

# THE FOOD DISCOURSE AS SCIENCE POPULARIZATION DISCOURSE

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**Résumé :** *D'une importance capitale dans la hiérarchie discursive et avec une applicabilité dans la connaissance humaine universelle, le discours alimentaire occupe une place substantielle dans la vie de chaque individu. Pour cette raison, la démocratisation des savoirs alimentaires par le texte-discours de popularisation devient un acte nécessaire et impératif. Dans ce contexte, cet article opère avec la variante didactique, de popularisation du discours alimentaire, visant à démontrer, du point de vue de la linguistique, que l'accès au savoir des non-spécialistes est facilité par des procédures linguistiques spécifiques. Ainsi, en analysant seulement quelques phénomènes, tels que la définition, la synonymie, l'exemplification, l'expression plastique, notre recherche montre qu'un acte social est parfait dans le domaine de la linguistique et que le discours de la popularisation des connaissances scientifiques est une ressource précieuse avec un réel effet dans la vie des individus.*

**Mots-clés :** *discours alimentaire, discours de popularisation scientifique, définition, synonymie, expression plastique.*

## Introduction

From time immemorial, humanity has been interested in its nourishment, and information on this subject has grown exponentially in recent decades. As much as he wanted not to be driven by physiological needs, *homo sapiens* is under the power of the verb *to eat*. In this context in which the *living-food* axis seems to be one of the basic relations of human existence, access to knowledge of this subject matter is fundamental. In this sense, our paper aims to analyze the food discourse from the perspective of scientific popularization, in order to identify lexical, semantic, rhetorical processes by which specialized information is transformed into information for everyone to understand and acknowledge.

## Theoretical Framework

The discourse of scientific popularisation is a simplification of science through an accessible vocabulary, addressed to a non-specialist audience, which is why it is an

alternative communication of science for a mosaic, non-specialist audience (Perrault, 2013). Therefore, scientific popularisation is found in texts (oral or written) that focus on a scientific topic that they bring to the public's attention through a "wide dissemination" (Antonescu, 2008: 14), and its purpose is determined by the spread in "all the layers of a population" (Longinescu, 1906: 3). The concrete, sensory, cognitive data collected from the common knowledge is insufficient and does not ensure our adaptation to the society, therefore the consultation of science in the "language of the people" facilitates the creation of a general culture. Thus, the importance of scientific popularisation lies in the power of information, and its quality is determined by the transmission of rigorous data, "methodical lessons" of a scientific nature (Belcot, 1930: 16). This discursive mechanism will arise through the application of methods of explanation, lexico-semantic, textual, rhetorical, iconic (definition, explanation, paraphrase, synonymy, hyponymy, polysemy, exemplification, generalization, humor, metaphor, personification, comparison, etc.). In the present study we will approach only a few explanatory procedures of lexico-semantic and rhetorical nature, such as definition, synonymy, exemplification and artistic devices, through which we will demonstrate how segments of food discourse cross the border of specialization, reaching non-specialist audiences.

### Corpus

The corpus of selected texts includes two periodical publications aimed at popularizing knowledge, the series *Caleidoscop* (*Kaleidoscope*) (from which we selected the following publications: *Lapte și multiplele lui întrebuințări* (*Milk and its multiple uses*) - 1969; *Băuturi din legume* (*Vegetable drinks*) - 1978; *Aluaturi, foietaje, fursecuri. Patiserie de casă* (*Dough, puff pastry, cookies. Homemade pastries*) - 1979; *Cu sau fără sare?* (*With or without salt?*) -1982; *Caleidoscopul sănătății* (*The kaleidoscope of health*) - 1983; *Omul și sănătatea în societatea modernă* (*The man and his health in modern society* - 1985) whose articles about the ideology of the publication spoke of "the presentation of practical solutions and the answer to the most diverse problems we encounter daily in our concerns for improving and beautifying life" and the magazine *Știință și tehnică* (*Science and Technology*), another publication which aimed at enhancing science popularization.

### Explanatory procedures in the popularisation of the food discourse

#### 1. Definition

The definition is "an interdisciplinary linguistic and pedagogical activity, of a wide social interest, responding to the need for understanding and communicating", with a development of a "semantic equivalence" type (Bidu-Vrăncianu, 2000: 15). The definition addresses the descriptive presentation of the content of a notion, which ensures its individualization; it is a varied process, used in most sciences, only in various forms, in accordance with the intended communication situation.

The definition is often cultivated in texts of scientific popularization, as an explanatory phenomenon for scientific notions, corroborating, in this process of explanation, other procedures (rhetorical, pragmatic, discursive).

In the examples submitted for analysis we will retrace the manner in which the definition acts to clarify concepts, both formally and in depth. The designative process can be constructed by positioning the specialized term at its beginning or at end, with the mention that the initial placement is preferred, announcing the use of an inductive approach, while the placement of the term at the end, as a summary of the provided explanation, is less used, as we can see in the examples below:

- “cellulose and pectin represent the skeleton of vegetable cells, they are not assimilated in the human body, but have the role of serving as a regulator of intestinal movement, thus combating constipation” (*Vegetable Drinks*, 1978: 12)
- “phytoncides are substances characteristic of vegetables such as horseradish, onions, garlic, etc., and have a bactericidal action (kills microbes)” (*Vegetable and fruit drinks*, 1978: 14)
- “pastry, all culinary products obtained from dough worked in different ways” (*Dough, puff pastry, cookies. Homemade pastry*, 1979: 9)
  - “the method of pasteurization, heating milk in closed boilers to a temperature of 72-75 degrees, for 30 minutes, cooling it immediately to 0° C” (*Dough, puff pastry, cookies. Homemade pastry*, 1972: 63)
  - “salt is a chemical” (*With or without salt?*, 1982: 5)
  - “plastic nutrition factors are those that contribute to the growth, maintenance and repair of tissues. Among other things, they have the ability to be carriers of minerals. Proteins fall into this category” (*With or without salt?*, 1982: 11)

In the process of defining concept, a barrier is created between the specialized term and its explanation, marked at the textual level by copulative verbs: *to be*, *to represent*, *to mean* or by using the appositive function, highlighted graphically by the use of commas.

In some cases, a chain definition is used to create a path to enter a specialized context. Thus, the definition can also appear as a result of the whole presented context, in which the receiver is invited to make the connection between ideas with the help of marks of coherence and cohesion.

In each of the examples presented above we notice that the definition offered for the specialized term is organized around the common lexemes, known and understood by the non-specialist receiver, thus showing that this procedure fulfills its purpose of clarification and explanation with which it was invested.

## 2. Synonymy

Synonymous substitutions, a constant of the language in scientific popularisation, involve an act of “linguistic equivalence” in the process of “designation” (Coșeriu, 2000: 129) which progresses both in simple formations and in more developed ones (Munteanu, 2013: 94). The synonymy will be developed between a scientific term/scientific phrase and a word/words/phrases from the common lexicon.

The categories of semantic equivalences developed in the studied texts will be marked at the graphic level by means of commas, parentheses, quotation marks, dashes or the disjunctive coordinating conjunction *or*:

- “sucrose, white sugar” (*Science and Technology*, 1989, no. 2, p. 18)
- “root chervil, (*Chaerophyllum bulbosum*)” (*Science and Technology*, 1989, no. 2, p. 18)
- “carbohydrates (sugars)” (*Vegetable Drinks*, 1978: 9)
- “puff pastry, layered dough, as we call it French dough” (*Dough, puff pastry, cookies. Homemade pastry*, 1979: 9)
  - “fats (lipids)” (*Science and Technology*, 1991, no. 6-7, p. 22)
  - “sand cabbage (*Crambe maritima*)” (*Science and Technology*, 1989, no. 2, p. 19)
  - “sodium chloride or salt” (*With or without salt?*, 1982: 12)

Moreover, analyzing the broad contexts in which these situations can be found, we observed that after clarifying the scientific lexemes (see *supra*) the specialised term, and not

its equivalent in the common language, will be mentioned again whenever necessary. Thus, we observe a predilection for the non-specialist public to be accustomed to the language of science, which will determine the migration, over time, of the terminology to the common lexicon. At the same time, the use of the lexical recurrence shows a fear of the vulgariser not to include the extension of the notion in the specialized language in the simple equivalence he strives to offer. As a matter of fact, we can identify in the above examples both total synonyms, where there is an overlap between terms, and partial synonyms.

### 3. Exemplification

There are many situations in which the simple explanation of the terms seems insufficient in the language of science popularisation, which is why popularisers resort to duplicating information through the power of example. In many cases, although there is no specific textual marker (*for example*), the presence of the example in order to fix the purely theoretical framework is evident. This will be different from the phenomenon of analogy by keeping the field of reference in which the extension of theoretical landmarks is achieved.

Analyzing the popularisation text from an analytical perspective, we discover the phenomenon of immediate exemplification achieved by a word or by a small series of words. The following examples appear after the ideational exposition, as a duplication of them, through an accessible lexicon:

- “through cooking technologies such as boiling, frying, baking, vegetables largely lose their dowry of valuable substances and especially invaluable vitamins” (*Vegetable Drinks*, 1978: 5)
- “in vegetables, proteins are found in: beans, soybeans, peas etc.” (*Vegetable Drinks*, 1978: 11)
- “elements necessary for the body: lipids, proteins and carbohydrates” (*Milk and its multiple uses*, 1969: 10)
- “foods of animal origin (eggs, milk, cheese, meat) and those of vegetable origin (vegetables and fruits)” (*With or without salt?*, 1982: 16)

Consequently, through exemplification as a discursive strategy, a connection is established between the concrete and the abstract, through which the popularizer fills a theoretical framework that, singularly, would not have been sufficiently understood by the non-specialist receiver, with meaning. At the same time, the use of the example becomes a creator of a new context, because from the practical representation offered to the data of science derives a recontextualization of the scientific process, as stated by Calsamiglia (2000: 3-4). Therefore, exemplification is a textual articulation meant to fracture the simple sequence of scientific data, to create the connection between the space of ideas and that of reality, thus contributing to the great purpose of popularization, the explanation.

### 4. Artistic devices

Science popularisation is often achieved through an expressive, *plasticizing* expression (in Blagian N.B. Romanian poet terms) that aims to contribute to the accessibility of knowledge. The use of rhetorical figures has a double objective: attracting the receiver by decorating the speech, but also creating a path to specialized content, through balanced association: new concepts - old concepts, pre-existing in the collective mind. The personification (anthropomorphization) of information and metaphor are two of the most common rhetorical figures present in popularization discourses:

- “coffee - a possible friend or a virtual enemy” (*Man and health in modern society*, 1985: 20)
- “salt - the number one public enemy in cardiovascular pathology” (*Science and Technology*, 1991, no. 6-7, p. 19)
- “spinach - broom of the intestine” (*Kaleidoscope of Health*, 1983: 78).
- “it was found about root chervil that in order to be consumed, its bulbs must be allowed to age, only in these conditions the reserve substances will be able to display their full range of flavors and flavors” (*Science and Technology*, 1989, no. 2, p. 19)
- “mix water and flour quickly and let the dough rest” (*Dough, foie gras, cookies. Homemade pastry*, 1979: 9)
- “fruits and vegetables are a source of richness in nutrients and therapeutics” (*Vegetable Drinks*, 1978: 5)
- “vegetables and fruits are true sources of health” (*Kaleidoscope of Health*, 1983: 142)

We can notice the manner in which the vulgariser explains various realities through the prism of habitual situations in people’s lives, in which we must be vigilant and attentive to the amount of food used, as they can become harmful (“enemies”, “enemies” - anthropomorphization), we must be aware of the major role of other foods such as fruits, vegetables (“sources of health”, “sources of wealth” - metaphorization) that provide us with the necessary vitamins, or have the role of purifying the body (“spinach - broom”) or we must be patient in the process of food preparation (let the dough “rest”, be patient for the bulbs to “age”). Therefore, these examples show us that popularisation discourse does not only mean the competence of language translation, but requires a talent of the populariser to identify the most synthetic, qualitative and impactful words that, at the same time, do not distort the scientific meaning. Therefore, the popularisation of science is a territory that capitalizes on the realities, skills and acquisitions of the receiver to access the world of science.

### Conclusion

In conclusion, the present research highlighted some of the creative phenomena of popularising discourse found in food discourse. Scientific culturalization can help optimize living conditions, so it is vital in a society that aims to progress. The common man must not indulge in misinformation or be disadvantaged by the inability to decode science in its specialized form, but must have access to the common scientific heritage by its popularisation.

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