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Petra Zia Sluková**

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1 Foreword

„The two words 'information' and 'communication' are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through.“

Sydney J. Harris

The issue of the mingling of the terms of information and communication has been going through the historical development of both the fields – information theory and theory of communication. On both sides, the tendency to comply to the description of the characteristic features of those terms to the paradigms requirements defining the mother discipline can be traced.

The mingling of the terms of information and communication is happening not only in the semantic historical development of both the words which points at their similarity but sometimes almost on the edge of one being mistaken for the other.

In spite of the fact that information and communication have their own “home disciplines“ and scientist from both the fields, communication and also information studies, tend to define both terms as two different phenomena, many similar features can be observed.

Nowadays we seem to reach the boundaries where they are taken for synonyms, one being mistaken for the other. The semantic historical development of both the words is also showing their similarity. Still at the end of 19th century, the official definition of both the terms was undistinguishable from their everyday usage, from their meaning given to them by the general public.

In the beginning of the 20th century, scientist and engineers contributing to technical magazines started to use both terms in connection with the new technological progress in the field of electronics. **The definition of communication as a transfer of electronic signals and information as quantity** comes from just this period of time. **Claude Shannon, Norbert Wiener, Robert Hayes**, and their other contemporaries considered information and communication to be general concepts applicable in various situations. A similar way was the way the economists **John Hirschleifer, Donald Lambertson** or **Fritz Machlup**, brought information into economy defining it as something reducing vagueness in the decision making process.

For its capability to be captured in material objects such as books, discs, letters or clay tablets, information creates the impression of being material,

perceiving information as matter. The dramatic development of technology of storing, finding and manipulating data contributed to it in the 20th century. And as information is tightly connected to human society, a process of transfer of this substance is bound to appear there. This act is very similar to what many scientist call communication. Here lies the basis for the general assumption that **information equals matter, communication equals transfer**. This perspective became popular in the communication disciplines community especially, where **communication is the process of motion and information is what is being moved**. This definition also fits into the technical perspective of Claude Shannon and Warren Weaver; unfortunately it lures to certain simplification, especially in the area of human behaviour diversity.

Even though information is often connected to a state order only, it can also be a process, and it is then **part of the act of becoming informed**. Machlup works with this view, accepting to look at information as matter, “something is told“, but also including the vision of the process of “the telling of something“. If we identify information to the expression of “the telling of something“, it becomes communication.

Wilbur Schramm emphasises the concept of “**communication-as-sharing**“, and this point of view inspired a whole new generation of scientists. This theory has its support in the linguistic roots of the word, the Latin expression *communicare* means to share. Brent Ruben develops this thought further on and characterises “**human communication as a process of interactiveness**“:

“a process through which individuals in relationships, groups, organizations create, transfer and use information in relation to their environment and in relation to themselves.“

And here we get to the basic question: “What all is communication an interaction of?“ Symbols, ideas, skills, words, images, graphs, messages, gestures and information. Information is used as a covering term here and again confirming the assumption that to be able to define communication the term information has to be characterized.

2 Information – Communication Models

Men often hate each other because they fear each other; they fear each other because they don't know each other; they don't know each other because they can not communicate; they can not communicate because they are separated.

-- Martin Luther King Jr.

After having studied this material I should be able to

- Characterize modelling
- Name the advantages and disadvantages of models
- Talk about each of the communication models /Aristotle, Lasswell, Berlo, Shannon, Schramm, Westley and MacLean, ... /

Key words:

Information models, communication models, modelling, feedback, channel, message, coder, decoder, transmitter, receiver, field of expertise, Aristotle, Lasswell, Berlo, Schramm, Newcomb, Shannon, Westley, MacLean

2.1 Modelling

What is modelling?

The main goal of informational activity is to communicate knowledge. Each knowledge can become a piece of information only provided that it is communicated, if it goes through any act or process of communication (KONIGOVÁ. 1981). Via modelling, such acts of communication can be expressed graphically.

Modelling is one of the main methods of studying the complicated phenomena of the real world, where all phenomena are inter-connected and it is basically impossible to offer a complete and exact description. Therefore, **a model allows to depict objective reality in a simplified way and to capture only those parts of the given phenomenon that we consider important, which means those that are near the purpose the model is supposed to fulfil.** Inevitably, a certain idealization of the specific phenomenon is happening and

its abstraction which should not be mistaken for creating a copy of the object or phenomenon being modelled or its logical tautology (BERKA, 1967). Doc.RNDR. Milan Berka, CSc. calls the art of modelling and creating models an art of searching for the compromise between simplicity and exactness.

We can define a model as a consciously simplified description of a part of reality presented in graphical form, depicting the main parts of a certain structure or a process and the relationships between their single parts.

2.1.1 The Advantages of Models

- **CONCISENESS AND ACCURACY**

As it has been already mentioned, the model allows for explaining or rather clarifying complicated phenomena, processes and events.

- **GENERALITY**

Allows for interpreting some theories and creates space for further questions. C. D. Mortensen cites: “the more complicated the given object – the more chaotic and unrecoverable is its natural interface – and the more the possible benefit of the model being created ”(MORTENSEN, 1972)

- **THE POSSIBILITY OF A FURTHER EXPANDING OF THE THEORY**

The given theory can be easily quantified through the model.

- **EASY VERIFIABILITY OF THE HYPOTHESES ADOPTED**

Especially with mathematical models, various mathematically exact methods can be used according to the character of the assumed relationships

- **FUTURE PROGNOSIS**

Predicting possible results or directions of events.

- **THE I SEE / AHA EFFECT**

On a certain level, the models also have a heuristic value, thus providing new insights by creating new hypothetical thoughts and relationships. Some scientists attach the highest significance to this function – offering a non-common original perspective. A good model can help us leave old patterns of thoughts.

2.1.2 The Limitations of Models

- **THE DANGER OF EXCESSIVE SIMPLIFICATION**

Even though simplification being an inseparable part of abstraction, the basic changeable, periodical relationships and main competence of the given subject should not be forgotten while creating the model.

▪ **PREMATURE CONCLUSION**

Models limit our awareness of unexplored possibilities. We occupy ourselves with the model even though it would be more reasonable to spend time and energy with the actual object of our interest. Most of our ideas are conditioned by a certain slow maturing, creating conditions for a calm growth, which can not be hurried up. By creating the model in a phase in which our thoughts still are in the state of being crystallized we may prevent the development and new ideas from their “settling down“ in a healthy way.

▪ **MISTAKING THE MODEL FOR REALITY**

The model functions as a substitute of reality which ultimately means that one form of multiple meaning is replaced by vagueness the model was supposed to minimize. E.g. perceiving Norway as being “up there“, because on the map of Europe it is placed near the North pole.

2.2 Communication Models

There are tens of communication models to distinguish, each of them focusing on various situations of communication, bearing different parts of communication into consideration, e.g. with Shannon it is the channel, Osgood-Schramm work with communication participants, Belo points at the message as being a phenomenon.

2.2.1 Aristotle (384 BC – 322 BC)

The origins of the systematic approach can be found in Greek culture. The Ancient Greeks had a democratic form of government and in all fields of business, public administration, law or education, the emphasis was given on oral expression. The civilians had to be their own lawyers – the defendant showed their case officially in front of the commission consisting of a few hundreds of people that had to be convinced of something.

From this state, Aristotle’s understanding of communication as **verbal activity, in which the speaker** (the one who is speaking) **tries to convince the listener**, thus reaching their own goal, **and this via using a tactical construct of an argument and presentation of the speech.**

Aristotle describes communication in the terms of **orator, the speaker is composing the argument that is to be presented in the speech to the listeners, hearers, thus the audience.** The orator is seen as the initiator of the whole communication, his speech and the recipient show in every next

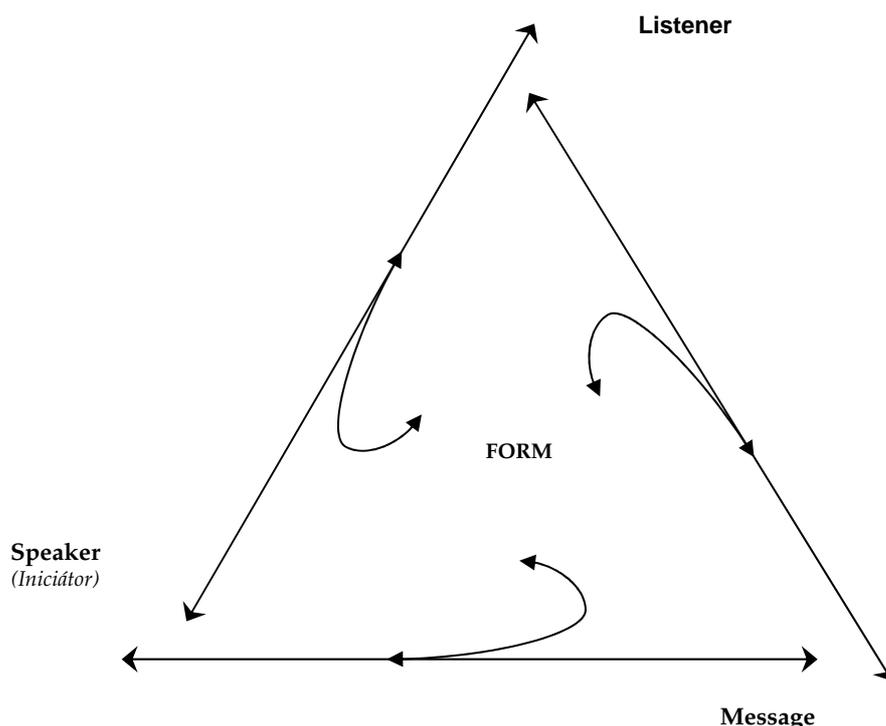
communication theory, but the understanding of the fourth element, that is the form, is changing. **The form is a result of the influence of mutual combination of the previous three elements**, but the retrograde influence does not apply here – **the form only works unidirectional and does not influence other parts.**

In his work *Retorica*, Aristotle described his communication model (see pict.1 Aristotle's model), which is considered to be “the first social communication model“ and the **basis of all following theories of communication**. Even though he was the first to exclude and name the individual parts of the process of communication, the model still does not bear the other circumstances of a communication process (e.g. circumstances, implications, influences, etc.) in mind.

So the goal of the initiator is to create a positive impression about themselves on the listener and to gain bigger understanding consecutively, and to create agreement with initiator's point of view. Aristotle **defined rhetoric as an ability to notice, register reachable means of persuasion in any kind of situation.**

Aristotle, same as his teacher Plato, considered communication to be **an art or a skill** that has to be practised and also one that needs exploring. So even though the earliest interest focused on public speech, the fact that it is needed to expand the view of other theories was acknowledged. Plato, e.g., emphasised the necessity to focus on the human behaviour area.

The following two scholars went into this direction - **Cicero** and **Quintilian**, who, same as Aristotle and Plato, saw **communication as practical and academic matter**. Cicero's view on communication was so complex that it included everything that is today considered the field of expertise of social studies.



Picture.1 Aristotle's model

2.2.2 Harold Dwight Lasswell (1948)

Another of the famous characteristic is the verbally descriptive model of the **American sociologist, political scientist and communication theoretician Harold Lasswell**, where the influence of the propaganda field, which he was theoretically interested in, can be traced. We consider it to be **one of the first simple models of mass media communication** (see pic.2 of Lasswell's model).

He himself said that the communication process can be best explained in a simple statement:

“Who says what to whom in what channel with what effect.”

Who

Says What

To whom

In what Channel

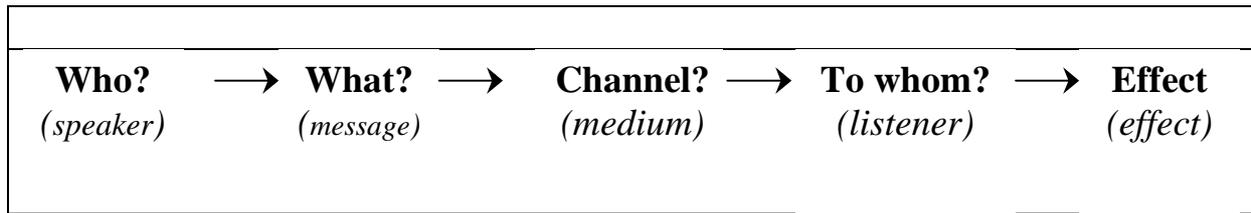
With what Effect?

Same as Aristotle, Lasswell focuses on the **oral message** emphasising the terms such as speaker, message and audience, even though he uses different terminology and sees also communication as a unidirectional process in which the individual influences the others with his or her message.

What distinguishes Lasswell from Aristotle?

- He offers a **wider definition of the channel**, through including mass media also
- He expands **the view of the target or effect of the process of communication** in general
- He suggests diverse results or effects of communication
- He expands the function of “convincing“ by adding “informing, entertaining, rousing, irritating“

His work is considered to be the first small step to the area of explaining the transfer and receiving of the message.



Picture 2 Lasswell's model

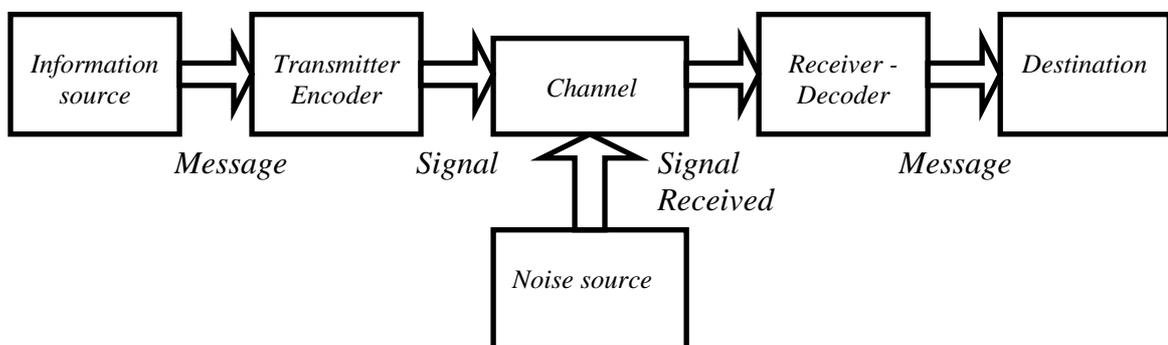
2.2.3 Claude Shannon (1948)

About a year after Laswell's presentation of his point of view, Claude Shannon put out the results of his research in the area of signal transfer.

In 1948, Claude Shannon published his "**Mathematical Theory of Communication**", in *Bell Systems Technical Journal* and this work spread very quickly into other areas of science, not only **technical**, but also into **social-humanitarian disciplines**. Shannon's concept of information measured by the entropy pattern is one of his most important contributions to the theory of information. This probably also is the main reason why his theory is called "**information theory**", while Shannon preferred the term "**communication theory**".

According to Shannon, any communication system can be divided into single components that can be treated as different mathematical models. So it is possible to separate the source amendment from the channel amendment.

In their model, the authors distinguished the single components of the communication act (see picture 3 Shannon and Weaver's model): **signal from message, information source from transmitter, and receiver from destination.**



Picture 3 Shannon and Weaver's model

2.2.4 Wilbur Schramm (1954)

In his work, Wilbur Schramm broke the rule of linearity when he, as one of the first, modified the model of Shannon and Weaver, and created **a circular model**, emphasising **the cyclic naturalness of communication** (see picture 4 Schramm's model). Schramm himself says:

"It is misleading to think of a communication process as of something that has a beginning and end. It is truly endless... ", (SCHRAMM, 1979).

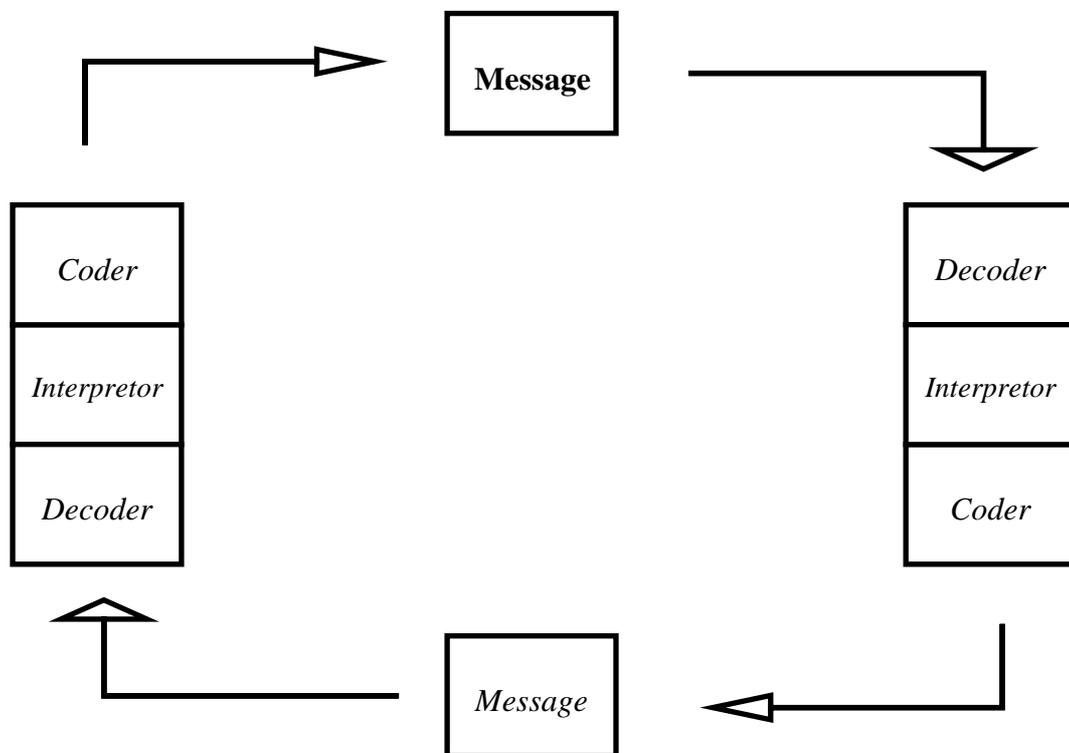
In his model, Wilbur Schramm not only changed Shannon's "transmitter" and "receiver" to "**coder**" and "**decoder**", but he also converts the "source" of the information or feeling he wants to share into a shape that can be transmitted. He indicates that the images in our head can not be transmitted unless they are coded. As soon as the message is coded and sent, it is **no longer depended on the source**. And in this moment the relevant questions are if the receiver is going to be tuned in the same way the transmitter is, if the message is going to be interpreted without being distorted and deformed, if the picture in the head of the receiver is going to have some kind of similarity to the one the transmitting subject had in their head.

Among other things, Wilbur Schramm is also concerned by **the importance of feedback**, which he sees as an **effective means to solve the disturbance problem**. The experienced communicator is cautious of the feedback from their audience and they constantly modify their message according to what they observe or hear from the other part. In the model, the idea of the receiver providing feedback is expressed (either direct, slightly direct, or indirect), automatically becoming the transmitter, and thus Schramm **eliminated the differentiation of those two roles**. In this model, the function of the transmitter and the receiver are not differentiated. Coding, evaluation and decoding messages is provided by both the subjects.

Also the idea of Schramm that receiving the message is not a matter of decoding but also interpreting the message, is revolutionary. Adding the element of an interpreter into the model is an effort of looking at the problem of the content of the message; so a possible different meaning of the individual messages is taken into consideration.

Schramm also presents the concept of **field of experience**, which presumes that it is inseparable for determining if the message is going to be received at its destination in the way the transmitting subject intended. He claims that without **the field of experience – a common language, common background, common culture, etc. – it is almost impossible to interpret the message correctly**. Schramm is thus aware of the fact, that **a communication process functions with cultural rules and expectations limitations**, and for a satisfactory communication it is necessary **to share at least some social cultural elements**.

This model is criticized for the wrong assumption of mutual equableness of all those who are acting in the communication. It is the act of communication that is often unbalanced when it comes down to elements of sources, power or time. This model does not bear collective communication among more sources into consideration.



Picture 4 Schramm's model

2.2.5 David Berlo (1960)

Wilbur Schramm's classmate - David Berlo - **defined parts of a communication process more in detail** - with "the source" he considered important to point out the terms of **communication skills, approach, knowledge, culture and social system**. In his model, (see picture 5 of Berlo's model) Berlo emphasized all 5 senses of the characteristics of the information channel and hinted, that the same factors influencing the source also influence the receiver of the message. Berlo claimed that for a successful communication, an equal level of skills and common values is a condition, on the side of the transmitter and the receiver.

David Berlo perceives communication as a **regulated process**, where **the relationship of both the communication partners is significant same as the amount of their communication skills**. The higher they are the more effective and successful communication is happening. Communication skills are divided into 5 kinds:

Talking and writing (connected to the process of coding, transforming thoughts into symbols), listening and reading (decoding) and thinking.

The ability to think is of key importance – in its significance to get the essence of the communication situation rightly and perceive the context and connections. If this last quality is weakened, the previous four are automatically also weakened.

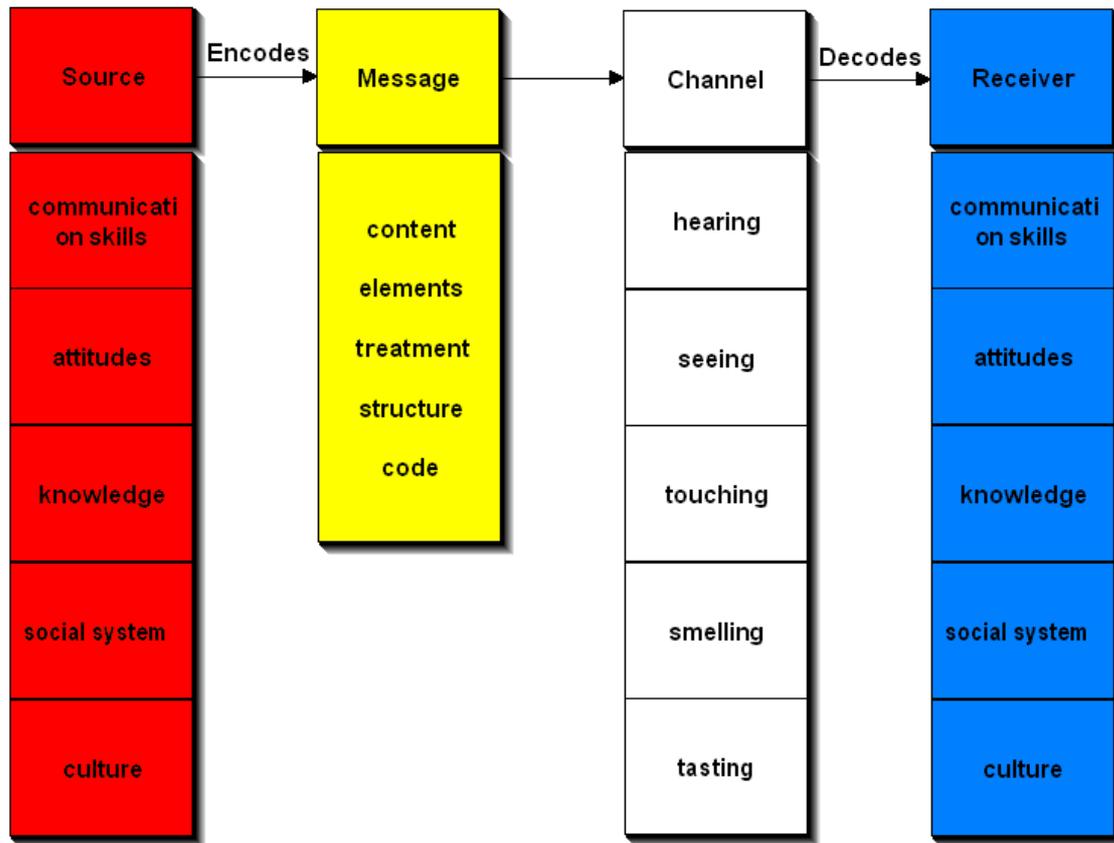
Factors influencing the course of a communication process:

- Communication skills of the participants
- Awareness of the participants level
- Social system
- Cultural system
- A set of attitudes of all the participants

The model is placed in the group of **linear models** and the interaction of the individual parts is not explicitly expressed.

David Berlo mainly emphasised the fact that communication is a process and that meanings are in people, not in words, in other words – **interpretation of a message depends mainly on the meaning of the words or gestures for the transmitter and the receiver** – more than on the basic parts of the message. And insisting on this fact changes the view of communication from *transferring the message to interpreting information*.

Berlo's Model of Communication



A Source encodes a message for a channel to a receiver who decodes the message:
S-M-C-R Model.

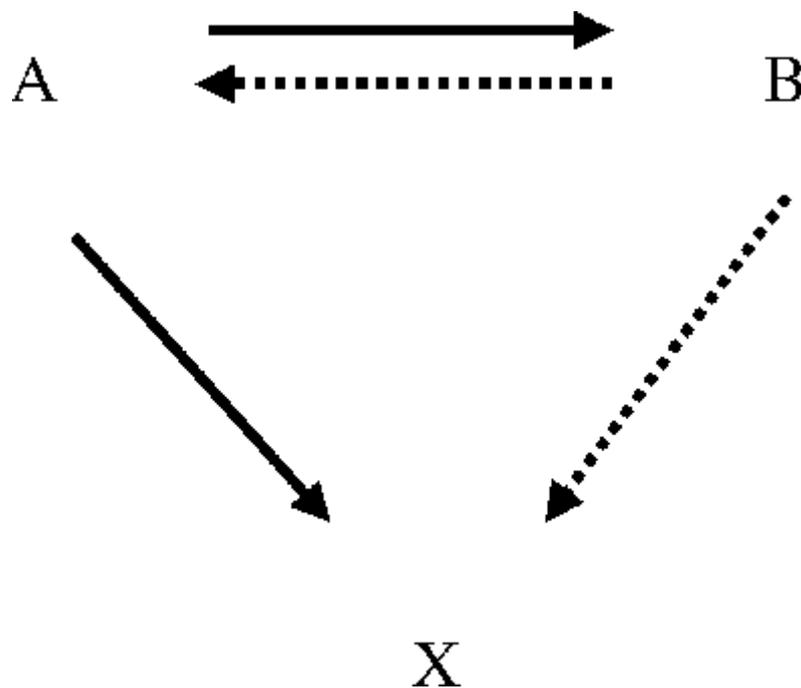
Picture 5 Berlo's Model of Communication

2.2.6 Theodore M. Newcomb (1953)

In the model of interpersonal communication of Newcomb (see picture 5 of Newcomb's model), the emphasis is given on the psyche and the relationship of the participants, which are **influenced by the communication process**. Terms such as message, channel etc. do not appear in the model. The model explores the implication of the communication process on the psyche of an individual, **it emphasizes the bidirectionality of the communication, addresses the relationship between the participants and the relationship to the subject of the communication**. On the other hand, it is still forgetting about factors such as communication process environment and other influences working on the participants of the communication.

A and B are communicating and X is the situation or the social context in which the communication is taking place. Both the individuals are directed both to each other and also to X. The balance between those three subjects is maintained by a constant information transmission. The communication process is perceived as **the work of interdependent factors maintaining equilibrium.**

Theodore M. Newcomb based his work on the work of Heider, a psychologist, who was interested in the amount of consistence or inconsistency which can exist between two persons in relation to a third person or object. Where there is equilibrium (positive attitude among them or to the object), each participant is resistant to change. In situations where there is imbalance, efforts to gain balance occur. So a discrepancy between A and B and their orientation towards X actually stimulates their mutual communication. Newcomb came out of this presupposition also, claiming, that communication is “a learnt answer in tension“ and we are probably able to find more communication activities in conditions of insecurity and imbalance than in any other situation.



Picture 5 Newcomb's model

2.2.7 The Conceptual Model of Westley and MacLean (1957)

This **circular model** is based on the model of interpersonal communication according to Theodor Newcomb; as in the original, the basis for the whole concept is the triplet A (communicator), B (recipient) and X (the subject of the communication), but it is **applied on mass, intentional communication area** (see picture 6 Westley and MacLean's model). He introduces a new role of the **mediator (also controlling subject)** and tries to describe the mutual relationships between the main agents of mass communication. One of the positive sides of it is that it **pins down the changeability of the message in the course of mass communication**. On the other hand, the influence of an outer context is not caught and the influence of the source on the medium and vice versa is not elaborated.

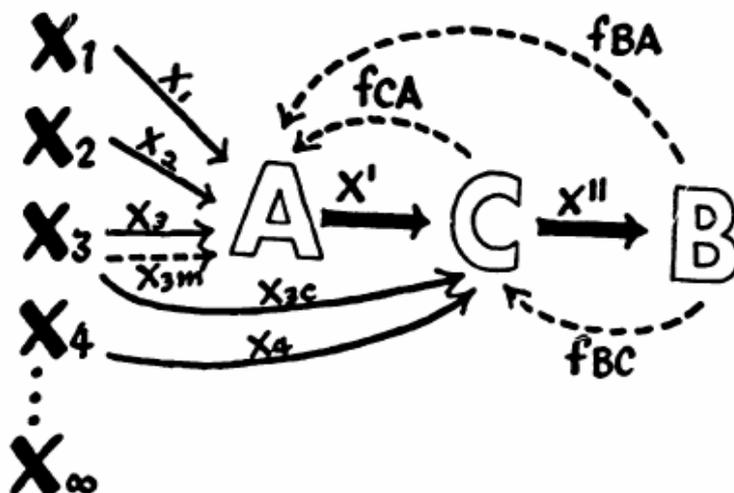
To Newcomb's model and his A, B (the communicating ones) and to X (any matter or event in the surrounding of A, B which is the subject of communication), the authors added C, representing the publishing function – the process determining **what and how to communicate**.

Each person responds to their sensual experience **by choosing only certain objects they respond to**, those are illustrated as X. In the model, A is the reporter, B is the public and C stands for the controlling subject or channel, e.g. chief editor. f represents the feedback.

Wesley and MacLean indicate that the balance of Newcomb model is disturbed by A and C being close together. C functions partly as a channel and also as a mediator of transfer of X from A to B, so X is further away from B than in the previous model, and thus the **dependence of element B (the public)** on A and C is indicated.

In the model, the idea that **communication is started by receiving the message rather than sending it** is illustrated. Communication is not started in the moment when the person starts talking but only when he or she selectively responds to their actual environment. This is emphasised by the fact that many signals that are important for a communication process did not have to be sent deliberately.

Another thing the authors are pointing out is the width of changes the message goes through while being transferred from one subject to the other.



Topics for discussion:

- What can you see as the weak point of David Berlo's model?
- In Westley and MacLean's model, the illustration of further sources and influences working on B and balancing the influence of A and C are missing. Which are they?

Independent work:

Mark the communication act in the model graphically: Knowledge management studies at secondary school.

Recommended reading:

NARULA, Uma. *Communication models*. Atlantic, 2006. 136 s. ISBN 8126906766.

HEATH, Robert. *Human Communication Theory and Research*. Lawrence Erlbaum Associates, 2000. Lea's Communication Series. 464 s. ISBN 0805830081.

3 Shannon-Weaver's Information Theory

„If you don't give people information, they'll make up something to fill the void.“

Carla O'Dell

After having studied this material I should be able to:

- Describe the advantages and disadvantages of the models in general
- Describe Shannon-Weaver's model with its basic characteristics
- Illustrate Shannon-Weaver's model schematically (graphically)
- Analyse the strong and weak points of the model
- Talk about the main contribution of the work of Shannon from the communication perspective

Key words:

Communication systems, linear model, Shannon, Weaver, deFleur, signal, message, source, transmitter, receiver, message, bit, channel, disturbance, entropy, feedback, disturbance, medium

3.1 Communication Systems

The system approach allows for understanding **the system as a set of agents mutually influencing each other and purposefully coordinated, entering into relationships with their surroundings at the same time.** (KONIGOVÁ. 1981). To describe a communication system thus means to describe its structure and functioning in detail in its various inner and outer parts. It is a state of interdependency and collaboration between the single parts and the environment which those parts are connected to.

In technical disciplines, the communication systems in most cases take care of the area of information transfer; in social systems, quite on the contrary, it is about charting the effect of the communication process on human behaviour. In information science, the description of the signs conditioning the course and result of the communication was described in detail by Prof. Marie Konigová.

3.2 Shannon-Weaver's Mathematical Theory of Communication

In 1948, in the *Bell Systems Technical Journal*, Claude Shannon published his work "A Mathematical Theory of Communication", which quickly expanded into other areas of science, not only technical, but also social humanitarian disciplines. Shannon's concept of information measured by the entropy pattern is one of his most significant contributions to the theory of information. This is probably the main reason why his theory was called "**information theory**", while Shannon preferred the term "communication theory".

In the area of formal architecture of communication systems, Shannon was one of the first to realize that any communication system can be divided into single components, that can be treated as different mathematical models. It is then possible to separate the source modification from the channel modification thoroughly.

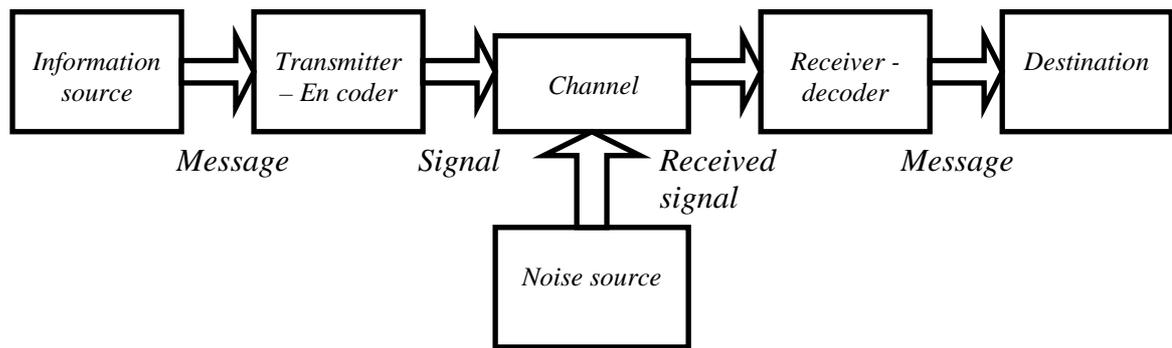
The authors distinguished the individual components of a communication act: *signal* from *message*, *information source* from *transmitter* and *receiver* from *destination*.

3.3 Shannon-Weaver's Model

Even though Shannon devoted himself to mathematical and cryptographic research in the Bell Telephone Laboratory, and his work is of highly technical character, the influence of his work was tremendous. The technical problems are different in their character from human problems, but we can see the influence of a *mathematical model* in work an models created by many scientist of social disciplines (see picture 3 and 7 of Shannon and Weaver's model).

3.3.1 The Basic Characteristics of the Model:

- The linear model (there is a sequence of communication activities, communication is based as unidirectional)
- Transmitting model (puts more emphasis on space than on time)
- The general model (applicable to different kinds of communication, not bearing in mind the semantic side of the communication process)
- "Information model" of communication (puts emphasis on the transmission and receiving of information, the original intent leading to creating the model was to differentiate the disturbance from signals carrying information)



Picture 7 Shannon and Weaver's model

The information source creates the message or selects it from a group of possible messages. The transmitter (the encoder) transfers the message into a signal, which is being sent via a communication channel to the decoder (receiver). The function of the decoder is reverse to the function of the coder, that is to decode, renew the message from the signal. Then the received message reaches the destination.

3.3.2 The strong points of the model

- ✓ simplicity
- ✓ general validity
- ✓ quantifiability
- ✓ the most often used simple communication model in communication theory
- ✓ model, which by dividing the communication process into individual units gave stimulus to creating communication models providing a thorough elaboration of their process
- ✓ intellectual inspiration for communication theoreticians leading to further theories and research – nowadays it is necessary to bring this scientific community back to life

3.3.3 The Weak Points of the Model

- ✓ **does not bear the content and meaning of the message in mind**

The model illustrates the mathematical theory applying to signal transfer and it is not the intention of the model to focus on the semantic meaning of the message or its effect on the audience. As Claude Shannon says himself (1948):

“The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. Frequently the messages have meaning, that is they refer to or are correlated according to some system with certain physical or conceptual entities. These semantic aspects of communication are irrelevant to the engineering problem.”

The word information, in this theory, is used in a special sense that must not be confused with its ordinary usage. Shannon himself noted to this topic when meeting the major scientists:

“I think perhaps the word ‘information’ is causing more trouble . . . than it is worth, except that it is difficult to find another word that is anywhere near right. It should be kept solidly in mind that [information] is only a measure of the difficulty in transmitting the sequences produced by some information source.”

The fact that “information“ in the context of Shannon’s mathematical theory has nothing to do with the meaning of the message leads to the fact that it is not possible to pay attention to the meaning (importance) of the message. There is no mechanism to hierarchically separate an important message from a less important one. By the term “information“ anything that may be coded and transmitted via a channel connected the source of information with the receiver is meant. Warren Weaver (1949):

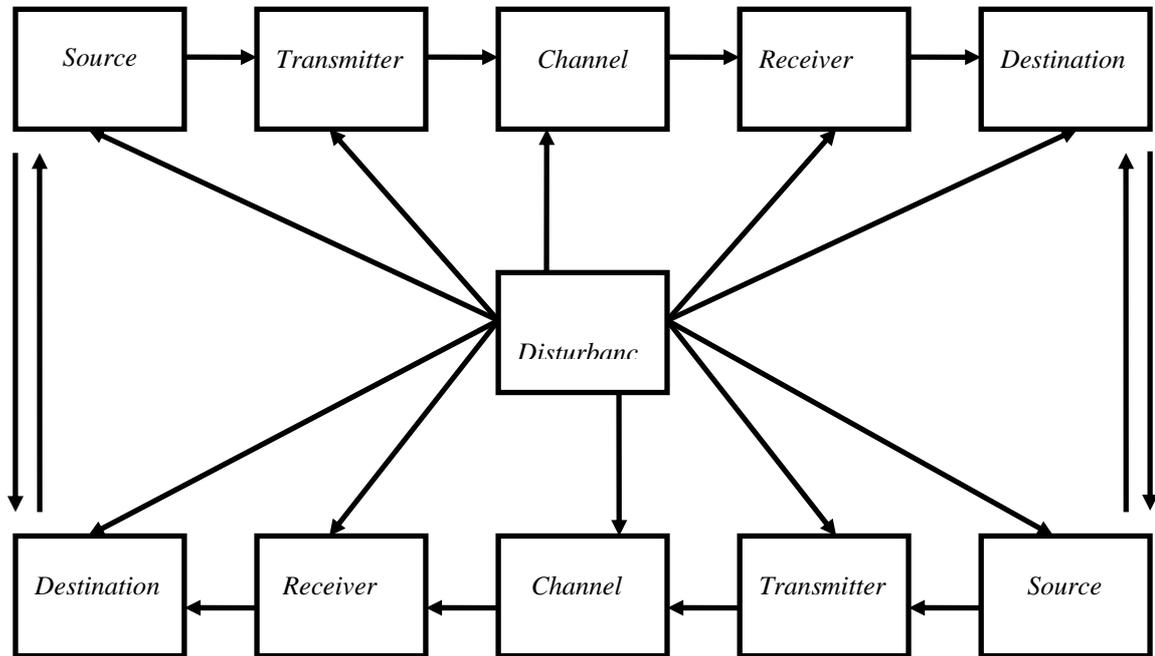
... the strange way in which, in this theory, the word -information- is used... It is surprising but true that, from the present viewpoint, two messages, one heavily loaded with meaning and the other pure nonsense, can be equivalent as regards information...”

✓ *linearity and lack of feedback*

Communication is marked as unidirectional only, so the information source lacks the very important feedback necessary for modifying the performance, the way of communication according to the needs and reactions of the receiver of the message. The information source is placed into the role of an active leading subject here, and the receiver is looked at as a passive goal absorbing information only.

In 1970, the model was expanded by the feedback by the theoretician **DeFleur** (see picture 8 of DeFleur’s model), adding further parts and introducing the term “meaning“. This is transformed by the source into “information“, sent by the transmitter through the channel and again changed by the receiver into “meaning“, delivered to the destination. The feedback rises the possibility of reaching izoformism, the concord between

“meanings“. It is the feedback that plays a significant role in checking the quality of information services.



Picture 8 DeFleur's model

✓ **the relationships and intentions of the participants of the communication are not taken into account**

The basis of communication itself, its original meaning in the sense of “sharing“ indicates, that the participants of a communication process are never isolated individuals. Also their intentions and intents influence the character of their exchange significantly.

The concepts of this theory are in fact mathematical and their intents were to apply them on technical problems in clearly defined conditions. That is why it seems at first sight that the information theory in social communication ignores the human factor.

✓ **excessive stationariness of the model**

The model suits illustrating a communication in space rather than in time, it does not take the change of the surrounding conditions, relationships and participants roles into account, neither the purpose of the given process.

- ✓ **the character of the given medium (channel) is not taken into account**

People have various attitudes to single kinds of media, they differ in their technological qualities and the amount of suitability to various kinds of communication purposes. The choice of medium can influence the form and also the content of the message, some allow for a direct feedback more than others...The medium is not a neutral agent in the process of communication.

- ✓ **other connections are not taken into account**

The meaning, the sense of the message is never fully isolated from its environment in a communication act, it is always under the influence of social, political, cultural, historical and organizational or situational phenomena.

Topics for discussion:

- How would I personally graphically illustrate a communication process? Would there be a difference in expressing it e.g. by a scheme of interpersonal or mass communication?
- How to indicate in an effective and lucid way the existence of time factor, environment influence, barriers or other variables influencing the shape and flow of our communication?

Independent work:

Choose from the personal or working life of both the scientists (Claude E. Shannon and Warren Weaver) events/facts/opinions, you were personally interested in.

Recommended reading:

Shannon-Weaver Model : Introductory models & basic concepts [online]. c2003 [cit. 2006-09-09]. The Communication, Cultural and Media Studies Infobase. Dostupný z WWW: < <http://www.cultsock.ndirect.co.uk/MUHome/cshtml/index.html>>.

SHANNON, Claude. *A Mathematical Theory of Communication* [online]. [cit. 2006-09-09]. Dostupný z WWW: < <http://cm.bell-labs.com/cm/ms/what/shannonday/shannon1948.pdf>>.

4 The Information-Communication Channels

*"The less people know, the more they yell."
— Seth Godin*

After having studied this material I should be able to:

- Distinguish formal communication from informal communication and their advantages and disadvantages
- Characterize horizontal and vertical channels in an organization
- Name the factors active during the process of message transfer in an organization
- Describe the features of the information transmitted by informal information channels

Key words:

organization, channel, information flows, vertical communication, horizontal communication, formal communication, informal communication, sharing information, analyses of ECCO flows

4.1 The Communication Channels

Communication among communicating partners happens through communication channels. Kunczik distinguishes six of them (KUNCZIK, 1995):

- **the auditive or vocal channel** (speaking, verbal and paralingual communication);
- **the visual channel** (facial expression, look exchange, gestures and movement of the body, the general appearance, interpersonal distance and/or using space for communicating in distance or closeness);
- **the touch or tactile channel** (e.g. touching, pushing);
- **the smell or olfactory channel** (perceiving the smell of the body);

- **the temperature or thermal channel** (feeling the physical warmth of another person);
- **the taste or gustatory channel** (perceiving taste).

We can see the communication structure in an organization as a **system of channels**, through which the messages flow, or patterns of interaction between the transmitter and the receiver, thus the **network**, a pattern of interaction among people forming an organization. The flow of information is provided by the system of information channels and networks in an organization (GOLDHABER, 1990). It should be considered that we basically talk about those two concepts – the information flow of the formal and informal character where the kind of information is one of the significant factors determining what kinds of information channels will be used in the course of the communication. Understanding the role of the networks and channels is necessary to obtaining an objective and real perspective of the flow of information in an organization.

4.2 The Formal Information Flows

Formal communication is **official, planned and it has its specific goals and is passed on** by way of communication paths resulting out of the company's organizational structure. With informal communication, we distinguish between **horizontal and vertical information channels**. Horizontal communication is **sharing information between single functional units on the same level of the company's hierarchy**. It often corresponds to channels and elements of the informal communication system, which bypasses formal organizational structure and hierarchy. It is very often the case that more departments or national units are working on the same issue and it is just this horizontal communication, if flowing freely, that can provide sharing new experience, solutions and information throughout the organization (Kanter, 1988).

4.2.1 The Formal Vertical Communication

Vertical communication is a **bidirectional communication between superiors and subordinates** and relates to lightness with which individuals can communicate up and down the organizational hierarchy. As new ideas and those who are trying to bring them about to life need strong support from the side of the executives, it is expected that the environment that has a positive relationship to vertical communication also has suitable conditions to generating and mainly presenting new ideas and their realising in practice.

I am going to focus on **formal** communication first and the main characteristics of **vertical** information channels:

a) it is a unidirectional (with no feedback) or bidirectional communication

In situations, where working duties and tasks are delegated, or where the employees are introduced to the organization's visions, and its goals, the information flow tends to be unidirectional. We perceive feedback with wholeness, hierarchy and openness as a basic concept of system theory and we distinguish between positive and negative, where as negative we consider the one identifying the deviation from the conditions assumed and the system customizes by repairing the deviations (the maintaining processes are depended on the feedback) and a positive one that stresses the deviations rather than signaling the need for repairing. The positive feedback is used for creating new conditions in the system rather than maintaining the old ones and it is the basis for the process of change and adaptation.

b) Information channels function as the organization's memory

How, why and by what is the content of a message transmitter in the information channel of an organization formed has a high testing value regarding the organization itself, and even though the main function is emphasised as the information transmitting that is necessary for coordination, understanding and performing tasks, another function mentioned the opportunity for using power, where the information channels are used as means for influencing and manipulating or as means for interpreting philosophy, visions and the organization's culture generally.

c) Information channels have several variables which significantly interfere into the process of message transmission

-

Active factors during the process of message transmission

During the process of message transmission within an organization, there are several active factors - **channelling, timing, editing and abstracting.**

Factors relevant in the area of **channelling**:

- The probability that a member of an organization accepts the information transmitted by any channel is influenced by the perceived quality of the information source
- The probability that the information will be transmitted via the information channel to an organization member is influenced by the price of communication technologies
- The probability that a member of an organization will participate in the information transmission is depended on the way they perceive the amount of their working duties

- The possibility that the message will be directed to a member of an organization is influenced by the way they perceive the relevance of the message for them personally

Factors relevant to the area of **timing**:

- The transmitter postpones transmitting the message until they start perceiving that the receiver is ready to pay attention to the message
- The transmitter postpones transmitting the message in case they are busy with other tasks of a higher subjective priority

Factors relevant to the area of **editing**:

the extend of editing the message is influenced by the feeling of the transmitter to what extend will editing the message lead to reaching the goal

- The level of editing of the message is influenced by the ability to chose a format of the message
- The tendency to edit the message is in direct relationship with the perceived data ambiguity on the basis of which the information is built

Factors relevant to the area of **abstraction**:

- the amount of information abstraction is influenced by the costs of storing and sending information
- the extend of information abstraction is influenced by the amount of tasks perceived by the receiver

d) the information channels are influenced by various views/perspectives of those receiving the message

Information needs of the individual users differ and this fact influences the state and course of the communication within the organization.

Formal communication of vertical information channels distinguishes two directions of the flow – down and up:

1/ **Formal vertical communication downwards**, as communication including the transfer of information from higher positions of the organization hierarchy to the lower ones.

In the historical context, the most information of formal communication flowed downwards. In spite of the attention that is devoted to this kind of information flow from the side of the superiors especially, this dimension of formal communication is effective in many organizations. In this context, the

paradox often occurs regarding the accuracy of the information, where on the basis of one downward information a state is created in the organization, where there is too much information, and on the other hand the employees of the organization repeatedly claim that they do not get important information regarding the issues that are important for them.

2/ **Formal vertical communication upwards**, as communication transmitting information from lower levels of the organization to the higher one.

The most important factor influencing the accuracy of the information flowing upwards is trust.

This statement is confirmed by the work of Read, Maier and Hoffman, who also worked with the issue of promotion motivation in an organization structure, which negatively influenced the very accuracy of information going upwards. (MAIER, HOFFMAN, READ, 2006).

In relation to formal communication, several results of research have been obtained connected to this area (GOLDHABER, 1990), e.g.

- a) Employees mostly prefer to get information rather than give it to the others.
- b) In the upwards communication, the leaders tend to be more perceptive to positive information from their subordinate and they tend to suppress the negative messages.
- c) The subordinates have a strong tendency to say to their superiors what they think they want to hear or what they want that their superiors hear.

4.2.2 The Formal Horizontal Communication

Formal horizontal communication relating to the flow of messages happening through individual functional departments of a certain level of an organization.

Horizontal information flow represents the flexibility in the organization structure, allows for an easier solution of problems, helps to coordinate tasks and sharing information between individual departments or working teams.

4.3 Sharing Information

There are a few factors influencing a successful sharing of information:

- a) The relationship between the transmitter and the receiver of the information
- b) The form and source of information
- c) Presuppositions “to get to know“ on the side of the receiver
- d) The transmitter’s abilities to share
- e) The context of wider environment

The high level of sharing information is connected to good working performance; on the basis of extensive theoretical research, we know that:

a/ scientist and engineers **with good working results** tend to have **higher frequency in contacts with the purpose of sharing information** with their colleagues in the organization

b/ **structure of the organization has high influence on communication** and it was the formal structure of communication channels that was marked as the main decisive agent in the flow of technical information between scientists in laboratories.

c/ it is this very **kind of information determining if a formal or informal communication channel will be used**. Individuals tend to use only informal communication channels for certain kind of information because they consider those channels natural for the given situation.

The climate of the organization supporting sharing information through informal information channels is dubbed as “strong standard of information sharing“. On the other hand, the climate that makes the formal information channels accessible and financially advantageous, is called “weak standard of information sharing“.

The process of sharing information can be perceived as **providing, donating information**, that means **communicating ones personal intellectual capital to the others and collecting information**, that is **addressing the colleagues in the matter of sharing their intellectual capital**.

It is of a logical conclusion, that the following communication areas are part of a satisfactory way of sharing of information:

- a) Communicating **work related** information

- b) Communicating **personal** information
- c) Communication information **of an operational character**
- d) Communicating **strategic** information
- e) General **upward** information communication

In this area, a rise of new specific terminology is happening, where e.g. Weggeman (2000) distinguishes between the term “knowledge source“ and “knowledge receiver”, Oldenkamp (2001) introduces the term “knowledge carrier“ and “knowledge requestor“.

The research regarding factors influencing this topic identified a number of variables from relative areas. From the “heavy“ topics it is the information-communication technology, and tools (Hlupic a kol. 2002), from the “light“ ones motivation (Hinds and Pfeffer, 2003), organization culture (Hlupic a kol. 2002) and communication climate (Van den Hoff and de Ridder, 2003).

4.4 Informal Communication

Informal communication includes **interactions that are not included into official information channels** and in their graphic expression, they are associated with a wine grape shape. The influence of information flowing through informal information channels not only has significant impact on the **expectations and value system of the members** of the organization, but also on the **general performance of the organization**. The research of communication theoreticians proves that information in its unofficial communication channels is a substitute for a non-functional formal communication and it originates under the presupposition that the information transmitted via official communication channels is either **insufficient or ambivalent**. Information in unofficial communication channels is considered to be an inevitable part of communication in an organization. Attempts to control these information channels also appear on the side of the executives of the organization.

Information transmitted in unofficial communication channels has the following features:

- a) The information transmitted is more often accurate than not
- b) Generally, it shows the sign of incompleteness
- c) It is fast

- d) Informal communication as a source of a certain information disappears as time passes
- e) This information is treated more freely and with more liberty than in the official information channels
- f) The information is often considered a news in those channels
- g) People treat the information they decide to transmit in this information channel selectively and discriminatively

To describe the flow of information in communication channels of an organization, the analytical tool **ECCO analyses** (Episodic communication channels in organizations) can be used.

As it was mentioned in the beginning, we can look at communication in an organization also as a **pattern of interactions between the transmitter and the receiver within the network of the relationships of their members, where we can use the relationship network for collecting information from various levels of the organization hierarchy, to spread information inside the organization, to exchange information and knowledge.** The transmitter same as the receiver can have different role characteristics, e.g. :

- a) **Star** – always having high level of interaction with the other members, frequently transmitting and receiving messages
- b) **Liaison** – connecting two or more members who would otherwise be not connected to the others by any information channel
- c) **Bridge** – connected by a multiple link with many members of the system
- d) **Gatekeeper** – regulating the information flow going from one member to the other
- e) **Isolate** – having no bond to another member of the system with the tendency to avoid the information flow

Topics for discussion:

- What are the advantages and disadvantages of the information flow with no feedback? Illustrate the possible scenarios of negative consequences unfavourable for the organization and also for the individual.

Independent work:

Chart the outer informal communication of your municipal library (so from the inside out, from the library to their users).

Recommended reading:

GOLDHABER, G.; BARNETT, G. *Handbook of organizational communication*. Norwood, N.J. : Ablex Pub. Corp., 1990.

BOUWMAN, H. *Information and communication technology in organizations : adoption, implementation, use and effects*. London ; Thousand Oaks, Calif. : SAGE, 2005.

5 The Information and The Communication Climate in an Organization

" <http://www.grantland.net/communication.htm> "

After having studied the materials I should be able to:

- Define the term “communication climate“ in an organization
- Characterize the features of an open and closed communication climate
- Theoretically describe and graphically illustrate the model of a communication climate by Robertson
- Talk about sharing information
- Explain the term “communication audit“ and name the individual kinds of communication audits

Key words:

Information, organization, communication climate, sharing information, Robertson, models, information flows, openness, adequacy, communication unit, ICA audit, OCD audit

5.1 The Information and the Organization Environment

Recently, the word *information* appears more than before in research and in theoretical work of communication scientists in an organization. Information appears united in messages and in this mechanistic conception it moves from one point to the other within an organization. It has several shapes, differs in quality, can be part of a message that is vague or ambivalent, influences the amount of insecurity people face in the organization, can be edited by individual employees, does not need to reach its destination in time or is received in such amount that it can not be used in an effective way.

In a united association, terms like **network, vagueness, message, dosage** appear, mainly in the years of 1985-1995 of the origins of technology. Even though various information and communication technologies play a significant role in forming and influencing the term “information flow“, the

essence of information itself stays constant, not bearing in mind the shapes of the channels, elements and bonds of the system.

Every organization can be perceived as a **communication network**, where the main part is **information** (message – content - meaning) and its **flows** (channels - bonds). In this communication-information concept 6 major aspects are emphasised: **source, message, channels, receiver, effect and feedback** (Corley, 1975). **Communication in an organization thus responds to the flow of messages in the network of interdependent human factors and the way the information (message) is spread within the formal structure of the organization.**

5.2 The Information and an Open Climate

When using the term “communication climate“ we first have to be aware that in the context of the organization environment it is often mistaken for the term “organization culture“. The character of this term was clearly depicted by Martin Bower, the founder of the McKinsey & Co. company, by his famous statement: “*the way we do it here*“. In his self-confident briefness he talks about the individual parts of this concept, which are **organization norms, values, rituals, myths, language and other specialities in the environment of the organization that characterize it in a specific way and thus distinguish from others.** The climate is thus understood as only one aspect of the organization culture –the belief patterns and expectations shared by the members of the organization – that is how contented the employees are with certain activities of the organization.

Recently, the communication climate has been differentiated from the wider context of the **organization climate**, as it pays attention to communication phenomena exclusively, as e.g. opinions regarding how the employees are perceived by the executives of the organization or the exactness of the information spread in an organization, etc. The communication climate can be defined as the inner environment of information exchange between the members of the organization with the help of formal and informal networks. It mostly consist of “how” the members of the organization communicate as opposed to “what“ they communicate.

5.2.1 An Open Communication Climate

Communication climate is often characterized with the help of the **indicator of quality and flow of information.** Generally speaking, each communication process starts with providing good information. **Communication climate is open if the information is flowing freely, it is closed if its flow is blocked in some of its phase.** In an open communication climate, the employees feel free to express their opinion and discontentment towards their superiors, but also suggestions of new solutions or improvements. They speak freely among themselves about important tactical decisions but also their personal or

working interests. The information flows without distortion and deformation in the rising, falling and horizontal direction.

Research has shown, that **open communication climate has the following characteristics:**

- 1) it is **supporting**
- 2) it is **rich in participation and activity of their members**
- 3) it is **based on trust**

Supporting environment

In the so called “supporting“ environment, the employees pass the information on to their superiors with no hesitation, with trust that the superior will accept it willingly whatever colouring it has for them (favourable or non-favourable). If the members of the organization feel vulnerable or unsupported, emotions like fear, shame or pride discourage them from sharing information.

In a supporting environment, the members communicate more willingly from more reasons:

- 1) the stating mechanism does not take away their respect and dignity
- 2) they have no reason to be afraid of revenge for sharing unpopular information
- 3) they are rewarded for their directness and openness
- 4) they are appreciated as important sources of information critical for fulfilling the success of the organization

Environment rich in participation/activity/joining in

In this environment, the employees feel heard and they have the feeling that their word has its significance. The key to encouraging the employees into participation into communication, activities of the organization is taking steps, negotiating from the side of the executives. Those for whom the message is meant, have to act according to the character of the information they obtain. The key performers, directors and leading employees should listen to complains, discontentment or suggestions of the members of the organization, and answer in words and deeds.

Environment based on trust

All the parties of the information exchange transmit the information in the shape they obtained it in. The members of the organization have to trust their

information sources. People often banish those information sources that have shown to be unreliable or not true.

5.2.2 A Closed Communication Climate

Such a climate is characterised **by the high frequency of occurrence of communicational barriers**. As a communication barrier we will consider any kind of obstacle in the process of communication caused by the phenomena disturbing its natural course. The information barrier is listed as specific communication barrier.

A phenomenon often occurs, where the individual “exposes“ a certain kind of communication barrier due to protection from attack and thus reaching a certain kind of psychological safety. An executive member, e.g. someone who is bad at taking criticism, does not share the kind of information that would expose them to criticism from the side of the colleagues or superiors. If such people happen to end up in leading positions their style is usually characterised by giving orders without any possibility to discuss them (feedback by Shannon-Weaver), they tend to work in a routine style and in perfectly controlled situations.

In an open communication climate, this kind of people use protective barriers and mechanisms to make sure the environment is more predictable and safer for them. They stay silent during meetings, don't talk, because opening up makes them vulnerable. They could be asked to express themselves to a topic or have a perspective to it and they do not have the facts ready in their hand. They could end up being pushed to defend a non-popular solutions. In a busy discussion with the others they could give the impression of being incompetent by making a mistake in terminology or applying logical skills wrongly. Or they feel fear of being caught making a mistake or they will be disrespected for asking a silly question or making a nonsense comment. Unfortunately, such psychological barriers result in disturbance of the flow of information and knowledge and their natural sharing.

Buchholz (2001) discovered that if during the course of communicational exchange defensive barriers occur and the flow of information is limited, a closed communication climate is created, which then is a cause of losing profit, leads to general dissatisfaction and is damaging the name of the organization. On the other hand, an open communication climate improves human relationships and employees feel freer in expressing their comments, complaints and opinions regarding the rules and regulations of the organization.

5.3 A Model of a Communication Climate

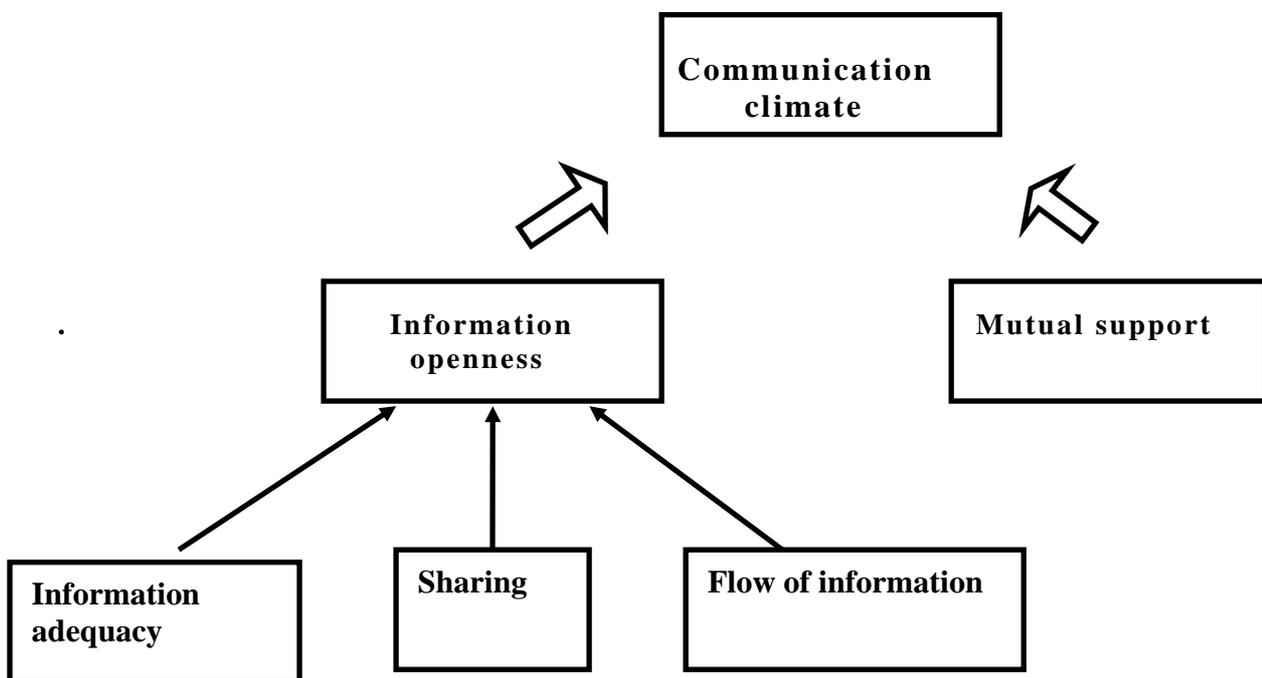
Ed Robertson is the author of the basic model of a communication climate (see picture 10 of the model of a communication climate of Ed Robertson).

This model creates a **communication climate that is highly open in the area of information flow and highly supporting mutual human interaction, so it is a system with a high number of mutual connections.**

Those two main dimensions of effective communication are based on two most common, but evidently different ways of how people see communication. From the perspective of “*Information openness*“, communication is perceived as a mechanical process of sending and resending information from point A to point B. The verbal expressions often used in this concept are “hand over a message“ or “share information“.

From the other perspective of “*mutual support*“, communication is perceived as a human process, where there is more attention paid to how people communicate rather than what they communicate. This theory is based on psychological and sociological disciplines focusing on communication as an act, deed or form of treatment influencing the way people feel with each other.

Some of the interpersonal skills of a leader which positively influence the communication climate in an organization are: active listening, emphatic listening, exactness check-up, making clear of the meaning of the message received, offering and demanding constructive feedback, etc.



Picture 10 model of Communication climate by Ed Robertson

5.3.1 Information Openness

Information openness, sometimes called communication openness, is **the level of the willingness of the organization members to send and receive messages**. There are 3 parts of information communication openness, and these are:

1/ **Information adequacy** = the level of split/imbalance between information that the organization members wished to obtain and which they in reality obtained. Individuals need to get an adequate number of information to their relevant topics if they are expected to perform well.

In their research, Zimmermann, Syber and Haas (1996) suggested a hypothesis rebutting the information-communication myth regarding the amount of the information provided. According to the results of their work it does not matter what amount of information people get they still keep announcing that they want more. In this case, the myth is based on the supposition that by providing more information this “hunger for information” disappears or at least diminishes. Another research in this field (Hargie, Tourish, Wilson, 2002) rebutted this hypothesis and enriched it by the factor of the theory of indefiniteness reduction. It was based on the fundamentals of theoreticians Sias and Wyerse (2001) and their knowledge, that if there is a state of higher insecurity, the information needs of the persons concerned will also rise.

The term information adequacy was explored also in connection with responsibility, devotion and commitment of the employee in the organization. The existence of a direct relationship between those two variables is proved (Montgomery, 1991).

2/ **Information flow.**

Obstacles need to be removed from an open information flow, in both vertical and horizontal direction, so a free exchange of opinion, thoughts and ideas can happen within an organization. The ideal state is when the information flows flowingly from above downwards (superior – subordinate), from below upwards...and that it flows horizontally between the working groups and teams. For most employees, their direct supervisor is a generally preferred source of information. (Curley, 2000).

3/ **Sharing information.**

Communication climate of an organization is the critical factor in determining if and how knowledge will be passed on (Albrecht and Hall, 1991). The macro communication climate is then as open and supportive as the individual communication micro climates in the organization.

The key characteristics of a communicational climate are the **horizontal flow of information, openness, vertical flow of information and information reliability**.

To the topic of **communication openness**, devotees of two different opinions express themselves. Total openness can be of harm to the organization – this opinion is based on the worry that it is better not to share some strategic information due to loss of competition position (Elsenberg and Witten, 1987). Or the opposed argument regarding the necessity of a more open communication and especially the need for sharing ideas and opinions; with the purpose of generating new ideas and solutions (Kanter, 1988).

Information reliability is the level on which the individuals obtain the information in time, and how correct and exact it is. If we perceive the information to be correct and exact we trust it more and then we use it in a more productive way. As opposed to the information which we perceive as not being so exact, we show a higher level of indifference, with no regard to the information actually being right or not.

Larsen and Folgero (1993) distinguish between a **supportive and a defensive communication climate**, where the supportive climate is characterized by open exchange of information, accessibility of colleagues, cooperating and confirming interaction links and a general culture of sharing knowledge. Ali and co. (2002) came to the conclusion that it is this very communication climate that is the basis for creating, distributing and continuing existence of organization's knowledge that is being shared. It is proved (Hooff a Ridder, 2004), that constructive communication climate positively influences the extend into which the organisation members provide and collect knowledge. **The communication climate was found to be the decisive variable in the process of sharing knowledge.**

5.4 The Communication Audit

Not only does information as one of the main elements of communication occur in the relationship with the term communication climate, but also in the area of communication audit. **The communication audit is characterized as an objective message about the state of internal communication in an organization** (Frank and Brownell, 1989) and to the executives, it offers an independent picture about what is really going on as opposed to what the executives think or what they were told. The executives need to know who they are communicating with, via what channels and with what effect, what content they should communicate, what topics are being talked about in the organization, from what sources most employees get their information and via what channels they reach it (communication face to face or mediated), and the implication of this all on the relationships at work. Certain responsibility for the flow of information in the organization should be appropriate. On the practical level it means, that if a necessary information does not reach its receiver, the blocks in information channels have to be identified.

5.4.1 The ICA Audit

The ICA Audit (**International Communication Association**) is a tool by the implementation of which the **main topics, sources and channels of communication** can be described, **the quality and functionality of the information is taken into account and it determines the negative and positive experiences of the members of the communicating system.**

Goldhaber and Rogers (1979) identified **the key targets of a communication audit:**

- To set the amount of information (excessive overload or on the contrary, lack of information), connected to the main topics, sources and channels of communication
- To evaluate the quality of information communicated from the source or, to the receiver of the information
- To evaluate the quality of communication relationships, first of all the amount of interpersonal trust, supporting togetherness and general contentment with work
- To identify informal communication networks and compare them to the flows planned or to the formal flows
- To identify the people who function as potential bottlenecks or their gatekeepers by comparing the real communication roles of key employees to their official roles
- To identify the category and set examples of commonly occurring positive and negative communication experience and events
- To describe individual, group and organization patterns of a real communication behaviour when it comes to information sources, channels, topics, length or the quality of interaction
- To provide general recommendation requiring change or improvement in the attitude, behaviour or skills of the participating communicator

This diagnostic tool officially called the **ICA Audit Survey**, consists of 122 questions that can be further divided into 8 main sections:

- The amount of information received regarding a certain issue versus the amount of information required
- The amount of information actually sent versus the amount of information we wish to send regarding a certain issue
- The amount of information we provide as reaction or feedback to a piece of information that had been sent to us (a follow-up) versus the amount we wish to give or from the other perspective – the amount of information we get as response or feedback to the information sent by us versus the amount we wish to get
- The amount of information received from various sources versus the amount we wish to receive from those sources
- The amount of information received through various channels versus the amount we wish to receive via those channels
- The timing of the information from key sources
- The quality of relationships in an organization
- Contentment with the organization output

5.4.2 The OCD Organisational Communication Development Audit Questionnaire

Another instrument that can be used to analyse the task and functioning of information in communication of the organization is **the Organisational Communication Development audit questionnaire (OCD)**. The intent of Finnish theoreticians under the leadership of Osmo Wiio was *“to find out how well the communication system helps the organization with pursuing its goals in desired results“*.

This questionnaire built on previous LTT research tested in 23 Finnish organizations (more than 6000 employees took part in this) and it consists of 76 items united in 12 areas:

- General communication contentment
- The amount of information received from various sources - now
- The amount of information received from various sources – ideal state
- The amount of information received regarding certain work topics - now

- The amount of information received regarding certain work topic – ideal state
- The areas of communication that need improvement
- Contentment at work
- Accessibility of the information system
- Time organization during the working day
- General communication behaviour of the respondents
- Specific questions regarding the organization
- Patters of searching information

Topics for discussion:

- If I wanted to perform a questionnaire solution for examining the role/function/effectiveness/etc. of information in communication of an organization, how would the individual questions given to the respondents sound?
- What problems during creating, setting, evaluating and implementing the results of a communication audit would I expect?

Independent work:

Elaborate a form of a communication audit of your class/department on the theme: Identification of informal communication network and comparing it to formal flows that is supposed to discover if information is communicated more in the formal or informal way? What channels are used? For what kind of information? Are the formal and informal networks mutually substitutable?

Recommended reading:

GOLDHABER, R.; ROGERS, D. *Auditing organizational communication system* : The ICA communication audit. Dubuque : Kendall/Hunt, 1979.

HOGARD, E.; ELLIS, R. Evaluation and Communication : Using a Communication Audit to Evaluate Organizational Communication. *Evaluation Review*. Roč. 30, č. 2. 2006. s. 171 – 187.

6 Communication Barriers in an Organization

“God don’t make no mistakes. That’s how He got to be God.”

Archie Bunker

After having studied the material I should be able to:

- Distinguish and talk about personality communication barriers on the side of the communicator and the receiver
- Be aware of the outer and non-verbal barriers we create ourselves
- See and be able to define barriers in communication channels, use examples to illustrate

Key words:

Communication barrier, information barrier, non-verbal communication, paralinguistic, verbal performance, language style, vocabulary, listening, outer barriers, communication channels

A communication barrier is considered to be any kind of obstacle in the process of communication caused by the phenomena disturbing its successful flow. **An information barrier** is a specific type of communication barrier. To the typology of **communication barriers** the illustrative Shannon-Weaver’s model is used, often quoted in the theory of communication and information studies, where specific kinds of barriers are linked to the individual components of a communicative act:

- a) signal
- b) message
- c) information source
- d) transmitter
- e) receiver

6.1 Personality/individual barriers

6.1.1. The Communicator's Side

Verbal Communication Barriers

1/ **Language style** – language style does not only differ on the individual level, from one person to another, but also one person uses more different styles depending on the language environment, e.g. women use more expressive language, descriptive, using feelings, they use less slang, it is easier for them to enrich their logical reasoning by emotional components.

Dialect – language used by a certain community that is isolated to a certain degree. Dialect has a unique grammatical structure and specific way of pronunciation. Dialect lowers credibility – a study undertaken in the English territory of Canada – the content of the dialogue was identical in both cases – English Canadians were considered more credible and more qualified than French Canadians.

Slang/jargon/professional slang/the way a certain generation speaks – they have a significant psychological function in the study of Mr Křivohlavý – delimiting the members of one group from another group, strengthening the feeling of belonging even at the cost of communication barriers. The notorious slang of computer and internet users (e.g. ego surf, geek, uptime)

2/ **Vocabulary** – the extent of vocabulary has to be accustomed to the level of the listener. A low level of emphatic perception is connected to this.

3/ **Incomprehensible thought, opinion and message expression.** With technical scientists – lack of communication skills.

4/ **Inadequacy of the information and its distortion.** Wordiness – Keep it simple!

5/ **Not being prepared – from the point of view of the language and knowledge**

6/ **Inadequacy in paralinguistic aspects of verbal performance.** Paralinguistics studies extra creating the denotation meaning of the language by features of connotation, that is, what the speaker is strengthening or weakening, challenging or confirming in the content of the performance, shows his or her attitude.

The features of a paralinguistic performance:

- *Loudness of the verbal performance* (intensity)
- *High or low pitch* – each of us have a different voice pitch, its colour. It is proved that lower voice is more convincing and trustworthy than higher voice
- *The speed of the verbal performance* - fast speech is difficult to perceive and it easily leads to tiredness as the preceptor has to concentrate with higher effort to get everything which leads to faster attention oscillation. Each person has their own individual pace.
- *The content of the speech* - the amount of words production differs. Statistically, women produce much more words than men, more than twice as many. The verbal activity of the participants ratio is important. Often, **intrusion** (interrupting the speech) happens between the participants. If the intrusion between two people happens in a length of time it is called a **dueto**.
- *The flow of the speech, pauses* – monotonous flow is characteristic for schizophrenia, for instance. But a mentally healthy person can also have a higher rate of extreme continuous speech that does not make a good impression, it is uncomfortable to listen to.
- *Empty phrases* – words often unconsciously used as a stereotypical filling between words and sentences. („like“, „you know what I mean“, „actually“, etc.)
- *Mistakes in speech* – *articulation, incorrect pronunciation, mumbling, stuttering, swallowing ends of words up...*

7/ Inner Barriers of the Communicator

The most common inner barrier is fear of failure, which gives a feeling of tightness. The capability to respect lower communication level of the partner. It is possible to respect the higher level of communication of the partner, but is hard to adjust to his or her level of verbal performance. It is a problem for us to express that there is something we do not understand. The emotional state – e.g. anger in conflicts with the partner. Barriers in the attitude in the form of xenophobia, stereotyping – putting the partner into the category through which we match them with all other qualities this category involves, disrespect, resistance or dislike towards the partner.

Barriers of Non-verbal Communication

- Speed of movements – slow/fast/. Unusual movements - shaky/obsessive.
- Staring at people x avoiding eye contact
- Proxemic barriers of distance. Each person has their own personal space.
- Crossed arms, legs + physical barriers as table, water bottle in between the communicators.

- Gestures. Anger. Intercultural difference.
- „Doodling“ . Rearranging materials.

6.1.2 The Receiver´ s Side

Barriers in Listening

One of the most important skills in the process of listening is to be ready to listen. If we listen and think what we would say to the other or if we even prepare our answer beforehand, we are not listening.

- Physical obstacles (trouble hearing, tiredness, sitting position)
- Distorted perception where the receiver chooses only some aspects from the message and on their basis evaluates the intent and content of the communication
- Different life experience/different opinion/absence of some life experience
- Disinterest in the content
- Evaluating the communicator (mistrust, aversion, prejudice to their culture)
- Problems with language, slang, level of technical knowledge
- Making own conclusions, thinking “ahead“ of the speaker
- Psychological barriers: state of stress, fear as a strong learning motivator but too strong becomes a barrier. Impatience. Listening under pressure (work, financial, we “have to participate“) shyness. Resistance to learn (reason:“been there, done that 1000times”, “I’m too old for this“)
- The mind is preoccupied by something else – worries, duties, daydreaming“, „detouring“

6.2 Outer Barriers

- Unusual environment
- Being disturbed by somebody or something (does not even need to interrupt the speech, only their presence is enough and the feeling that they are listening)
- Noise/temperature/lighting
- Space limitations (not enough space for storing things, not enough space for moving)
- Time limitation

6.3 Barriers in Communication Channels

The function of the channels is to give the message as accurate as possible. The choice of the channel itself helps the receiver understand the importance of the message. Take into account the abilities and knowledge of the receiver of the message.

- limited scale of technical devices, their faultiness
- twisting the message in the course of the flow through the communication channel
- filtering the message and its purposeful editing
- overestimating the meaning of particular communication means (written communication)

If, during the course of communicational exchange, defensive barriers occur and the flow of information is limited, a closed communication climate is created, which is then the cause of losing profit, general discontentment and damaging the organizations reputation.

Topics for discussion:

- What time of communication barriers do you most often encounter? In what areas? Which do you dislike most and why?
- What types of communication barriers do I create consciously and what is their function in my life?

Independent work:

Write down the possible barriers in listening that may disturb the course of interpersonal communication.

Recommended reading:

Handbook of communication competence / edited by Gert Rickheit, Hans Strohner. - Berlin : Mouton de Gruyter, 2008. 538 s. (Handbooks of applied linguistics ; 1)

LARSEN, S.; FOLGERO, I. Supportive and defensive communication. *International Journal of Contemporary Hospital Management*. Roč. 5, č. 3, 1993. s. 22 – 25.

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