplification strategy in Adam Smith's *Wealth of Nations*. In M. Hewings (Ed.), *Academic writing in context* (pp. 150-168). The University of Birmingham University Press.
- Heng, C. S., & Tan, H. (2010). Extracting and comparing the intricacies of metadiscourse of two written persuasive corpora. *International Journal of Education and Development Using Information and Communication Technology*, 6(3), 124-146.
- Hewings, A., & Hewings, M. (2001). Anticipatory 'it' in academic writing: an indicator of disciplinary difference and developing disciplinary knowledge. In M. Hewings (Ed.) *Academic writing in context* (pp. 199-214). The University of Birmingham: University Press.
- Hoey, M. (2000). Persuasive rhetoric in linguistics: a stylistic study of some features of the language of Noam Chomsky. In S. Hunston & G. Thompson (Eds.) *Evaluation in text* (pp. 28-37). Oxford: Oxford University Press.
- Holmes, R. (1997) Genre analysis and social sciences: an investigation of the structure of research article discussion sections in three disciplines. *English for Specific Purposes*, 16(4), 321-337.
- Hopkins, A & Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes*, 7, 113-121.

- Hunston, S. (1994). Evaluation and organization in a sample of written academic discourse. In M. Coulthard (Ed.) *Advances in written text analysis* (pp. 191-218). London and New York: Routledge.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: a learning-centered approach*. Cambridge: Cambridge University Press.
- Hyland, K. (1994). Hedging in academic writing and EAP textbooks. *English for Specific Purposes*, 13( 3), 239-256.
- Hyland , K. (1996a). Nurturing hedges in the ESP curriculum. *System*, 24( 4), 477-490.
- Hyland , K. (1996b). Writing without conviction? Hedging in Science research articles. *Applied Linguistics*, 17( 4), 433- 454.
- Hyland , K. (1996c). Talking to the academy: Forms of hedging in science research articles. *Written Communication*, 13( 2), 251-281.
- Hyland, K (1999a). Talking to students: Metadiscourse in introductory textbooks. *English for Specific Purposes*,18(1), 3-26.
- Hyland, K (1999b). Academic attribution: citation and the construction of disciplinary knowledge. *Applied Linguistics*, 20(3), 341-367.
- Hyland, K. (2000). *Disciplinary discourses: social interactions in academic writing*. London and New York: Longman.
- Hyland, K. (2001a). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes*, 20, 207-226.
- Hyland, K. (2001b) Bringing in the reader. Addressee features in academic writing. *Written Communication*, 18, 549-574.
- Hyland, K (2002a). Directives: argument and engagement in academic writing. *Applied Linguistics*, 23(2), 215-239.
- Hyland, K. (2002b) . Options of identity in academic writing. *ELT Journal*, 56(4), 351- 358.
- Hyland, K (2002c). Genre: language, context, and literacy. *Annual Review of Applied Linguistics*, 22, 113-135.
- Hyland, K. (2002d). Activity and evaluation: Reporting practices in academic writing. In J. Flowerdew (Ed.), *Academic Discourse* (pp. 115- 130). Longman.
- Hyland, K. (2004a). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13, 133-151.
- Hyland, K. (2004b). Graduate gratitude: The generic structure of dissertation acknowledgments. *English for Specific Purposes*, 23(3), 303-324.
- Hyland, K. (2005a). *Metadiscourse: Exploring interaction in writing*. London and New York: Continuum.
- Hyland, K. (2005b). Stance and engagement: a model of interaction in academic discourse. *Discourse Studies*, 7(2),173-192.

- Hyland, K. (2005c). Representing readers in writing. Student and expert practices. *Linguistics and Education*, 16, 363-377.
- Hyland, K. (2006). *English for academic purposes: an advanced resource book*. London and New York: Routledge.
- Hyland, K. (2007). Applying a gloss: Exemplifying and reformulating in academic discourse. *Applied Linguistics*, 28(2), 266-285.
- Hyland, K. (2008a). 'Small bits of textual material': A discourse analysis of Swales' writing. *English for Specific Purposes*, 27, 143-160.
- Hyland, K. (2008b). Persuasion, interaction and the construction of knowledge: Representing self and others in research writing. *International Journal of English Studies*, 8 (2), 1-23.
- Hyland, K. (2009). *Academic discourse*. Continuum.
- Hyland, F., & Hyland K. (2001). Sugaring the pill. Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185-212.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: a reappraisal. *Applied Linguistics*, 25(2), 156-177.
- Hyland, K., & Tse, P. (2005). Hooking the reader: a corpus study of evaluative *that* in abstracts. *English for Specific Purposes*, 24, 123-139.
- Jaworsky, A., & Coupland, N. (1999). Introduction in A. Jaworsky and N. Coupland (Eds), *The discourse reader* (pp. 1-44). London and New York: Routledge.
- Kheovichai, B. (2013). Marketization in the language of UK university recruitment. A critical discourse analysis and comparison of university and finance industry job advertisements. *Unpublished PhD thesis*. The University of Birmingham.
- Kuhi, D. (2014). Commodified discourses, commodifying discourses: In pursuit of a theoretical model on the constitutive functioning of academic discourse in marketization of higher education. *Journal of Applied Linguistics and Discourse Analysis*, 2(1), 39-62.
- Kuhi, D., & Alinejad, Y. (in press). Stephen Hawking's community-bound voice: A functional investigation of self-mentions in Stephen Hawking's scientific prose. *Journal of Applied Linguistics*,
- Kuhi, D, Asadollahfam, H., & Amin, S. (2014). An investigation of the effect of audience awareness-raising on EFL learners' use of interpersonal resources in essay writing. *Social and Behavioural Sciences, Social and Behavioural Sciences*, 1016-1025.
- Kuhi, D., Asadollahfam, H., & Dabbagh-Anbarian, K. (2014). The effect of metadiscourse use on Iranian EFL learners' lecture comprehension. *Social and Behavioural Sciences*, 1026-1035.

- Kuhi, D., & Behnam, B. (2011). Generic variations and metadiscourse use in the writing of applied linguists: A comparative study and preliminary framework. *Written Communication*, 28 (1), 97-141.
- Kuhi, D., & Dustsadiq, Z. (2012). A cross-cultural diachronic study on hedging devices diversity in chemistry research articles. *Paper presented at the Second International Conference on Foreign Language Teaching and Applied Linguistics, Bosnia and Herzegovina, Sarajevo*.
- Kuhi, D., & Mollanaghizadeh, N. (in press). A contrastive exploration of manifest intertextuality in applied linguistics research articles: Iranian vs. English authors. *Journal of Applied Linguistics*,
- Kuhi, D., & Mousavi, Z. (2015). A diachronic study of interpersonality in research article discussion section: The field of applied linguistics. *International Journal of Research in Humanities and Social Studies*, 2 (4),6-13.
- Kuhi, D., Sorayyaei Azar, A., Shomoosi, A., & Shomoosi, N. (2012). Interaction in the written output of learners of English: the case of gender. *Journal of Education*, 1(2), 79-90.
- Kuhi, D., Tofiq, M., & Babaei, R. (2012). Self-representation in academic writing: The case of computer engineering RAs by English vs. Iranian writers. *International Journal of Research in Second Language Learning*, DOI:10.5861/ijrsl.2012.164.
- Kuhi, D., Yavari, M., & Sorayyaei, A. (2012). Metadiscourse in applied linguistics research articles: a cross-sectional survey. *Mediterranean Journal of Social Sciences*, 3(11), 405-415.
- Kuhn, T. (1970). *The structure of scientific revolution* (2<sup>nd</sup> ed). Chicago: University of Chicago Press.
- Lantolf, J. (1999). Second culture acquisition: cognitive considerations. In E. Hinkel (Ed.), *Culture in second language teaching and learning* (pp. 28-46). Cambridge: CUP.
- Latawiec, B. M. (2012). Metadiscourse in oral discussions and persuasive essays of children exposed to collaborative reasoning. *Unpublished PhD Dissertation*. Urbana: Illinois.
- Lecercle, J. J. (2006). *A Marxist philosophy of language*. Brill.
- Lee, D. (1992). *Competing discourses*. London: Longman.
- Letsoela, P. M. (2013). Interacting with readers: Metadiscourse features in National University of Lesotho undergraduate students' academic writing. *International Journal of Linguistics*, 5(6), 138-153.
- Lynch, K. (2006). Neo-liberalism and marketization: the implications for higher education. *European Educational Research Journal*, 5(1), 1-17.

- Mansourizadeh, K., & Ahmad, U. K. (2011). Citation practices among non-native expert and novice scientific writers. *Journal of English for Academic Purposes*, 10(3), 152-161.
- Martin, J.R. (1992). *English text: system and structure*. Amsterdam: Benjamins.
- Mauranen, A. (1993). Contrastive ESP rhetoric: metatext in Finnish-English Economic texts. *English for Specific Purposes*, 12, 3-22.
- McEnry, T., & Kifle, N.A. (2002). Epistemic modality in argumentative essays of second language writers. In J. Flowerdew (Ed.), *Academic Discourse* (pp. 182- 195). Longman.
- Mei, S.W., & Allison, D. (2005). Evaluative expressions in analytical arguments: aspects of appraisal in assigned English language essays. *Journal of Applied Linguistics*, 2(1), 105-127.
- Miller, C. (1994). Genre as social action. In A. Freedman and P. Medway (Eds), *Genre and the new rhetoric*. London: Taylor & Francis.
- Moreno, A. (2003). Matching theoretical descriptions of discourse and practical applications to teaching: the case of causal metatext. *English for Specific Purposes*, 22, 265-295.
- Mur-Dueñas, P. (2007a). *A contribution to the intercultural analysis of metadiscourse in business management research articles in English and in Spanish: A corpus-driven approach* (Unpublished doctoral dissertation). University of Zaragoza, Spain.
- Mur-Dueñas, P. (2007b). "I/we focus on..." A cross-cultural analysis of self-mentions in business management research articles. *Journal of English for Academic Purposes*, 6(2), 143-162.
- Mur-Dueñas, P., & Šinkuniene, J. (2016). Self-references in research articles across Europe and Asia: A review of studies. *Brno Studies in English* (42)1, (in press).
- Myers, G. (2001). 'In my opinion': the place of personal views in undergraduate essays. In M. Hewings (Ed.), *Academic writing in context* (pp. 63-78). The University of Birmingham: University Press.
- Nelson, N. (2008). The reading-writing nexus in discourse research. In C. Bazerman (Ed.), *Handbook of research on writing: history, society, school, individual, text* (pp.435-449). London and New York: Lawrence Erlbaum Associates.
- Petrić, B. (2007). Rhetorical functions of citations in high-and low-rated master's theses. *Journal of English for Academic Purposes*, 6(3), 238-253.
- Rodrigues Junior, A.S. (2003). Facework, writing and interaction in the FL classroom. *Linguagem and Ensino*. 6(2), 163-189.

- Rustipa, K. (2014). Metadiscourse in Indonesian EFL learners persuasive texts. A case study at English department. *International Journal of Linguistics*, 4(1), 44-52.
- Sanigar, M. A. (2013). *Selling an Education*. Universities as commercial entities: a corpus-based study of university websites as self-promotion. *LWPLP*, 18, 85-114.
- Sarangi, S., & Roberts, C. (1999). *Talk, work and institutional order: discourse in medical, mediation and management settings*. Berlin: Mouton de Gruyter.
- Selinker, L., Lackstrom, J., & Trimble, L. (1973). Technical rhetorical principles and grammatical choices. *TESOL Quarterly*, 7(2), 127-136.
- Shi-Xu (2005). *A cultural approach to discourse*. Palgrave MacMillan.
- Street, B.V. (1995). *Social literacies: critical approaches to literacy in development, ethnography, and education*. New York: Longman.
- Swales, J. (1981). *Aspects of article introductions*. Birmingham, UK: The University of Aston, Language Studies Unit.
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Swales, J. (2004). *Research genres: Exploration and applications*. Cambridge: Cambridge University Press.
- Swales, J., Ahmed, U.K., Chang, Y., Chavez, D., Dressen, D.F., & Seymour, R. (1998). Consider this: the role of imperatives in scholarly writing. *Applied Linguistics*, 19(1), 97-121.
- Swales, J., & Feak, C. (2004). *Academic writing for graduate students (2<sup>nd</sup> ed)*. The University of Michigan Press.
- Taylor, J. (2001) The Impact of performance indicators on the work of university academics; evidence from Australian universities, *Higher Education Quarterly*, 55(1), 42-61.
- Teo, P. (2007). The marketization of higher education: A comparative case study of two universities in Singapore. *Critical Approaches to Discourse Analysis Across Disciplines*, 1(1), 95-111.
- Thomas, S., & Hawes, T., (1994). Reporting verbs in medical journal articles. *English for Specific Purposes*, 13(2), 129-148.
- Thompson, S. (1994). Frameworks and contexts: a genre-based approach to analyzing lecture introductions. *English for Specific Purposes*, 13 (2), 171-186.
- Thompson, P. (2000). Citation practices in PhD theses. In L. Burnard, & T. McEnery (Eds.), *Rethinking Language Pedagogy from a Corpus Perspective* (pp. 91-101). Frankfurt: Peter Lang.

- Thompson, G. (2001). Interaction in academic writing: learning to argue with the reader. *Applied Linguistics*, 22(1), 58-78.
- Thompson, P. (2005). Points of focus and position: Intertextual reference in PhD theses. *Journal of English for Academic Purposes*, 4, 307–323.
- Thompson, P., & Tribble, C. (2001). Looking at citations: Using corpora in English for academic purposes. *Language Learning & Technology*, 5(3), 91-105.
- Thompson, G., & Ye. Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365-82.
- Thue Vold, E. (2006). Epistemic modality markers in research articles: a cross-linguistic and cross-disciplinary study. *International Journal of Applied Linguistics*, 16(1), 61- 87.
- Vande Kopple, W. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 36, 82-93.
- White, R. (1974). The concept of register and TESL. *TESOL Quarterly*, 8(4), 401-416.
- Widdowson, H.G. (1984). *Explorations in applied linguistics (2)*. Oxford: Oxford University Press.
- Yakhontova, T. (2002). "Selling" or "telling"? The issue of cultural variation in research genres. In J. Flowerdew (Ed.), *Academic discourse*. London: Longman.

### **Biodata**

**Davud Kuhi** is an assistant professor of applied linguistics at Islamic Azad University, Maraghe Branch. He is mainly interested in exploring the social and cultural dimensions of discourse in general and academic discourses in particular.