WRITTEN ACADEMIC DISCOURSE AND THE MEDICAL DISCOURSE COMMUNITY

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Abstract: Starting from the general concept of discourse community available in the literature, this paper aims to highlight the characteristic features of the medical discourse community for a better understanding of its role in present-day written academic discourse. Focus will be placed on highlighting the importance of adhering to the commonly shared goals, conventions and rhetorical strategies of the international medical discourse community, which enable healthcare professionals to produce valuable written academic discourse for the purpose of gaining personal as well as institutional recognition and prestige.

Keywords: written academic discourse, medical discourse community, medical research articles, discourse conventions, rhetorical strategies.

The analysis of the available literature revealed several characteristics of present-day written academic discourse. These include, besides an implicit inability to exist in the absence of genuine scientific research activities, the clear distinction between facts and interpretation (Hyland, 2007), an 'institutional-individual' duality reflecting two types of goals that academic must achieve simultaneously (Latour and Woolgar, 1986), disciplinary differences between the hard and soft sciences leading to different rhetorical strategies, writing styles and author identities (Skelton, 1987; Millán, 2010; Gnutzman and Rabe, 2014), as well as a persuasive and interactive dimension (Myers, 1989; Swales, 1990; Hyland, 2005; Mauranen et al, 2010), which allows authors to negotiate their claims, and readers to be active participants in the creation of scientific knowledge through the acceptance or denial of claims, in this way also establishing academic hierarchies. In particular, the interactive nature of written academic discourse and its institutional-individual duality determine writers to oscillate between the need to conform to discipline-specific discourse forms and the need to

achieve individual goals in the context of today's highly competitive international academic environment.

Given this context, the correct identification of the various goals and intentions of medical academic writers as members of the international medical discourse community could enable the appropriate interpretation of relevant texts such as medical research articles from a pragmatic perspective. Therefore, this paper focuses on the concept of discourse community as perceived in the literature, with specific reference to the characteristic features of the medical discourse community.

"One of the tasks of pragmatics is to explain how the same content is expressed differently in different (cultural, religious, professional etc) contexts" (Mey, 1993: 16). Given this pragmatic focus on language users in their social context, a better understanding of the concept of discourse community is essential for establishing its role in present-day written academic discourse. Discourse community, alongside communicative purpose and genre are closely related concepts within Swales' approach to studying genres (Swales, 1990), at the same time being connected with the notion of discourse competence, which is part of the communicative competence in a language.

According to one definition, "discourse communities are sociorhetorical networks that form in order to work towards sets of common goals" (Swales, 1990: 9). The members of a certain discourse community are familiar with the particular genres employed for achieving community-specific objectives. The concept of discourse community is placed within that of 'writing as social construction', where "the writer is neither a creator working through a set of cognitive processes nor an interactant engaging with a reader, but a member of a community" (Hyland, 2009: 33). According to this view then, writing is a social act while texts gain meaning and communicative force if they display the patterns and conventions that the community has become familiar with. Therefore, "writing is a form of cultural practice tied to forms of social organization" (Hyland, 2009: 34).

The term discourse community was often labeled as indeterminate or fuzzy in the writing literature due to difficulty assigning membership to a certain community. Swales (1990) attempted to conceptualize discourse communities first by differentiating them from speech communities, and then by identifying six defining characteristics that are able to characterize a group of people as a discourse community. Therefore, in Swales' view (1990), the communicative needs of sociolinguistic speech communities, such as socialization or solidarity influence the development and characteristics of the group while in sociorhetorical

discourse communities, the communicative needs of the goals influence discoursal characteristics, "since a discourse community consists of a group of people who link up in order to pursue objectives that are prior to those of socialization and solidarity, even if these latter should consequently occur" (Swales, 1990: 24).

Being a member of a discourse community does not only mean learning the discipline but also "learning to use language in disciplinary approved ways" in order to communicate as a member of the community (Hyland, 2006: 38). In the highly competitive medical discourse community of today this means, among other things, the ability to successfully master the English language and the conventions of reporting research in order to publish medical articles that receive international approval and constitute means of constructing and spreading knowledge. Given the current predominance of English over other languages, as well as the higher impact and better citation opportunities of English-language journals, medical research articles must be written in English in order to gain international recognition irrespective of the first language of their writers.

The predominance of English is also supported by data presented in different studies. For instance, a computer-based analysis of the language of journal articles included in Index Medicus between 1966 and 1983 was carried out by Maher (1987). The results indicated that the number of articles published in English has steadily grown by 19% during this period while a 5% decrease in the number of German-language articles was simultaneously recorded. According to the same study, in 1980, out of the total number of articles, 20% were published in countries other than the USA and the UK, out of which approximately 8% were published in Japan, Germany and France. The same trend identifying English as a key tool in medical communication and education was also confirmed by more recent findings. Thus, according to a study published in 2008, "in the last 130 years, the percentage of English language journals in the American journal catalogue Index Medicus (now called Medline - Medical Literature Analysis and Retrieval System Online) has increased from 35% to 89%" while that of German-language journals dropped from 25% to 1.9%. Also, according to the same source, while in 1879, there were 284 journals in English and 201 in German in Index Medicus, in 2007, Medline, the online journal database derived from Index Medicus listed 4609 journals in English and only 98 in German, which means that nine out of ten new Medline-indexed journals are in English (Baethge, 2008: 37).

However, being accepted for publication in a medical journal is not the only aim researchers must focus on. The impact factor of the journal as well as the number of citations

of a given paper or author have become increasingly important especially in recent years, following the development of widely accessible online publications and internet-based databases. English-language publications also seem to be cited more often as "English makes up over 95 per cent of all publications in the Science Citation Index" (Hyland, 2006: 26).

This predominance could pose problems for the non-native speakers whose familiarity with the conventions of writing in English may prevent them from presenting research results successfully. This is due to the fact that in order to be widely approved and acknowledged, medical articles must not only reveal accurate and relevant research outcomes but also present such results in a persuasive manner. Consequently, in this situation, language may play a more crucial role than scientific facts. This Social constructivist view "sees the agreement of community members at the heart of knowledge construction, and the language used to reach that agreement as central to the success of both students and academics" (Hyland, 2006: 39). Since language is used in particular contexts, especially within a specialized discipline such as medicine, a clear understanding of the context in which the members of the discourse community use language for producing meaning and achieving common purposes is crucial. Context is essential in the creation of knowledge since the target readers of a medical article for instance can only truly understand the value of the scientific results presented if they are able to interpret them appropriately based on their own expertise. Three types of contextual factors were identified outside a text: "the situational context, what speakers [readers] know about what they can see around them; the background knowledge context, what they know about each other and the world; the co-textual context, what they know about what they have been saying" (Cutting, 2002: 3).

Awareness of the background knowledge of their target readers enables writers of medical research articles to use appropriate rhetorical means of persuasion in accordance with audience expertise and expectations while the co-textual context offers the linguistic means required to this end. The main rhetorical strategies used by medical research writers include the use of personal pronouns, citations, self-references, boosters or hedges. Such strategies allow authors to support their claims appropriately and to thus convince their readers, fellow members of the medical discourse community, of the validity, relevance and usefulness of their findings.

For instance, the current conventions of written academic discourse require new knowledge to be introduced with caution and modesty in scientific research articles in order for claims to be accepted by members of the target discourse community and thus become

new scientific knowledge. This is primarily achieved through hedging, i.e. the use of linguistic devices such as relatively, approximately, may, it is assumed, it is believed, to our knowledge, from our point of view, which present information accurately, avoid taking direct responsibility or introduce knowledge claims as personal opinions in order to avoid denial and encourage reader participation (Hyland, 1998). Given their ability to reduce commitment and show deference towards fellow discourse community members, hedges represent a widely used strategy in line with the conventions of present-day written academic discourse.

Hyland (1998: 258) also stressed that "an analysis of scientific discourse must focus on the interactional and social aspects of scientific communities" since "social practices link the text to the institutional and social circumstances of the event". Similarly, in Fairclough's view (1992: 4), "any discursive event (i.e. any instance of discourse) is seen as being simultaneously a piece of text, an instance of discursive practice, and an instance of social practice". Receiving acknowledgement, prestige and consequently further research projects and funding following the publication of valuable research articles represents one of the social practices adopted by the medical discourse community. This is why professional and educational institutions place enormous pressure on healthcare professionals who are often evaluated based on their ability to master discursive practices for presenting research results rather than strictly on their medical or teaching achievements. Non-native speakers of English face an extra challenge since they have to convincingly present their results in a language other than their first language.

Another difference between speech and discourse communities identified by Swales (1990: 24) refers to their centripetal and centrifugal structure: "a speech community typically inherits its members by birth, accident or adoption; a discourse community recruits its members by persuasion, training or relevant qualification". Individuals become members of the medical community only after graduating from medical schools and completing residency or specialty programs that offer professional training and support.

The six defining characteristics of discourse communities identified by Swales (1990: 24-27) are also recognizable in the medical discourse community. Firstly, "a discourse community has a broadly agreed set of common public goals", which are either openly declared or more tacit. Most of the goals of the medical discourse community are public, beginning with the Hippocratic Oath, although, besides the primary desire to help patients at the same time contributing to the development of the medical sciences, tacit, or personal goals such as obtaining a higher position in the medical hierarchy and associated benefits also

motivate healthcare professionals. However, common goals, not shared object of study are essential criteria in this respect.

Secondly, "a discourse community has mechanisms of intercommunication among its members". These are community-specific but may include meetings, telecommunications, correspondence, newsletters, conversations, etc. The medical discourse community has a wide range of such communication mechanisms that allow group members to interact other than through face-to-face meetings. Written communication among healthcare professionals concerning patient-related issues is carried out via documents such as letters of referral, case notes, patient records, laboratory test reports or prescriptions, while research results in the medical field are usually shared through specialized texts like research articles, reviews, presentations of clinical cases or editorials.

According to the third feature, "a discourse community uses its participatory mechanisms primarily to provide information and feedback". In the medical field, such participatory mechanisms usually refer to participations in international conferences, congresses and other events, as well as subscriptions to international medical societies and publications. These tools enable communication within the community, at the same time adding prestige to individual members, especially if they are younger or come from smaller, less developed countries.

Next, "a discourse community utilizes and hence possesses one or more genres in the communicative furtherance of its aims". This feature is connected with the discoursal expectations created through specific genres within each discourse community. Besides genres such as the research article, which belongs to the broader scientific community, the medical discourse community possesses unique means for achieving its professional purposes, such as letters of referral, case notes, patient records, laboratory test reports, prescriptions, etc. "In addition to owing genres, a discourse community has acquired some specific lexis". Apart from using lexical items accessible to speech or other communities, medical professionals use highly specialized terminology, specific abbreviations and acronyms that can be easily recognized by fellow community members but which represent a huge challenge for outsiders. Romanian doctors have also come to use English abbreviations and acronyms in doctor-doctor but also doctor-patient communication, probably due to their extensive reading of scientific publications in English and increased professional communication in English. Such examples include, but are not limited to: STEMI (ST Segment Elevation Myocardial Infarction), PTCA (Percutaneous Transluminal Coronary Angioplasty), MCV (Mean

Corpuscular Volume), MCH (Mean Corpuscular Hemoglobin), MCHC (Mean Corpuscular Hemoglobin Concentration), APPT (Activated Partial Thromboplastin Time), etc.

Finally, "a discourse community has a threshold level of members with a suitable degree of relevant content and discoursal expertise". In the medical community, just as in any other discourse community, there is a constant balance between experienced members with a high degree of expert knowledge and novice members striving to become an integral and active part of the professional community. Further research is needed in order to confirm whether these characteristics are generally applicable to the medical discourse community as a whole, or if local nuances depending on region, contexts and cultures can be detected based on the writing output generated by members of specific medical discourse communities.

Besides discourse communities, authors such as Bhatia (2004), Wenger et al (2002) or Sarangi and Roberts (1999) also mentioned communities of practice when referring to knowledge and expertise in professional settings. Knowledge is the essential element that binds communities of practice together. Although their members may not necessarily cooperate on a daily basis, they are characterized by similar concerns, problems, levels of knowledge and expertise shared through specific tools and means of communication. As Bhatia (2004: 149) pointed out, the difference between discourse communities and communities of practice is that the former heavily rely on language, texts and genres for achieving common goals while the latter rely on practices and values as means of creating community identity. However, given this differentiation, most pragmatic analyses of written academic texts, research articles included, take into account the characteristics, norms, practices and expectations of what is generally referred to as discourse community.

In conclusion, this paper focused on the role of the medical discourse community in the analysis and interpretation of written academic discourse from a pragmatic perspective. Features such as shared goals, spoken and written communication mechanisms, specific lexis, or commonly shared genres with their associated norms and conventions were found to characterize discourse communities in general. In particular, it is the existence of specific intercommunication mechanisms which seems to differentiate the medical discourse community from other discourse communities. Such mechanisms involve the use of highly specialized medical terminology whose correct understanding requires in-depth training and extensive experience in the healthcare field.

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