

Medical English vs. Literary English: A Contrastive Analysis

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ABSTRACT

The present study tends to determine what kinds of linguistic features and styles distinguish medical English from literary English. Corpus analyses of both varieties were taken into account. Ten scientific research papers drawn from each genre were linguistically analyzed. It was found that the kind of English used in medical sciences is marked with accuracy, precision and hybridized language mixed with Latin and French. Medical scientists reveal proven facts and findings whereas literary writers just illustrate their creative thoughts with illusions, allusions and figurative language. Literary language contains non universal features and reveals the literary writer's inner self which doesn't at all need extraneous and empirical evidence to pen down the overflow of his spontaneous expression. On the contrary, medical language needs empirical experience and experimental validity. The investigation also suggests that medical English contains more passivation, nominalization, lexical density and foregrounding which are found far less in literary English. Moreover, medical scientists unlike literary artists, are adhered to a clearly defined IMRAD structure which contains Introduction, Methods, Result and Discussion sections.

Keywords: Medical Texts, literary texts, empirical study, imaginative language, inner self, exterior.

INTRODUCTION

Heterogeneity of academic disciplines gives rise to numerous varieties of English. Hence, medical English is not a variety in the same way as literary English. Medical English distinguishes from literary English in its nature and function. The contrastive analysis will manifest thematic, lexical and syntactical disparities that exist between the two genres. Medical English is marked with precision, exactness, verifiable research findings and departure from an individual's whims and fancies. For example, a medical scientist needs authentic experiment to validate the accuracy of his medical discovery whereas a litterateur just reveals what he feels regardless of any external verification. At thematic level, literary language is imaginative, emotive and reflective of inner and spontaneous overflow of powerful feeling. It contains literary devices such as illusion, allusion, epigraph, euphemism, foreshadowing, imagery, simile, metaphor, personification and so forth. A famous English poet, Joan Keats in his poem "Ode to a Nightingale" is willing to overcome the trial and tribulation of his life on "viewless wings of poesy". He does so for his inner satisfaction that needs no verifiable validity but a medical scientist has to prove every bit of his findings with valid and empirical evidence.

The idea to do research on this topic occurred to me while I was writing a textbook on English for Health Sciences. While pursuing this venture, I made an extensive and an intensive reading of medical books, research papers and medical leaflets. On the contrary, while doing graduation and post-graduation in English literature during 1986-1992 I had a chance to read a lot of literary research papers, English novels, drama and poetry. The amalgamation of these two varied experiences in both medical and literary texts motivated me to make a contrastive analysis of these two genres which have never been touched upon before. Just a few separate studies either on medical English or on literary English were found on Google search, but a contrastive analysis of both the genres have never been taken into account. This motivated me to take a pioneering venture to analyze both the varieties contrastively and to come up with a sound conclusion. In medical sciences, the empirical findings have precedence over the style of artistic presentation. A medical scientist's main concern is to maintain experimental accuracy and exactness of his research outcomes rather than to rely on metaphorical presentation. Hence, medical English is bereft of any artistic and sensuous pleasure whereas literary English titillates human pleasure and aggravates human impulse. Medical vocabularies containing Greek and Latin origin differ from ordinary and literary vocabularies because medical diction and lexicons do not trigger human excitements. Medical English was found more direct and free from allusion, euphemism, imagery, foreshadowing, allegory, alliteration, anaphora, hyperbole, situational irony, metonym, oxymoron, paradox, personification, and so forth.

According to Ding, D. (2002), medical texts are marked with "impersonal style." By impersonalization, the author means that "there could have been anyone, or any research could have been carried out, the research still would have come to the same conclusion." This impersonalization is realized when the author frequently uses passive voice in order to become universally accepted. According to Swales (1990), "passive voice is one of the most frequent strategies in medical text." According to Marin, Arrese. J. I. (2002), passivation strengthens "credibility, reliability and objectivity."

Statement of the problem

My teaching experience with ESP courses propelled me to write a textbook on *English for Health sciences*. Before I took a decisive step I made a meticulous study of medical texts whereas my extensive exposure to English literature had yielded enough knowledge about the features of literary English. Besides, nowhere did I find the solid contrastive analysis of these two genres. This has further strengthened my idea that to do a contrastive research on these two different varieties is no less than a pioneering effort to enrich the scope of empirical research on the two contraries. Therefore, I took this venture to explore the contrastive linguistic features of medical and literary texts.

There is no dearth of research done separately on these two varieties, but to bring these two vicissitudes parallel and make a comparative study might be a ground breaking research. A few studies about linguistic features of medical texts and literary texts, no doubt, were carried separately, but a contrastive analysis has never been touched upon till date. For example, on the one hand, Marco, M. J. C. (2000), Romich J. (2001), Wulff H.R., (2004), Maglie R. (2009), Mičić, S. (2011), Monica Sarton, (2013), made an intensive research on linguistic features of medical texts. On the other hand, Eagleton, T. (1983), Van Peer, W. (1991), Zwaan, R. A. (1993), Miall, D. S., and D. Kuiken (1994). Culler, J. (1997), Carter, R. (2004) and many more researchers wrote about literary language and literary devices, but none of them made a comparative study of both the contraries.

This has instilled in me enough curiosity to bring these two different disciplines together and to make an in-depth contrastive analysis in order to expand the scope of research beyond limit.

LITERATURE REVIEW

Taking into account the views of previous researchers and authors on the said topic I found that no such contrastive analysis of medical and literary English was found before. However, researchers were found reflecting their insight on these two genres separately. Mc Morrow (1998) opined that medical researchers encompass a greater degree of impersonality, accuracy, exact reporting and hypothesizing. Anita Sheen (1982) was of the view that scientists prefer passivation to make their research findings sound more empirical and universal. On the contrary, the literary language represents author's personality and highly imaginative impulse. Roman Jakobson (1960) a leading formalist, is of the view that a piece of literature bears literariness, and imagination is the source of literariness.

Zwaan (1993) considered stylistic variation, defamiliarization and modification of personal meaning as the major components of literariness. Van Peer (1991) purported elegant delineation as the major component of literariness. To him, foregrounding, a noticeable feature of literary language represented via meter, rhyme, repetition and other patterns which completely lack in medical language. In an empirical study, Miall and Kuiken (2001) also considered imagination as the salient feature of literary language. Carter (1997) asserted that literariness means defamiliarization and deviation makes departure from linguistic norms. Mc Morrow (1998) further revealed that Greco-Latin heritage is still the major source for coining new medical terminologies, because they are precise and easier to understand. According to Mičić (2009) medical English is based on "Greco-Latin and Anglicized terms." Marco (2000) explored that medical research papers, medical textbooks and leaflets are full of semi-restructured phrases and medical jargons which are unusual in literary piece of writing and every day speech. Berghammer (2006) also considered Greek and Latin as the major source of medical terminology. One of the prominent features of medical English is that noun strings occur frequently with adjectives forming a concept (Mičić 2011). Parkinson (2000) is of the view that medical texts characterize nominalized verbs, adjectives, technical phrases and extended nominal groups/collocations.

According to Maglie (2009), medical English is characterized by semantic univocity which means there is no synonym of medical terms but only one term governs the conceptual meaning. Another famous linguist, Halliday (2006), found high lexical density in medical texts since a process is transformed into a more abstract phenomenon. In other words, a cluster of complex nouns containing pre- and post-modifying elements frequently occur in medical texts. Fang, Schleppegrell, & Cox, (2006) said scientists use nominalization to pack information into text and to retain a universal acceptability. Kazemian and Hashemi (2014) argued that nominalization is a "prevailing feature of scientific text." In addition, Fatonah (2014) focusing on nominalization proposed that teachers should create awareness about the importance of nominalization in scientific writing. According to Scarpa (2008:41), the use of noun phrases and nominalization allow authors to introduce new information and retain objectivity. Wulff (2004) opined that most of the medical terminologies are coined from the Hippocratic texts of the 5th and 4th century BC. Dirckx (2005) also explored that Hippocrates and his successors wrote a large number of medical texts in Greek. Berghammer (2006) explored that most of the medical terminologies consist of prefixes and suffixes which are drawn from Greek and Latin.

HYPOTHESIS

1. Passive voice is more frequent in medical texts than in literary writing.
2. Nominalization is more common in medical texts than in literary writing.
3. Compound words occur more frequently in medical texts than in literary texts.
4. Greco -Latin vocabulary is more common in medical texts than in literary writing.
5. Acronyms are more common in medical texts than in literary writing.
6. Allusive, emotive and figurative language occur more in literary texts than in medical

METHOD

This empirical research draws on the secondary data encompassing a contrastive analysis of two corpora: medical and literary texts which illustrate how the linguistic features of Medical English distinguish from those of literary English. With a view to exploring a scientifically proven finding, ten research papers for each discipline were chosen and analyzed thoroughly. Medical texts contain published medical research papers, textbooks and medical leaflets, whereas, literary texts are based on literary research papers, poems, novels and drama. The data were collected from the following medical journals: *i. Journal of the American Medical Association*, *ii. New England Journal of Medicine*, *iii The Lancet*, *IV. The Wall Street Journal and medical leaflets*. These are highly reputed medical journals which publish the research papers of both native and non-native medical scientists. These journals incorporate new research findings of medical disciplines.

With a view to analyzing the linguistic features of literary texts, the following literary journals and poems selected from classical English literature such as Spenser, Milton, Wordsworth, John Keats etc. have been considered for linguistic analysis. The literary journals include: *i. The Aligarh Critical Miscellany*, *ii Tri Quarterly*, *the literary journal of Northwestern University*, *iii. Bellingham Review*, *IV. London Journal of Fiction and Mid-American Review*.

This contrastive analysis aims to unearth stylistic variations of both medical and literary texts. Swale's (1990) model has been the significant source for the linguistic analysis of both genres. This model reveals how new research findings are systematically formulated in medical research papers and what stylistic and syntactical features govern varied segments of medical and literary research papers. The medical research articles selected for linguistic analysis were written by both native and non-native medical scientists and published in the aforesaid medical research journals. The linguistic analysis of selected research papers from medical journals illustrates well what grammatical components occur more frequently in medical texts than in literary texts. The statistical data based on the comparative study of both genres were explained through tables and figures which determine the authenticity and validity of this study. Grammatical components and discourse features of medical and literary texts have been analyzed thoroughly in this study.

RESULT

Internal formulation of medical and literary research papers

It has emerged after the in-depth analysis of both medical and literary journals that the most recurrent phenomenon of the formulation of medical journals is based on distinct constituents. These constituents are drawn on IMRD sections in medical research articles which stand for Introduction, Method, Result and Discussion. This format is a clear pointer of objectivity, universality and uniformity. This analysis is based on Swale's model (1990) termed it as "genre

convention.” On the contrary, in literary and creative writing the essence lies not in the objectivity but in writers’ deep imagination and their individual perception. Literary and creative writing is not based on experimental assessment. Hence IMRD pattern is not essentially followed in literary and creative writing.

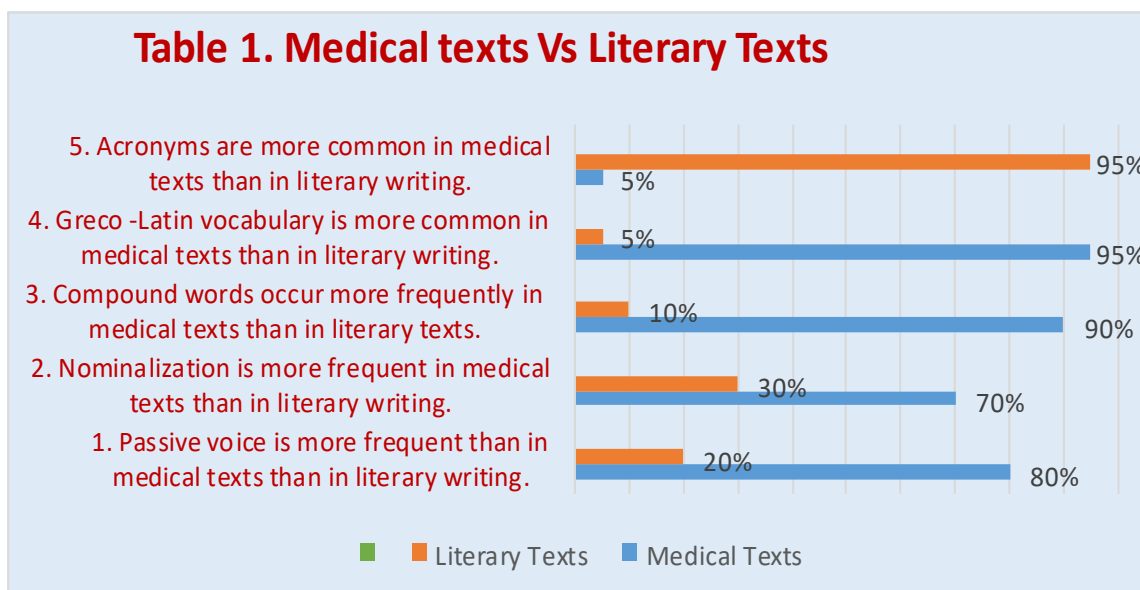
This standard format is followed by the entire community of medical sciences whereas this format is not considered nitty-gritty of literary research papers. In fact, medical scientists need verifiable data to consolidate his new findings whereas a literary writer while composing the overflow of his inner feeling doesn’t need experimental verifiability at all. Therefore, a medical scientist needs to be well organized and cogent while delineating his new findings

Introduction Section of medical research paper encapsulates the background of selected medical topic, established assumption and new medical findings from renowned previous researches. Method Section contains procedural formulae adopted in the research and systematic description of step by step procedures that were taken up in laboratory to carry on the medical research. It also gives a good account of research tools and experimental process that were undertaken to validate the new research findings. Result Section lays more focus on the medical scientists’ new research findings and their in-depth analysis. Medical scientists elucidate their new research findings through tables, graphs and pictorials. Discussion Section justifies why the present research is so significant and how medical scientists adopt the right methodologies to come up with a sound conclusion. The limitations of the study are also mentioned so that the new researchers can take special care to make their research findings more solid and more justifiable. On the contrary, no such format (IMRD) exists in literary research papers. Literary writers take full liberty to make a departure from this format. They take pleasure to set their own format and to create their own stylistic presentation.

With a view to examining the validity of aforesaid hypotheses I chose three journals: *Journal of the American Medical Association*, *New England Journal of Medicine* and *The Lancet* from medical discipline. From literary discipline I chose the following three journals: *The Aligarh Critical Miscellany*, *Mid-American Review* and *London Journal of Fiction*. I analyzed 10 articles from each discipline. In addition some English poems selected from Classical and Romantic Periods were also taken into account. The statistical findings of medical and literary texts are as follows:

Table 1. Medical texts Vs. Literary Texts

Statements	Medical Texts	Literary Texts
1. Passive voice is more frequent in medical texts than in literary texts.	80%	20%
2. Nominalization is more common in medical texts than in literary texts.	70%	30%
3. Compound words occur frequently in medical English	90*	10%
4. Greco-Latin vocabulary is more common in medical texts	95%	5%
5. Acronyms are more common in medical texts than in literary texts.	95%	5%

**Figure 1. Medical texts Vs. Literary Texts**

DISCUSSION

Predominant use of passive voice in medical texts

While exploring the frequency of passive voice in medical and literary research papers, I found predominant occurrence of passive voice in medical rather than in literary research papers. Medical scientists prefer passive voice to active voice to consolidate their research methodologies, research tools and hence their research findings. The frequency of passive voice in medical research articles was 80% compared to 20% occurrence of passive voice in literary research papers. The frequent occurrence of passive voice in medical journals suggests that it is an inevitable style for medical scientists to write with high frequency of passive voice in order to remain universally accepted. The excessive use of passivation in medical texts reflects the objectivity of the scientific method. Method section is marked with high frequency of passive voice in medical research paper. The ranges were wide, with values as high as 80% in medical research articles compared with just 20% in literary articles.

The predominant use of passivation in Method Section reflects the tendency of medical writers to give a good account of what procedures and tools were used step by step in the laboratory. Hence, medical scientists excessively use passive voice in medical research articles. MacDonald (2002) also opined that medical scientists rely heavily on passive voice in the Method section of medical research papers. Three examples of passive voice selected from each discipline are given below: Examples of passive voice in medical texts

1. *Heated bacteria were held responsible*

2. *Enzyme patterns and their functions have been studied.*
3. *Survival was patient was enhanced.*

Examples of passive voice in literary texts

1. *Shadwell, a complete non-entity is invested with the incremental virtues.*
2. *An indubitable link with Flecknoe is boldly asserted.*
3. *With a stroke of sarcasm, this fact is established thus.*

However, a few modern researchers have strongly criticized the excessive use of passive voice in medical research papers. Robert Flesch (1960) and Robert Day (1998) appealed to young scientists: "I herewith ask all young scientists to renounce the false modesty of the previous generations of scientists. Do not be afraid to name the agent of the action in a sentence, even when it is 'I' or 'we.'"

Matthews et al (2000) "suspect that scientific writing's heavy reliance on the passive voice is more a matter of tradition than a formal requirement

Use of nominalization in medical and literary texts

Another prominent linguistic feature that frequently occurs in medical research papers is the use of nominalization. According to Cambridge Dictionary, nominalization is forming of nouns from other parts of speech, most commonly from a verb or an adjective. This noun is used instead of the verb or adjective in medical English to create formality, precision, lack of ambiguity and lexical density. Nominalization is the most important lexico-grammatical realization for packing lexical items at high density. In this study, the above mentioned medical and literary journals were analyzed as to compare the use and frequency of nominalization and the level of lexical density in both the genres. It was found that 70% nominalization occurs in medical research papers compared to 30% in literary articles. The medical doctors prefer nominalization in order to make medical text typically more complex by making it lexically dense. With higher frequency of nominalization, medical information can be easily compacted.

Examples of nominalization in medical texts:

1. "absorption with primary acid hyposecretion, anemia or hypochlorhydria or pharmacologically hypoacidity (ant-acid administration, partial gas-trectomy, or vagotomy)"
2. "Our observations implicate an inadequate release (maldigestion) of dietary vitamin B12 as the cause for the malabsorption"
3. "Prescription, reinfarction, depletion, depression, excretion, dilatation, medicament, consumption"

Examples of nominalization in literary texts:

Homogeneity, conclusion, consumption, visualization, discrimination, limitation, tradition

Thus far, we have explored that nominalization plays a significant role in text cohesion, encapsulation and compactness. Therefore, I entirely agree with Thompson, (2000) when he says nominalizing contains a large amount of information in a small place pack a large number of lexical items into one clause.

Use of compound words in medical and literary texts

Compound words occur more frequently in medical texts than in literary texts. The frequency of occurrence of compound words is 90 % compared to just 10 % in literary texts. The compound words that are used in medical research papers and medical leaflets are usually constituted of three and four words. The medical scientists use long compound words in medical texts solely because they tend to convert prolixity into precision and verbosity into exactness. It has been found that the medical writers use excessive compounds to make a deliberate evasion of lengthy expression. It has emerged after a meticulous analysis of both medical and literary texts, that medical texts are full of compound words which are constituted of three or four lexical words thereby making them highly technical. A few examples of long compound words used in medical leaflets are given below:

Transient ischaemic attacks, -----medically confirmed high risk, Abnormally high bleeding tendency, Rapidly absorbed acetylsalicylic acid product, Nonsteroidal anti-inflammatory drugs(NSAID. etc.

Thus, the use of long compound words reduces related concepts into minimum length and consolidates precision which is the hallmark of medical texts. On the contrary, the occurrence of compound words in literary texts is just 10 % compared to 90 % in medical texts. Just a few examples of literary compound words are given below:

Living readers, golden age, admirable poem, wide range, delightful rebuttal, scurrilous abuse, innocuous person, absolute monarch, a complete non-entity, lucid interval, rising fogs

This is not a fashion at all for literary writers to use long compound words. This is considered bombastic and turgid style in literary texts. This highly embellished style is more common in medical texts than in literary texts.

Use of Greco-Latin compound words in medical and literary texts

Another type of compound words that occur in medical texts are made up of prefixes, root words and suffixes. Such compound words mark an innovative and creative evolution of medical nomenclature thereby incorporating findings into precision. Most prefixes and suffixes are derived from ancient Greek or classical Latin. While making a contrastive analysis of medical and literary texts, I found that medical texts contain 95% Greco-Latin vocabulary compared to just 5 % in literary texts. For example:

Angiocardiology, Electrocardiophonography, Hemangioendotheliosarcoma, Hypofibrinogenemia, Hyterosalpingiooophorectomy, Polioencephalomyelitis, Panhysterooophorectomy, Osteoarthropathy, Panhysterosalpingooophorectomy, Pseudocryptorchidism, Syringocystadenoma

Such long compound words consisting of Greco-Latin prefixes and suffixes are more used in medical texts than in literary texts. For example such prefixes: *Angio, electro, hem, hypo, hytero, pan, polio, syringe osteo*, and suffixes such as: *graphy, sarcoma, emia, ectomy, pathy, itis*, are the unique features of medical English.

No doubt prefixes and suffixes do occur in literary English but they are well known and very common unlike those of medical texts. For examples the following words have occurred in literary texts: *Neighborhood, judiciously, discrimination, dramatists, consequently, inconsiderable, earlier,*

mighty, families, pretension, performer, unidentifiable, murkiness, objectivity, inevitable, impending, impregnated, enviable, detract, demotivate, so on and so forth.

The prefixes such as *dis, in, un, im, de*, and the suffixes such as *hood, ly, tion, tist, able, ty, ies, er, ness, ity*, more frequently occur in literary texts than in medical texts. The long compound words consisting of Greco-Latin prefixes and suffixes as seen in medical texts hardly occur in literary texts.

Use of acronyms in medical and literary texts

An acronym, also called abbreviation is a word or name formed from the initial components of a longer name or phrase, usually using individual initial letters. Medical writers use acronyms extensively to save time and space whilst writing medical books, research papers, leaflets and patients' medical records. This shows their efficiency and the ability to cover numerous medically related concepts with minimal space. The contrastive analysis of medical and literary English reveals 95% use of acronyms in medical English compared to 5% in literary English. This is as an active way of word formation which has become widespread in medical English. Acronyms are considered as jargon because they are used by particular groups of doctors that are not generally understood. In fact it is difficult for the non-medical disciplines to understand initialism and alphabetism which are used to form acronyms from a string of initials. A collection of commonly used abbreviations are more recognizable to the physicians working in the same discipline rather than to those not working within the same field. There is no doubt that abbreviations save time, but their different interpretations by different medical community of different medical disciplines are unacceptable. Sometime, very long abbreviated words are totally unknown to the multidisciplinary world. Some examples of acronyms used in medical English are listed below:

AACG: Acute-angle closure glaucoma, AAH: Acute alcoholic hepatitis, AIDS: Acquired immune deficiency syndrome, TIA: transient ischemic attacks, NSAID Nonsteroidal anti-inflammatory drugs

On the contrary, the use of acronyms in English literature is minimal. In literary English acronyms are mnemonic devices that enable readers to remember information. These acronyms make excellent tools to enhance students' retention ability.

CLT Communicative Language Teaching, ALLT: Applied Linguistics Language Teaching, ELT: English Language Teaching and APPLS: Applied Language Studies

Use of figurative language in medical and literary texts

Illusion, allusion and figurative language are literary devices which the literary writers use to lay special effect on the readers. Figurative language contains metaphors, similes, personification, hyperbole, symbolism, alliteration, idioms, irony, onomatopoeia, oxymoron, puns, synecdoche, Juxtaposition, etc. These literary devices are considered embellished style in literary writing or common language but hardly find mention in medical writing. The contrastive analysis of both the genres reveals that the plethora of illusion, allusion, metaphors and figurative expressions are found extensively in literary texts

The literary writer uses figurative language to entertain his readers and to develop emotions within a contextual framework. For example, an "allusion" is a literary device which is used to reference another book, Biblical passage, person, etc. A famous poem "The Waste Land" written by T. S. Eliot is filled to the brim with literary allusions. He mentions April being "the cruelest month" sharply

contrasts with Geoffrey Chaucer's *The Canterbury Tales*, which depicts April as a cheerful, lively month. Another example "Chocolate cake is my Achilles heel." The allusion here is to "Achilles' heel," or the Greek myth about the hero Achilles and how his heel was his one weakness.

A simile also compares two things. However, similes use the words "like" or "as." Examples of similes can be seen in classic literature, such as in the poem "O my Love is like a red, red rose" by Robert Burns:

Personification is used to give human characteristics to inanimate objects. Such as William Blake's poem: "Ah, William, we're weary of weather, "said the sunflowers, shining with dew"

Alliteration is a literary device which has a number of similar consonant sounds occurring close together in a series. From Samuel Taylor Coleridge's "The Rime of the Ancient Mariner.

The fair breeze blew; the white foam flew, the furrow followed free;

We were the first that ever burst into that silent sea."

Medical scientists are not obsessed at all with literary devices which are the essence of literary texts. They use no emotive language in order to equip readers with aesthetic pleasure beyond the experimental and proven empirical findings. Unlike literary language, Medical scientists lay more focus on their research findings which are validated by realistic empirical data and put into exact magnitude with no emotive ornamentation.

On the contrary, literary writers don't need to validate their imaginative ideas with lab testing because their aim is not to give realistic findings as such but to appeal to readers' aesthetic senses. Hence, Milton doesn't intend at all to disseminate exact divine happening about "man's first disobedience" in his "Paradise Lost" but he has artistically recreated the whole happening with high imagination and very tactfully recreated 'Satan's rhetorical speeches. Similarly, people don't study Keats' poem "Ode to a Nightingale" to seek any realistic knowledge about the bird but to rejoice the symbolic implication associated with the bird, which needs to be perceived from imaginative viewpoint rather than realistic. The bird metaphorically refers to "trial and tribulation of human life" which the poet wants to overcome with the "viewless wings of poesy" The poem explains how the poet imaginatively considers the bird as a significant means to fly far beyond human sufferings.

"Away! Away! For I will fly to thee

Not charioted by Bacchus and his pards,

But on the viewless wings of poesy." (John Keats)

Literary writers use a lot of ornaments and figurative language such as allegory, apologue, simile, metaphors, rhyme, alliteration, so on and so forth. Medical writers don't use the aforesaid literary devices to make scientific texts embellished but they substantiate their findings with scientific experiments. In the above stanza Keats longs to withdraw himself from the harsh realities of life on the "viewless wings of poesy". To fly on viewless wings of poesy is the poet's ultimate resort for relief which will bring him beyond the worldly fever and fret. Such language is admired only in poetic language rather than medical language. On the contrary, medical findings and discoveries are based on valid experiments rather than imagination

Common words acquire distinct meanings in medical texts

It is also noteworthy that medical scientists sometimes take ordinary words and gave them special meanings on varied occasions. Hence, a common word after acquiring pejorative connotation means different in medical disciplines. Innumerable examples of this type are given below;

Abductor means one who takes someone away in common language but in medical English, it refers to the muscle which moves a limb outward from the body

Benign means amiable in common term but in medical discourse, it refers to a condition, tumor, or growth that is not cancerous and does not invade nearby tissue.

Infiltration in common language means creeping in but in medical English it means an abnormal entry of a substance into cell, tissue or organ.

“Para” in common language, means at the side of but in medical English it means disorder, for example

the word “Paraphrenia” which means mental disorder characterized by an organized system of paranoid delusions.

Specialized plural formation in medical texts

The specialized plural formation of medical words is really worth noting. It marks a departure from the kind of plural formation usually seen in literary English. Medical words are borrowed from other languages especially from Latin and Greek, so they retain their foreign plural forms. For example:

1. Nouns ending in -us, form their plurals by changing the ending to -i: E.g. *acinus- acini, alveolus-alveoli, fungus-fungi*
2. Nouns ending in -a, form their plurals by changing the ending (-a) to ae. E.g. *avorta -avortae, aphtha-aphthae, bursa-bursae*
3. Nouns ending in -um form their plurals by changing the ending (um) to -a. E.g. *antiserum - antisera, labium -labia, ovum- ova*
4. Nouns ending in -ma form their plurals by changing the ending in -ta. E.g. *enema- enemata, scotoma-scotomata,*
5. Such plural formation hardly occurs in literary language. Plurals are formed in literary English by adding *s, es, ves, ies*, (car-cars, box-boxes, leaf-leaves, city-cities, etc.)

Use of foregrounding in medical texts

Foregrounding which means deviation from linguistic norms is the symbol of high literariness in literary texts but it is unacceptable in medical texts. The word ‘deviation’ which is also called ‘foregrounding’ by Leech (1965) is commonly used in poetic language but it is considered a gross negligence in medical texts. Grammatical and syntactic deviation has extraordinary worth in literature because it is the main source of aesthetic beauty and intense pleasure for the readers. On the contrary, any linguistic deviation in medical texts might create nothing but confusion and ambiguity in understanding the clear meaning of medical texts. Therefore, medical scientists fully adhere to all linguistic norms because any grammatical or syntactic inaccuracy will be catastrophic for the patients. However, foregrounding is the symbol of high literariness in literary texts.

The literary writers manifest foregrounding in the following lines through unusual syntactic order:

1. *"Slept Rip Winkle twenty years" (Longfellow).*
2. *The door is strange to be unlocked. (Dylan Thomas)*
3. *"When will your round me going end?" (Hopkins)*

In the normal expression these lines would probably read:

1. *Rip Van Winkle slept for twenty years.*
2. *It is strange that the door is unlocked.*
3. *When will you end your going round me?*

The linguistic norms in the aforesaid literary lines are grossly violated. Lack of correspondence between subject and predicate is clearly seen. The literary artists have taken literary freedom to transcend the established rules of grammar and created their own norms which are not considered non-language within their own contexts. On the contrary, the medical scientists can't afford such liberty to distort grammatical rules because scientific findings are more significant than artistic and metaphorical outpourings. As a matter of fact, medical scientists' sole aim is to elucidate their verifiable findings as they are found without nurturing any aesthetic pleasure. Hunting rhymes appeal more to the literary artists rather than to medical scientists.

CONCLUSION

To make a contrastive and in-depth analysis of medical and literary texts is a rare venture. At the outset it looked very difficult to bring two contraries together and explore different linguistic features in them. However, their syntactic and grammatical features were unearthed after critical evaluation. A comparative and meticulous study of the aforesaid genres reveals that medical texts supersede literary English in the use of passivation, nominalization, lexical density and foregrounding. It was also found that medical scientists are adhered to a clearly defined IMRAD pattern which is a recurrent phenomenon in medical research papers. They design the conceptual framework of their research papers and organize their research findings in a coherent manner but to literary writers; it all looks nothing but an undesirable fashioned and just an embryonic step.

Medical scientists purge themselves from their individual whims and fancies whereas; literary writers are immersed in constant display of human impulse. 'What oft was thought but never so well expressed' is the essence of literary writing. A literary writer achieves a consummate success when he is at his best while delineating human emotion. The predominance use of passive voice in the Method Section of medical research papers reveals the fact that medical scientists choose passive to make their findings objective and universally acceptable. Literary writers frequently resort to metaphorical language which itself becomes the object of study. Illusion, allusion, alliteration, rhythm and the cadence are all essential features of literary texts used extensively by literary artists to lay special effect on readers' mind but they are all irrelevant in medical language. Medical scientists lay more focus on their experimental validity and verifiable data whereas, literary artists rely more on the spontaneity of their powerful feelings. Their ideas emanate from their sudden intuition which requires no experimental validity at all. Medical scientists discover the truth which has universal appeal because, they follow systematic and step by step procedures to validate their empirical observation, whereas artists' discovery of truth is based on their sheer imagination which needs no empirical validity.

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