# Herbal Remedies in Written Communication: The Interpretation of the Message<sup>[\*]</sup>

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#### Abstract

For ages, herbal medicine was the part of community or family oral tradition. Transmitted through generations, the knowledge of medicinal use of plants is often described as kept secretly, within defined group of initiated. The outbreak of printed media gives strong impulse to change traditional transmission: the knowledge is now freely available in all kind of printed sources and presumably the character of the knowledge is also changed. We may only guess how was herbal medical tradition communicated among common people in pre-printed ages, as no traces are left from that time. Not even in old folk songs or myths — seems that herbal folk medicine is something that does not find reflection in general folklore, at least according to Estonian material. Although Estonian Folklore Archives hold more than 1,4 million pages of all genres of folklore collected during last century, only about thirteen thousand short texts on herbal medicine are present there; despite the fact, that the use of herbal remedies was repeatedly asked by all kind of folklore collectors. Reason for that may be the fact, that domestic use of plants required in addition to folk medical knowledge also at least some experience with plants (except the use of officially sold plants, the practice that is common nowadays, but was not available half a century ago). Many folklore archives worldwide have considerable amount of messages on herbal use, waiting to be interpreted, not just statistically analyzed. Being itself a result of communication process (among nature and people or within bearers of culture or media and people etc), the herbal lore once written down becomes a base for the future communication process between the text and researcher. The paper explores the possibilities of application of Roman Jakobson's model of communication for analyzing the contents and structures of collected herbal knowledge. Although the resulting application can be widely used, the ground for it originates from Estonian herbal medical lore collected since 1888.

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or ages, herbal medicine was a part of a community or family oral tradition. Transmitted through generations, the knowledge of the medicinal use of plants is often described as being kept secretly within a defined group of the initiated. The advent of printed and electronic media gives a strong impulse to change this traditional transmission. Knowledge is now freely available in all kinds of printed and electronic forms and presumably the character of this knowledge has also changed. We may only guess how the herbal medical tradition was communicated among common people before printed material was easily available, as this is very difficult to re-construct. It seems that herbal folk medicine is something that does not find reflection in general folklore, even in old folk songs or myths, at least in Estonian material. Although the Estonian Folklore Archives hold more than 1,4 million pages of material in all genres of folklore collected during the last century, only about thirteen thousand short texts on herbal medicine are present there, despite the fact that reflections on the use of herbal remedies was repeatedly asked for by the folklore collectors. The reason for that may be that the domestic use of plants required folk medical knowledge and also at least some experience with plants. Many folklore archives worldwide have a considerable amount of material on herbal use waiting to be statistically analyzed and interpreted. Being itself a result of a communication process, the herbal lore once written down becomes a base for the future communication process between the text and researcher. This paper explores the possibilities of the application of Roman Jakobson's model of communication for analyzing the contents and the structures of collected herbal knowledge. One particular text is used as an example.

#### **1. THE MATERIAL AND THE METHOD**

#### 1.1. The material

In 1888, Estonian pastor and linguist Jakob Hurt<sup>[1]</sup> launched his famous appeal to «active sons and daughters of Estonia» to collect the local folklore. Among other requests (to collect songs, myths, beliefs, etc.), he named 54 folk plant names (with Latin equivalent supplied for some) and asked to be sent popular descriptions of their use. The appeal was published in one of Estonia's biggest newspapers, *Olevik*. One month after the publication of the first part of the appeal, Hurt remarked, with an expression of gratitude to his correspondents, on the amount and content of the folklore sent. In the following 18 years, mostly in *Olevik* and *Postimees*, another nation-wide newspaper, Hurt published 155 reports on the folklore sent to him, including crediting every correspondent by name and indicating his (or quite rarely her) contribution. Such encouraging feedback initiated a long-lasting collecting tradition as well as future research.

<sup>[1]</sup> Jakob Hurt (1839-1907) was a famous Estonian folklorist, theologian and linguist, perhaps internationally best known for his dissertation on «pure» -ne stem nouns («Die estnischen Nomina auf -ne purum», 1886). For Estonians, Hurt is best known as the «king of Estonian folklore». Via a press campaign, started in 1888, Hurt organized volunteer collectors who visited most of Estonian households and collected 114 696 pages of folklore. Hurt planned the publication in the 1870's of a six volume series on Estonian folklore called, *Monumenta Estoniae Antiquae*. However, due to financial difficulties, only two volumes of folk songs were published in 1875-76, titled *Vana kannel* (Old Harp). Hurt also published a three-volume collection *Setukeste laulud* (The Setus' Songs) between 1894 and 1907.

The sample text is one of the responses given to this appeal. It is rather simple at first sight, describing the use of one plant for one disease and even a bit of its preparation. The plant used is named *arnica* and used for a disease called straining (*venitus*) that is marked by a kind of stomach condition obtained during hard work.

«Venitamise vastu on hea arnik, mis teest keidetasse, aga enne kuivatasse. / Against strainig arnica is good, make a tea, but previously dry it» H II 7, 883 (2) < Jõhvi khk., Edise v., Vasavere k. – August Tõnurist (Tõnorist) (1889)

The text could be divided into several information units: straining, against, good, arnica, tea, make, dry, etc. All those units are essential for the proper understanding of the text, but we will focus on *arnica*. The need to dry the plant, indicates that it has to be a local plant.

In addition to the text, we know some intriguing facts about this plant name:

- arnica (Arnica montana) does not grow in Estonia (Kukk 1999, etc.);
- the plant name *arnica* is very common in Estonian folk medicine, it is present in about 1% of all texts stored in the database, HERBA;
- this name is used for more than 19 local plants (Vilbaste 1993);
- the plant name *arnica* is mentioned in several popular medical books published in Estonia during the second part of 19<sup>th</sup> century (Sõukand 2007a).

## 1.2. The method

Our chosen method of analysis is the well-known linguistic model of communication (Figure 1) of Roman Jakobson. Although the model was initially intended for describing the process of spoken communication, it can be also applied to written texts. Nevertheless, even if our goal is to understand one written text, we also have to see the non-written communication behind it.



FIGURE 1. ROMAN JAKOBSON'S MODEL OF COMMUNICATION (1981: 22, 27)

Roman Jakobson's model of communication helps us to open new levels of interpretation and, depending on the origin of the source, at least four different levels could be seen in the transmission of this message. With a closer look it is possible to identify even more, but our task here is to get an idea of the most probable levels applicable to given material. For the same purpose, the model in this article is used quite freely and metaphorically.

### 2. THE ANALYSIS

#### 2.1. Ways of knowledge transmission

Plants never tell humans directly about their healing properties, but people tend to decide about their use according to their appearance, growing place and taste. Today we know that intense smelling plants may have essential oils and some of them have antimicrobial or other therapeutic qualities. The communication appears here on a totally different level. It is the human who communicates with the plant, reading the signs from it; the plant itself does not want to communicate anything.

If we adapt Jakobson's model to the interaction between the human and the plant, we get the following result: the plant is the unintended addresser, the addressee is the human. The contact is direct. The human interacts with the plant, looks at it/smells/tastes it and the code is understandable for the human. It is related to something that the person already knows. The message is its use for curing some disease; the context is the situation that induced the discovery of the given plant qualities.

Such exchange between the human and the plant can be compared to the way the hunter reads tracks left by animals. The prey leaves the tracks understandable for the hunter: «Indexes present the widest field of signs interpreted by their receivers without the existence of any intentional sender. Tracks were not purposely left by animals for the hunter's use but nevertheless serve as signantia enabling him to infer their signata and thus to identify the kind of prey as well as the direction and recentness of its passage.» (Jakobson 1971a: 702-703).

One can suppose that the peasant of the 19<sup>th</sup> century was selecting his plants mostly following the apparent properties of the plant. Although the Doctrine of Signatures was at that time widely accepted, it was not much known nor appreciated by the peasants. Analyzing the texts from the collection of Jakob Hurt, the author found that this relation can be detected within no more than 10% of the reports. Only a few of them directly indicate the principle of Doctrine of Signatures (Sõukand 2007b). This means that Estonian folk herbal medicine of the 19<sup>th</sup> century was not based on plant selection derived from the Doctrine of Signatures. There were additional ways through which herbal medicine was established.

At that time one of the must important was the transmission of knowledge from the elder generation to the younger. At the end of the 19<sup>th</sup> century most young Estonians were literate and popular books on herbal medicine were available in towns as well as in the countryside. But different generations still lived together, and we can presume that the intergenerational exchange of herbal knowledge was more intensive than it is nowadays. If we describe this process of oral transmission in light of Roman Jakobson's linguistic model of communication, we get the following result: the addresser is usually representative of the same culture, but older. The addressee is usually a representative of the younger generation. The context is some given situation where the transmission takes place, some garden, field or healing room. This situation precedes the actual usage of the information given in the message. The code is understandable for both, and

the contact is immediate and all misunderstandings can be cleared up as they appear. We cannot follow precisely the oral transmission that took place a century ago, but we can reconstruct it through texts from the same period and through analogous situations nowadays.

Another situation occurs when transmission of the information comes from the medical literature to the layperson. To understand the background of this exchange we need to know a bit of the history of popular medicinal literature in Estonia. The first journal of medicine in the Estonian language, «Lühhike öppetus, mis sees monned head rohhud täeda antakse» ('A brief instruction in which some good medicines are indicated'), compiled by a German doctor and pharmacist, Peeter Ernst Wilde in Põltsamaa and translated by August Wilhelm Hupel was published in 1766–1767 in forty-one thin booklets, 164 pages in total. Another important work by the same author is «Arsti raamat nende juhhatamisseks kes tahtwad többed ärraarwada ning parrandada» ('A doctor's instructions to those who want to diagnose and treat diseases'), published in 1771; it is regarded as a publication marking the beginning of popular-scientific literature in Estonian. Until the end of the 19th century, the medicinal use of 29 plants (not including cereals and other cultivated plants) was mentioned in 38 of the total of 832 published almanacs (Martsoo 2007), whereas among the 49 popular books and booklets on medicine published in Estonian in the same period, 23 (i.e. a bit less than a half) touched upon medicinal plants. The almanacs and their medical supplements were popular among their target group as they were very cheap and interesting to read. The authors of most of the articles in the almanacs are unknown, so we cannot speculate much about their sources.

Now, if we look at the communication process when the information is gathered from medicinal literature through Roman Jakobson's model, we see a different approach again. Here the addresser is either a learned doctor and/or the translator. The addressee may be more literate than the average person. Probably in the situation of reading he/she does not have the need to use the information, but just memorizes part of it. The addresser may know the addressee generally to some extent. For example, Friedrich Reinhold Kreutzwald (1803–1882) was a practicing doctor in Võru and also a collector of folk songs and other folklore. At the end of the 19<sup>th</sup> century he published several editions of his popular medical book that was mostly based on his medical practice among peasants (Kreutzwald 1879). On the contrary, in some almanacs there are translations of text evidently of foreign origin that had seemingly nothing to tell the locals. They ask to collect herbs that certainly did not grow in Estonia (for an example see ERK 1857). Here the transmission is in one way anonymous. The code (made to sound popular, but for the peasant often odd medical language) is written down and the addresser does not control the context, as there is no immediate contact. The message is given, but there is no guarantee that the addressee receives what was sent.

In the case of transmission of knowledge through the archive texts, the researcher (addressee) is anonymous for the informer (addresser), who might have received the knowledge he or she transfers in one of three previously described ways. Or maybe those three ways are even combined. The researcher is facing the text (first meant for the collector – Hurt) stored in the archives. Here we have the situation where the openness of the context depends only upon the addressee's knowledge of the supposed situation. The message is given information that may help to open the context. The addressee has to learn the code in order to understand it. The extent of the mastery of reading this code depends on different circumstances.

|              | 1. Interaction plant-<br>human                          | 2. Oral history | 3. Medical literature                | 4. Archive texts          |
|--------------|---|-----------------|--------------------------------------|---------------------------|
| a. Addresser | Plant   | Older person    | Learned doctor,<br>translator        | Informer                  |
| b. Addressee | Human   | Younger person  | Reader(s)                            | Researcher/s              |
| c. Context   | The moment of discovery and it's preconditions          | Given situation | Informant's<br>previous<br>knowledge | Researcher's<br>knowledge |
| d. Message   | Deduction   | Information     | Teaching                             | Teaching/information      |
| e. Contact   | Direct  | Direct          | Written                              | Written                   |
| f. Code      | Signs, under-<br>standable for the<br>human; perceptive | Spoken language | Folk "medical<br>language"           | Archaic language          |

The following table briefly illustrates four different communication situations using principles of Roman Jakobson's model of communication. Columns and rows in this table are labeled with numbers and letters that will ease the future analysis of our sample text.

## 2.2 Possible formation of the text

We don't have enough direct evidence to reconstruct the exact methods of transmission, but we can give it an educated guess and try to come up with some possible ways that the knowledge got from its original source to our text. The path reconstructed will include all four ways of knowledge transmission described above, keeping in mind that in reality the described situations can recur endlessly or some of them may be missing:

1. The plant name *arnica* (3.d.) is published for the first time in Estonian in O. Jannau's (3.a.) book (1857) as a parallel name for St John's Wort. With this message, (3.d.) the author proposes a new code (3.f.), which is to some extent misleading. But in the given conditions of freedom within plant nomenclature (3.c.) we cannot condemn it.

2. The peasant reads the book (3.b.). He has no other contact (3.e) with the author but just through this book. Discovering the plant (1.a.) (*Hypericum sp*) that corresponds to the description (3.d.), he names this plant *arnica* (2.f.) because this name of foreign origin (3.c.) adds power to the healing process.

3. The relation between the plant and the name is transmitted to the next generation (2). But in the next transmission, the plant is not at hand and someone (2.a.) describes to another person (2.b.) arnica as being a local plant with yellow blooms, growing in grasslands (2.d.). But it happens that this other person (2.b.) has seen blooms of *Arnica montana* in a pharmacy or has bought it from the wandering druggist and think that he has some idea (1.c.) of how the plant looks like (1.f.). He relates the name *arnica* to some local Asteracea plant, that is similar in appearance to *Arnica montana* (1.d.).

4. At the same time, another person from the same neighborhood (3.b.) reads from the almanac (PERK 1879) (3.a.) that arnica is used to treat stretching (*venitus*), the disease believed to be caused by too much hard work (3.d.). When two bits of information meet (2.c.), the

outcome for the outside word, or for the occasional visitor (2.b.) takes the form: «stretching is healed with the decoction of *arnica*» (2.d.).

5. Someone (2.b.) knows, that Hawkbit (*Leontodon sp*) also has a name that already suggests its use for stretching, «stretching-thee» (*venituse-tee*) (2.f). Two species of Hawkbit get the name *arnica*.

6. Vasavere schoolteacher, August Tõnurist (1869-1943) (4.a.), who had used arnica or just heard of the use by others, reads the call by Jakob Hurt (Hurt 1989 [1888]) (4.c.) and sends (4.e.) him (4.b.) our example text (4.d.), which does not reveal what plant is behind the name *arnica* (4.f.).

7. A researcher from the 21th century (4.b.) discovers the text (4.d., 4.e.), in which the name *arnica* (4.f) has several meanings (4.c). If the researcher (3.a.) decides that the text has to be re-published, then the content of the message (3.d.) will depend on his or her decisions (3.c) upon this text.

## **3. THE END**

In whatever communication situation we look at, it has to be kept in mind that messages coming from outside are related to what already exists in the receiver's mind. «The stimuli received from Nature», as Colin Cherry wisely stresses, «are not pictures of reality but are the evidence form which we build our personal models.» (Jakobson 1971b: 573). Signs read from the plant are interpreted according to already known ones. Indeed, only those are chosen that fit in the world of the one who is looking. Also, listening to another person or reading popular medicinal book, one gets only those bits of information that correlate to the previous knowledge of the listener or reader.

Contacts between addressee and addresser may vary. Codes may change and the content of the message may acquire different meanings in this changed context. The way described above is only one possibility in interpreting the assignment of a foreign name to local plants. But Roman Jakobson's linguistic model of communication helps to analyze in depth the mystery of one text representing so many chains of changes in thought. Although the reconstruction of real events may cause the loss or even distortion of the information, this modeling helps us to understand how we received the analyzed message.

## REFERENCES

- Buenz, Eric J., Schnepple, David J., Bauer, Bent A., Elkin, Peter L., Riddle, John M., Motley, Timothy J. (2004): «Techniques: Bioprospecting historical herbal texts by hunting for new leads in old tomes.» *TRENDS in Pharmacological Scienses*. Vol. 25 No 9, 494–498.
- Eco, Umberto (1997): «Innovation and repetition: Between Modern and Post-Modern Aesthetics.» In: *Reading Eco. An Anthology*. Ed. Rocco Capozzi. Indiana University Press, Bloomington, 14–33.

- ERK 1857: Eesti rahwa Kalender se 1858 aasta peale pärrast J. Kristusse sündimist [Almanac of Estonian people for the 1858<sup>th</sup> year after the birth of J Crist]. Hartung.
- Jakobson, Roman (1971a): «Language in relation to other communication systems.» In: Jakobson, Roman. Selected Writings II. Word and Language. The Hague: Mouton Publishers, 697-710.
- (1971b): «Linguistics and communication theory.» In: Jakobson, Roman. *Selected Writings II. Word and Language*. The Hague: Mouton Publishers, 570-579.
- (1981): «Linguistics and poetics.» In: Jakobson, Roman. Selected Writings III. Poetry of Grammar and Grammar of Poetry. The Hague: Mouton Publishers, 18-51.
- Jannau, Otto August von (1857): Ma-rahva Koddo-Arst, ehk, lühhikenne juhhataja, kuida iggaüks mõistlik innimenne ommas maias ja perres, kui kegi haigeks saab, agga arsti ep olle sada, vöib aidata. Tartu: H. Laakmann.
- Kreutzwald, Friedrich Reinhold (1879): Kodutohter: Õpetus, kuda haigedega peab ümber käidama ja neile arsti abi puudusel kergitust tehtama [Home doctor: how ill persons have to be treated and helped in the absence of the doctor]. Tartu: Schnakenburg
- Kukk, Toomas (1999): Eesti taimestik. Eesti looduse mitmekesisus. Tallinn: Teaduste Akadeemia Kirjastus.
- Martsoo, Stella (2007): Ravimid 18. ja 19. sajandi eestikeelses kalendrikirjanduses. /Medicaments in Estonian almanacs in the 18th and 19th century/ Mäetagused 36, 7–34.
- PERK (1879) = Otstavel, Jaan (toim). Pärnu Eesti-rahva Kalender ehk Täht-raamat 1880 aasta pääle, pärast Jeesuse Kristuse sündimist. Pärnus: W. Borm.
- Sõukand, Renata (2004): «Jooksvarohud» Eesti rahvameditsiinis [Herbs for Treating Rheumatism in Estonian Folk Medicine]. *Akadeemia* 2004: 11, 2475–2493.
- (2005): Loodus eesti rahvameditsiinis [Nature in Estonian Folk Medicine]. Kultuur-loodus [Cultural nature]. Editors Maran, Timo and Tüür, Kadri. Tartu: Estonian Literary Museum, 55–80.
- (2007a): Kuidas võõras muutub omaks: kaks taime eesti rahvameditsiinis. Mäetagused 36, 79-104.
- (2007b): Mis teeb taimest ravimtaime: taime ja haiguse vaheliste seoste liigitamise katse Jakob Hurda kogu taimravi tekstide põhjal. / What makes a plant the medicinal plant: an attempt to relations between plant and desease Acta Semiotica Estica IV. Ilmumas.
- Sõukand, Renata & Raal, Ain (2005): Plants in Estonian Folk Medicine: Collection, Formation and Overview of Previous Research. *Folklore 29*, 173–200.
- Vilbaste, Gustav (1993): Eesti taimenimetused. Tallinn: ETA Emakeele Selts.
- Wilde, Peter Ernst (1976 [1766-1767]): Lühike õpetus, mis sees monned head rohud täeda antakse. Tõlk. Huppel, August Wilhelm. Faksimiilväljaanne. Tallinn: Valgus.
- (1771): Arsti raamat nende juhhatamisseks kes tahtvad többed ärraarvada ning parrandada. Eesti keelde ümbertöötanud August Wilhelm Hupel. Põltsama.