



Systematic relations between scientific language and scientific terminology, applied models from the book The Law of Medicine by Ibn Sina

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Abstract ;

Contemporary terminological studies are concerned with linking the results of linguistic theories to terminological research, in order to make the work more effective and monitor the largest number of results, in a systematic manner based on scientific and practical rules. Contemporary systematic theory is a form of linguistic editing of various materials (literary, linguistic, artistic,...). A comprehensive theory of precise logical and practical foundations of analysis, which can be used actively and productively in the field of terminology. This is what we will reveal through a practical reading of a sample of the book (The Law in Medicine) by Ibn Sina under the title (The Dam and its Treatments), by researching the systematicity of the relationships between scientific terminology and scientific language, and the extent to which the principles of systematic theory are embodied in this sample.

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1. Introduction:

Contemporary terminological studies are concerned with linking the links between the term as a single terminological material and the scientific language resulting from the occurrence of these materials in their linguistic and scientific contexts. These contexts are nothing more than servant indicators for reading scientific language and serving terminology for correct reading.

The consistency of the relationships between parts of the scientific text, including terminological and scientific phenomena, is one of the most important phenomena. This is due to the organization of the principles of linguistics' reading of scientific structures, and this is what he deliberately embodied in part of Ibn Sina's book *The Canon of Medicine*.

We will reveal all these elements by making the following assumption: adopting the principle of systematicity in terminology and on a heritage blog

- Can something new be presented in terminological study?
- How can it be analyzed through questions: What is meant by the systematic relationship?
- What is the relationship of scientific term to scientific language?
- Do we find regularity in the relationships between scientific language and terminology in the blog?

To answer these problems, we followed the following two approaches: the textual terminology approach, and the descriptive approach in linguistic sciences.

2. the theoretical side:

2.1 Systematicism - concept and principles:

In this element, we pay attention to systematicity as a general analytical

method, the elements that fall under it as principles of procedural work in the linguistic sciences, and the possibility of activating it in terminology in particular.

1.1.2 Defining the format and the format, and this is done by standing on its concept:

a. language: There are several definitions and explanations of the word "format" in Arabic dictionaries, and we present among the most important explanations the following:

Where Ibn Manzoor states in the tongue, "The arrangement of everything was on a method and system." (Perspective, Lisan Al Arab, Article (Format), 2003)

- And the line of men is a row
- The planets are aligned.
- And the letters of the pattern are letters of kindness.

From this we learn that the system carries the meaning of regularity and order. As for the Greek origins of the word (...), it means linking the elements in order to arrange (Raed Al-Mulla, 2007, pg. 41).

From this we see a great agreement between the meaning of this word in our Arabic dictionaries and ancient Western dictionaries, as the meanings revolve around "ordinal regularity."

B. Terminologically: DJamil Hamdawi defined order from a philosophical point of view by saying: (It is the system that consists of intellectually, mentally, and theoretically consistent elements, and the consistency between them may be either connection or separation.) (Hamdawi, 2003, p. 13).

Since Hamdawi here discusses the system from a philosophical point of view, it is natural that the material of the system is ideas. This is on the one hand, and on the other hand, consistency for ideas does not mean their compatibility, as difference and

divergence may also be a systematic relationship.

From the perspective of linguistic or critical work and analyzes of discourses, Al-Hamdawi explained the same concept by saying: (A systematic approach to studying cultural, literary and linguistic phenomena in order to discover all implicit, hidden and obvious patterns within the framework of...the center and the periphery by monitoring various internal or external relationships) (Hamdawi, 2003, p. 69)

We note from this statement:

- Considering systematicity as an analysis method and mechanism.
- Going beyond the concept of structuralism by examining the internal and external structures.
- Its foundation is based on an important principle, which is dynamism, that is, the process and movement that stems from functions, roles, and relationships.

2.2 The emergence of systemic theory:

Several elements united in order to form the intellectual and scientific frameworks that helped the emergence of the systemic theory, and we can summarize them as follows:

- Postmodern studies, which led to the need to look at phenomena in a broader view, as it transcended the concept of structuralism and its principles that confined matter to its internal structure, and neglected dynamism when it contented itself with description only.
- The philosophical and systemic epistemological thought, which leads to the existence of an adjective... in intellectual materials, and the intellectual is nothing but the product of the correct and logical relations between the parts (Al-Daher, 2014, p. 02) Those relationships that are not concerned with knowledge whatever it is, but rather for what it is for.

Thus, we conclude that the systemic theory was the product of the interaction of

intellectual and philosophical elements on scientific requirements that called for going beyond the limits of epidemiological research to the principles of dynamism and function.

2.3 Systematic principles:

Systematism is based on a set of principles that were manifestations of its formation on the one hand and a mechanism of action and analysis on the other hand, the most important of which is: **A. Objectivity** And with the intent of this process is the subject under discussion, and this is without diverging into another subject other than a servant on the one hand, and without introducing the researcher into the midst of the research..

B. Rationing It is intended to link the language and scientific terminology with linguistic laws that bear a scientific and utilitarian character, with the aim of scientific foundation.

C. Relational Every linguistic or terminological material contained in a text or blog carries, in its connection with other similar or contrary elements, a kind that does not establish relationality, which is revealed only by analyzing the content of the format.

2.3.1 The first stage:

Presentation of the content of the sample (the subject of the study). The sample represents the twenty-fourth chapter And From the first book, the chapter title is: Payment Treatments Chapter Twenty Four: On Payment Processors (The treatmentment of the embolus) (Thick Humorous), either from viscous mixtures, or from many mixtures. And the many mixtures, if there is no other reason with them, it is enough to harm them to take them out with the venesection and diarrhea. He needs the analyzer to thin it, so it is easy to push it, and the sticky one needs the clip to show between him and what has stuck to him, so he clears him of it, and to cut his parts little by little, if the sticky is blocked

by his adhesion and its parts stick together, and he must be careful in analyzing the thick for two contradictory reasons: What was in the major organs, and if contraction and softening were combined in the openings, it would be more effective, since the contraction produces the most severe gentleness from the organ? (Ibn Sina Abu Ali, dt., page 303)

It contains the following:

- Definitions of payment and its cases
- Payment types and their effects
- Payment processors and their images

He also provided a detailed explanation of a number of terms, for which we provide maximum statistics:

Blockage, thick humors, translation humours, excessive humors, excretion, causes, intention, diarrhea, analyzers, data, impulsion, analysis, weak analysis, strong analysis, softening/softening, blockage of veins, blockage of arteries, major organs, constriction.

To further verify the contexts of its occurrence and use, we present the original text of the piece.

2.3.2 The second stage:

Characteristics of practical language and scientific terminology in the sample:

The piece in our hands is characterized by brevity in terms of its structure, and as such it carries a number of characteristics in view of its scientific content in terms of it being the subject of presentation and subtraction, which is what we will present and analyze in this element.:

A. . Accuracy of scientific language The piece embodied a set of indicators, and the use of rigorous scientific language. We mention that:

-Interpretation: (The most difficult to block is to block the veins, and the most difficult to block is the arteries)(Ibn Sina Abu Ali, dt., page 303)

-Detail: This includes what he mentioned in explaining the causes of obstruction (either from thick mucus, or from sticky mucus). Then it is detailed with the phrase (then if) each time.

B. . Objectivity: He addressed this issue without bias towards an idea or expressing an unfounded opinion, and this is evident in the following matters:

- Absence of the speaker's conscience.
- Absence of doubtful expressions.
- Use of the passive voice (need, add, issue). This characteristic was connected to the characteristic of precision, as passive verbs were indicative of the control and precise definition of thoughts.

C. Universality: The more elements related to the topic are available, the more comprehensiveness is achieved (Sina A., Law in Medicine). This is what we will try to reveal in this item:

- Introductory introduction, and the definition of payment.
- Classification phrases types of payments.
- List the reasons.
- wizards.

The expressions indicating that each element takes its place in the piece are many, but we postpone talking about them to the next element in the place of two talks about the characteristics of scientific terms and their relationships, then the interpretation of these relationships, and what we conclude in general is that the piece fulfilled the elements that guarantee its comprehensiveness, combined and arranged in this way.:

2.3.3 The third stage: Systematicity of the relationships between scientific terminology and scientific language in the sample:

This stage is considered one of the most important stages, in which we will try to reveal two aspects,

the first: It is the general characteristics of systematicity.

the second: These characteristics are embodied in the relationship between scientific terms and scientific language from two angles: **You mentioned that there are two angles, so where is the second angle?**

❖ The angle of the coordinating principles and the extent of their verification:

These are the overall characteristics and systemic principles that are available in:

A-thematic We mentioned previously this element in the theoretical aspect, and this shows us that systematization necessarily depends on taking care of the multiplicity of subjects, and falls within a topic or topic. A general feature in a blog or sample. Ibn Sina succeeded in exploiting his encyclopedic knowledge to achieve this principle. Perhaps this is what we sense to a great extent in this piece, as a number of topics are included within it... namely:

- Organs and body components: limbs, veins and arteries.
- Types: sticky, fluffy, dense.
- Medicines, treatments, intended magazines and products.
- Function: The function in this piece is connected to two areas: the function of expression, and the most important of these functions is review and linking, such as his saying: (And I have learned the difference between thick and sticky) (Al-Raqib, 2010, p. 312).

This reminder phrase emphasizes: the existence of prior knowledge, and the necessity of linking it to subsequent knowledge.

The function of this term and this field is very clear, as shown in the table:

The compound term... for implicitness, as Ibn Sina used compound terms that

Table 1: Functions of sample terms

the explanation	Examples	Jobs
By this we mean that these terms are an abbreviation of previous basic knowledge It is necessary to be aware of it before knowing about blockage, as it is a state of confusion in the veins and organs	Mixing (thick, thick, sticky) arteries, veins, organs	Founding
All of these terms are explanatory and interpretive materials for the relationships and interactions between materials, disease and treatment	Adhesion Transfiguration Analysis	Analytical
All these terms, in addition to denoting the types of analysis that the humors are subjected to during treatment, also represent scientific judgments on the nature of therapeutic analyzes. The payment.	Inseparability of parts Softening Weak analysis Extreme analysis Powerful analysis	wisdom

Source: Diligence from the author of the research

At the end of this element, we should point out that these three jobs are not the only ones, but they are the most important by virtue of being basic jobs in the subject of our work.

4.2Function:

The systematic relationships between the scientific term and the scientific language are based primarily on function, and this stage represents a summary of what we can reach in reading the systematicity of the functional relationships in this sample, and therefore the process of extrapolating these relationships will be as follows::

a. Implicit relationship: The scientific term in the scientific language represents an implicit element, which is a partial and inclusive relationship, and it is a fixed relationship in every scientific book in which the scientific language is judged through the parts, that is, the term. This relationship emerged in this sample, and that is what we summarize in these notes:

indicate type (such as: strong humours, weak humours, viscous humours), all of which were connected to the language of detail and classification through tools (either, or, if, if). (Ibn Sina Abu Ali, dt., page 303). They are all tools that restrict choice or assumption and the multiplicity of cases.

❖ The actual form and its connection to the terminology: Ibn Sina used the nominal term and included it in a linguistic context dominated by the actual, due to the fact that the materials in question go through states and transformations, such as(It facilitates its integration): Linking the process of integration to the process of facilitating the viscous sealing by its adhesion, as the term sealing was used in the actual form, not the quality, the process, and its occurrence.

B. Specialization relationship: In this relationship, there is a clear exchange of functions, as the language of the term is specified, through the abundance of the scientific term in one phrase, and until the language takes on a scientific form, such as: (And if there is no other reason for it, it

is enough... to take it out intentionally and diarrhea).

c. Specialization in language terminology: This is evident in his saying: (If it is sticky, especially thin, you need to cut it.) (Ibn Sina Abu Ali, dt., page 303) Where he used the expression "specification" (particularly), which made the term viscous humors more specialized, to include a more specific type, which is the term delicate humors.

Through this relationship, it included the rule that says: A term is only gelatinous in its linguistic context, and that the linguistic context takes its scientificity from the structures resulting from the combination of terms. (Ibn Sina Abu Ali, dt., page 303).

This rule and the previous two notes show the systematic relationship between the linguistic building units in scientific work and the tools of editing and linguistic presentation, moving it out of the ordinary scope into specificity and specialization.

Dr..Analysis relationship: The terminology played the role of explanation and analysis in this passage as well as its usual role, including several examples of it:

- Definition (thick and viscous mixtures) The difference between them.... representational in his saying: (phenomena between application) (Ibn Sina Abu Ali, dt., page 303).

3. Applied aspect:

3.1 An applied study in the scientific characteristics of language and terminology (Ibn Sina, dt., page 355):

3.1.1 Definition of the sample: This sample represents a set of evidence of skin conditions and the changes that may occur, mentioning the causes and effects, and then applying the treatments.

As for the location of the sample, it is the third chapter in the second and moral article (skin conditions in terms of color). Its text is: (Ibn Sina, dt., page 355)

(Chapter: On things that improve color through differentiation, browning, and gentle polishing

ascienceaNo, whenever the blood moves (Blood) and the spirit to the skin, for it coats it with luster, purity, and redness, and what is meant by it is that which makes the skin (skin) thinner, and what is dead on its face is scraped off with a gentle scraping., Especially if there is dye in it, and in addition to all this he needs to be enlightened from heat, cold, wind, and things that move blood to the skin.(skin), he does this in four ways, of which blood is generated, especially the thin one, because good blood is when it is born and a lot and spreads with wetness in every place, and from it is the purification of the blood, and from it it spreads the blood (Blood) and spreads it by moving it outwards and lightens its streams, and from it is by attracting it forcibly from the inside out. And the things that improve the color in the first way, such as eating chickpeas, eggs, nimmerst, meat water, and basil drink, and eating figs, because it generates thin blood flowing to the skin, and because of that, KML, And whoever corrects his color among the convalescents, and I want him to return to his old color, benefit from dry figs and sounding, for they increase blood (Blood) gentle and instinctive heat.

What is tested for this is to drink a soft drink for days on end on an empty stomach, and things that do this by purifying the blood, such as small trefil and visible halij if used constantly. And the Kayli hellig is stronger than the Atrifil. and the things that do it by spreading the blood (Blood) and spread it, such as asafoetida, pepper, Saad and cloves. If it falls into food, and like saffron, saffron also dyes the blood, especially in mechting, and drinking up to a dirham, and like hyssop, the weight of two dirhams is taken from saffron, and from saffron half a dirham, and it is drunk with sugar, and aloj is also a color

enhancer, and the barbaric game is made from One to two dirhams, if you drink in the market full of severe alcohol for three, it will cause an obscene combustion, and it is said that such as radishes, leeks, onions, and cabbage in particular, and addiction to eating them, and garlic as well.

Actions and movements include: joy, anger, argumentation, moderate exercise, and wrestling, as well as pleasure, mirth, and reading about soothing actions and deeds, such as good listening, sitting with clean and tidy people, and looking at the types of matches such as betting on races, hassles, and so on. The things that do this from the outside by attracting and clearing as well are the smears and washes made from peeled bean flour, barley flour, karsana flour, wheat flour, starch, chickpea flour in particular, lentil flour, rice flour, fish glue, Ibrasa, ears, figs, kinder, mastic and its fat, egg shells, shell meat, fried meat, safflower, ivory shavings, and rotten bones. The mahlab and the strength of the perfume are also strong in this, and sweet and bitter almonds, and the seeds of cucumbers and watermelons, and pickled and squash, and the flour of radish seeds and watercress seeds, and the face is often cleaned and critics paint with starch and lots of milk every day, and the juice of the nightshade and the sparrow's fronds, and milk as it is milked, and cooking the hoofs of the goats have escaped in it. shellfish cooking,

This contains the terms trying to broadcastaHe defeated her in the same wayaT:

Skin, blood, soul, redness, clearing, abrasion, dye, arousal, heat, cold, wind generation, slave, purification, blood, good, stirring, lightening, acid, eggs, meat, drink, jam, flour, smears, washes, Winter, paint, arbitrariness, controversy, sports... From the sample classification perspective, we note:

- The presence of terms related to the organs.
- Terms related to medicines.
- Terms related to food peace.
- Terms related to climate conditions.

3.1.2 Choosing the elements of the textual curriculum and the sample:

We attempt below to reveal the manifestations of the previously mentioned components in the text selected for the study:

أ. Levels of linguistic description: There are several linguistic structures used in this text to serve terminology, among which we mention:

- The additional structure (grammatically) that generates a compound term is the compound term (Sabri, 2007, p. 211) In short, it is a binary terminological unit or more, and we mention (blood purification) and (blood generation).
- Derivative structure: which represents a picture of the descent of the term in the infinitive form from a verbal root (Derkzelli, 2006, p. 68) He denounced that (yajlu jalaa). This phenomenon, nor its predecessor, is not evidence of the relationship of derived and composite materiality to the content of the sample in general, as the composition and generation of materials comes with the overlay and generation of concepts and ideas.

ب. Calling the context element: In this element, we focus on the importance of context in revealing the impact of context in analyzing and understanding the structure of the term in terms of:

- Explaining the context to him: Such as explaining the context and function (jalaa), and the term independent had a general meaning until he explained it in his saying (so the skin becomes thinner and what died on his face is scraped off of it).
- Representation: such as explaining the phenomena of spreading and spreading

blood with a substance that works on that (and things that do that by spreading blood and spreading it, such as asafoetida).

ج. The relationship of the term to others: Relationships can be classified on two levels:

- The external level: This is the previously mentioned types of terms that serve some of them.
- The terminology of the drug serves the terminology of the disease.
- And the terminology of climate experiments with the terminology of changes and so on.
- The internal level: This is shown by the tools, verbs, and structures that indicate this.
- Such as the phrase (and in all of this it is necessary to be protected from heat and cold), so the term concealment is not intended for that, but rather in order to mention the factors that do not. It must be avoided in this regard, and the article or preposition (about) has contributed to this by indicating transgression and transgression. (Ibn Sina, dt., page 355).

3.1.3 Analysis of linguistic and cognitive functions in the light of the textual approach:

At this stage of analysis, the element of the principles that the textual approach focused on achieving is linked to the functions that they can achieve in the structure of the text under study, from the point of view of it being a linguistic structure within which the scientific term is mentioned, on the one hand, and from the point of view that the term is concepts included within a cognitive structure with an ontological framework. On the other hand, by:

A. Linguistic structure:

Defining text building links:

The text in our hands represents a cognitive system with cohesive features,

and the reason is the cohesion of linguistic elements, which is what will be revealed:

❖ Identifying linguistic phenomena:

Among these phenomena we find:

- Definition: indefinite article with alif and lam (jalaa) in addition to (movement of blood).
- Number and duration - one dirham and two dirhams, used in weight.
- Repetition: such as repeating the term (moving) and the verb to move and move.

B. Cognitive structure:

The cognitive structures in this text included a form of informational arrangement, which we mention as follows:

- The arrangement of concepts, where it deals with the general condition, which is the acceptable condition of the skin, then the changes that affect it, then the treatments based on that.
- Multiplicity of concepts or their individuality. The subject of knowledge is one, but individual topics are subsumed under it.
- The relationship between concepts:
- The relationship of the general to the specific in illness and then conditions.
- Cause-and-effect relationship with disease and medication.
- The relationship of easier to more difficult according to the availability of drug materials (Gansold, DT, p. 124).

4. Conclusion:

Referring to the aforementioned elements and examining their most important points, we can conclude a set of points that we present in the following: It is systematic to work with the principle of systematization in terminology, because it is a linguistic science on the one hand, and it deals with relationships on the other hand. Terminology is concerned with structure in order to develop ways The study of blogs The textual approach in

terminology requires activating the concepts of structure and format. Availability of systemic elements in the scientific language of the sample under study. The sample is characterized by terminological richness, accuracy, and the possibility of revealing relationships between language and terminology. Transforming scientific characteristics into effective functions in the language and terminology of the sample.

On this basis, we can refer to a set of pillars that must be taken care of. The necessity of activating the textual approach in the terminological study. The necessity of analyzing blogs terminologically according to the principles and characteristics of the scientific language. To test the value of the terminological study, we must reveal its functions and its relationship to the principles of scientific language.

List of references:

1. Ibn Manzur. (2003). Lisan al-Arab, article (format). Beirut: Dar Sader.
2. Abu Ali Al-Hussein Ibn Sina. (dt). Law in Medicine, Part 3. Beirut: Dar Al-Kutub Al-Ilmiyya Publications.
3. Al-Hussein Ibn Sina Abu Ali. (dt). Law in Medicine, Part 1. (Investigated by: Muhammad Amin Al-Dawi) Beirut: Dar Al-Kutub Al-Ilmiyya Publications.
4. Brottendahl, Jansold. (dt). Linguistic research and dimensions of philosophy for science, part 2., Yemen.
5. DJamil Hamdawi. (2003). Multiple consistency theory. Aloka network.
6. Hassan, Sabry. (2007). Grammatical research in the service of contemporary linguistics. Iraq: Al-Manar Research Center.
7. Suleiman Ahmed Al-Daher. (2014). The concept of system in philosophy (system: the problem and characteristics). Damascus University Journal, Volume 30 (Issue 3-4).
8. Abdul Rahman Darkazli. (2006). Major linguistic phenomena in the Arabic language. Publishers House for printing and publishing.
9. Masloh Raed Al-Mulla. (2007). Linguistic differences. Damascus: Dar Hamza.
10. Norse Sgt. (2010). Scientific research rules. Syria: Office of Research Works.