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# COMMUNICATION BEHAVIOUR

## UTILITY AND EMPATHY AS KEY VARIABLES

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### Abstract

This theoretical analysis continues to develop the Theory of social communication published by the author in the Proceedings of International Masaryk Conference for PhD students and young researchers in 2014. It aims to explain key variables of communication behaviour of individuals or groups which is always considered to be goal directed. To demonstrate the nature and causal mechanism within the processes of a specific kind of communication behaviour, we compare and analyse existing knowledge and scientific research results from various fields and develop an argument which helps us to establish a firm base for the introduced theoretical assumptions. Findings of this paper can be used and verified by experimental research.

*Keywords:* utility, subjective, expected-utility, empathy

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### 1. Introduction

In this paper, I will focus on a detailed description of two key variables – utility and empathy which are introduced and analysed in the Theory of social communication (TSC) further described and sourced in the following chapter. I argue that communication behaviour of individuals or groups is always goals directed (concept of psycho-physiological needs) and it is affected by real or anticipated change in overall utility. O. Hargie and D. Dickson also stress the purposefulness of communication when stating “communication is far from idle or aimless but is conducted to make something happen — to achieve a goal of some sort” [1]. Furthermore, the character and form of such communication behaviour depends on the actual ability to feel and express empathy towards other individuals. We can and do treat other people on a scale from subject to object when in the former case we can recognize their human value and share appropriate mental states with them while in the latter case, we fail to treat affected subjects as equal beings. It is impossible to provide a definite analysis of all possible reasons behind our inability to express minimal or appropriate level of empathy because many of them are not yet fully understood. From an historical perspective, communication behaviour of individuals or groups

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becomes cruel or inhumane when we cannot or do not want to share mental states with them, i.e., through direct experience or language.

## 2. Utility loop

The concept of utility loop describes the relationships between individuals and groups from a perspective of maintaining and improving existing utility or creating its new forms. The basic assumption for which I provided supportive evidence in my previous analyses is that communication behaviour of any individual or group is affected and motivated by a specific change in utility. I claim that if there is no effect on overall utility, there is no communication behaviour. We can perform appropriate forms of communication behaviour oriented towards other individuals or groups directly, on their behalf, or we can also be represented by the various groups with which we affiliate.

Communication behaviour derives from and is organized around the concept of one's self – identity with its individual and collectively shared elements and characteristics. In the TSC, it is expressed as follows:

$$pS + cS = \Delta rS \rightarrow Si \rightarrow \Delta Scmb \quad (1)$$

The 'S' stands for a subject and the first two stages of cognitive processes (p - perception and c - computation) determine a relevant change in the dependent variable:  $\Delta rS$  - representational stage of the world (Reality: natural, social and virtual) which further serves as a basis for creating a permanently modified and updated concept of the subject's individual identity ( $Si$ ). This identity guides his/her communication behaviour ( $Scmb$ ).

We can expect a specific change in communication behaviour when:

- the existing utility is affected negatively,
- there is a chance to create new utility functions,
- there is a way to increase the existing utility function,
- or during standard maintenance processes [2].

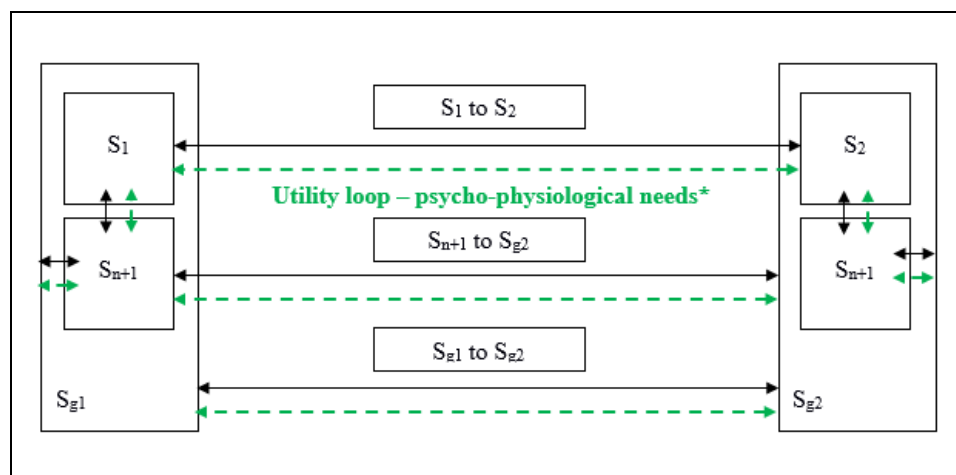


Figure 1. Utility loop – Theory of social communication.

Communication behaviour can take place between individuals within the same group or across various groups as shown in Figure 1 and it is always accompanied by a specific utility loop covering individual or collective psycho-physiological needs ( $S$  – subject,  $S_g$  – group of subjects). I should probably explain what I mean by the term group here. Whenever we use plural form of ‘I’ in any language, we establish a group whose members, at least from our personal perspective, fulfil precisely defined requirements – so called necessary and sufficient conditions for anyone who is to be defined as a member of this specific category/group. Some such categories/groups are permanent and others temporary with differing life spans. For example, by being born and living on this planet I belong to the group of people inhabiting the Earth. It is very likely, considering the lives of all previous generations, that I will stay a permanent member of this group until the end of my life. I started with such a general and superordinate category on purpose, because it also represents humanity as a whole. This category is further divided in our minds (individual representations of reality) into subordinate categories which represent whatever concepts we have created to divide people into different groups. Many people try to promote the values of humanism today, but despite me sharing the same values and ideas, I must acknowledge the observed historical evidence and state that people’s communication behaviour is affected by evolution and our ingroup/outgroup psychology very negatively. From an historical perspective, the rise and prosperity of empires and civilizations have stemmed from the oppression and exploitation of their competing counterparts.

It used to be assumed that an individual has the capacity for a full objective and comprehensive evaluation of reality. Consequently, his or her decision making and communication was expected to be optimal and rational. Theories with such assumptions tend to be normative but experimental research in Cognitive psychology and decision making focused more on people’s real-life performance. Relevant descriptive theories show that we tend, in many cases, and due to natural limitations and design of our cognitive system, to apply quick cognitive solutions which lead to false conclusions and thus negatively affects our communication behaviour and overall utility [A. Samson. *The Behavioral Economics Guide*, 2014, 1-9, <http://www.behavioraleconomics.com/BEGuide2014.pdf>,].

A different application and definition of the term ‘utility’ was already noted by J. Baron who analysed the differences of meanings in discourse. He introduced and used the term ‘expected utility’ which describes and expresses the reality of human decision making when there is uncertainty, i.e., when we do not have enough of relevant information or are not able to adequately process available information. In such situations, we must make an estimate of probability which determines the nature of our communication behaviour [3]. It’s the deviation in the area of probability estimates which are often used as examples of people’s irrational communication behaviour. The fact is that the Theory of probability was fully developed only in 17<sup>th</sup>–18<sup>th</sup> century and its complete axiomatic definition took another two hundred years [T.M. Apostol,

*Calculus*, Vol. II, <http://homepages.wmich.edu/~mackey/Teaching/145/probHist.html>]. However, application of this theory in everyday life is in stark contrast with our intuitive thinking which evaluates reality not in statistical terms but rather in the emotionally driven adaptive pleasure-fear mechanism.

### **2.1. Subjective expected-utility**

In Cognitive psychology and Decision-making science, we can find a modified term of subjective expected-utility which reflects on and describes real life conditions under which people make their decisions. K. Stanovich suggests the following categories by which we can describe and analyse decision making situations with an application of subjective expected-utility. In a simple decision-making model, we always consider:

- 1) possible actions – forms of communication behaviour in the world,
- 2) possible outcomes or states of the world,
- 3) evaluations of the consequences of possible actions in each possible states of the world [4].

It is well known that the steepness of the utility function differs above and below the status quo (positive and negative utility) which serves as a basis in decision making processes. Generally, we are considered to be rational when our preferences do not change and are invariant under different representations of the problem at hand but often it is not the case [4, p. 28]. The concept of subjective expected-utility helps us to understand and explain observed anomalies in decision making situations when a subject's communication behaviour is characterized as irrational. Unfortunately, being rational or irrational does not have a neutral connotation but because of people's preference of positive emotional states it is rather negative. Being rational might be seen as not being emotional which creates a perception of two opposite categories. The definition of the term in Oxford dictionary defines the term 'rational' as: "Based on or in accordance with reason or logic" [<https://en.oxforddictionaries.com/definition/rational>]. I suppose that the relationship of the majority of population with formal logic does not help to foster a positive attitude to this term either.

Some forms of irrational behaviour, with low impact on utility functions, might belong to the category of natural adaptive functions which relate to exploring the environment. A mix of strategies, a change of attitudes and forms of communication behaviour allows an individual to explore a broader range of possible outcomes. This, in turn, helps him or her to extend the range of direct experience, modify an existing representation of reality and align it with future perhaps more optimal and efficient forms of behaviour.

## **3. Empathy**

The goal of many scientists has been to explain the origins and causality of human cruelty. I think that it is not necessary to describe Milgram's experiment in which an unexpected proportion of subjects expressed

pathological forms of antisocial behaviour [5]. Many times, cruelty is not expressed by a direct action but by an inaction or passive acquiescence to authority. Despite the many variables which influence these experimental settings we can firmly conclude that even good people are able, under certain conditions, to act unpredictably or even cause suffering and physical harm to others.

Today we know that life conditions during early developmental stages have enormous impacts on an individual's behaviour and relationships later in life. J. Bowlby summarized the findings of previous research and expressed them, together with his own understanding of the topic, in the well-established 'Attachment theory'. The ability to perceive ourselves positively in the world and relationships as well as the ability to understand and feel other people's mental and emotional states in adult life depend on the extent of care, support, and security we had experienced as children [6]. Natural forms of empathetic behaviour do not occur among individuals who were exposed to abusive treatment by significant others or to deprivation in fundamental emotional and social experiences.

In terms of the Theory of social communication, we can say that a lack of appropriate and sufficiently diverse direct or indirect experience (1<sup>st</sup> and 2<sup>nd</sup> stage of cognitive processes) will consequently deprive an individual of an ability to share appropriate mental states with others. At the end, it will automatically lead, in case of missing reflection and realization, to sociopathic forms of communication behaviour which cannot consider other people's needs or mental states. S. Baron-Cohen characterizes this situation as zero degrees of empathy being negative. It is when "you have no awareness of how you come across to others, or how to anticipate their feelings or reactions. ... The consequence is that you believe 100 percent in the rightness of your own ideas and beliefs, and judge anyone who does not hold your beliefs as wrong or stupid." [7] Some people with such attitudes come into conflict with social norms and the law and end up in a prison system. That is exactly where most of the research regarding these individuals has been done. R.D. Hare and his Psychopathic checklist – revised (PCL-R) is used as a standardized tool to evaluate relevant personality traits. In his book 'Without conscience' he states that many people affected by an inability to recognize, express or share a broad variety of mental states with others are not in a prison system but live a regular life among us. He estimates that the prevalence of sociopathy/psychopathy is similar to the prevalence of schizophrenia (a conservative estimate: 2 million people in North America, 100 000 in New York) [8]. Hare's further research with P. Babiak was focused on top corporate managers and the results were published in their mutual book 'Snakes in suits: When psychopaths go to work'. They claim many managers express more than just a few of the twenty pathological interpersonal, emotional and lifestyle traits of behaviours monitored by the PCL-R [9].

It is not my intention to make any evaluative judgement about people with low empathy level. Considering the harshness of life conditions and experiences of many previous generations; it must have influenced and modified specific genetic predispositions which are so common today. Nobody chooses their genes or can control how their brain biochemistry operates and not everything is possible to change through mere self-reflection. My goal is to identify and describe a variable which significantly affects the nature of communication behaviour of individuals and groups in modern societies. Further analysis in my research is focused on manipulative aspects of such communication.

### ***3.1. Subjective expected-utility***

The perception and understanding of ourselves and others in a specific social configuration depends on our ability to perceive and share mental states and explain communication behaviour from a third person perspective. From an ontogenetic point of view, we can conclude that our own knowledge and skills stem from simple observation and mimicking and are consequently further developed through our own experience – communication behaviour. Individual and accurate interpretation of reality – understanding of possible states and characteristics of objects plus the needs and expectations of other agents/subjects is a crucial prerequisite for a successful adaptation of every organism in each environment. The recent phenomenon of quite extensive playing digital games by a considerable proportion of the youth will certainly have an influence on individual or group identity. It will also modify subjects' representational stage of reality which is being replaced by virtual reality and it will consequently affect players' communication behaviour – overall social interactions [10].

J. Baressi and C. Moore introduced the 'Intentional relations theory' about two decades ago and since then the research in this area has become an important part of our understanding of the human mind and social interactions. The key fact in this theory is that the 1<sup>st</sup> person perspective is not the only or the dominant one. Our individual neural activity mirrors the activity of other people during observation and also during decoding of abstract concepts accessible to us through languages. Each interpretation of reality, its organization in space and time continuum, is built upon the structures developed through the sharing of mental states. The theory works with a concept of goal oriented activities which can be described and analysed from a perspective of three variables: 1) Agent, 2) Object, and 3) Activity. We understand other people and can learn from them because our brain mimics their mental states and thus the authors say that any individual mind is more shared (collective) than individual. Establishing an appropriate connection between individual mental states and behaviour of other people is one of the most important requirements of early childhood development because it is very difficult to maintain healthy social relationships without it [11]. Together with our previous analytical papers, this theory confirms the purposefulness and goal directed character of each form of communication behaviour. Every organism must cover its own needs, occupy

specific space in a specific time and sometimes it logically creates conflicts with other organisms whose needs and interests are different or even opposite. I argue that human adaptive functions and capacities have been transferred from natural environments to social environments. It means that because of the technological advancements and organization of larger societies, we do not have to compete with natural but social elements represented by other members of a specific social configuration. Obviously, we have developed an appropriate and vast repertoire of indirect speech forms of communication behaviour, in instances where we cannot or do not want to use position of power and coercion, to convey intended meanings and pursue our individual goals directly. How it affects the livelihood of fellow inhabitants of the planet Earth depends on the ability to restrain ourselves from expressing sociopathic tendencies of such communication behaviours.

M. Tomasello introduced the 'Cooperation model' which reflects on requirements in which the human language originated. He puts stress mainly on social motivations that were behind the development of more complex and symbolic language systems. His argument is that human language does not start with the development of sign or vocalized language but rather, similar to children, with gestures which they use to:

- "direct attention of a recipient spatially to something in the immediate perceptual environment (deictically);
- direct the imagination of a recipient to something that, typically, is not in the immediate environment by behaviourally simulating an action, relation, or object (iconically).

By drawing the recipient's attention or imagination to something, these referential acts are intended to induce her to infer the communicator's social intention – what the communicator wants the recipient to do, know, or feel." [12]

I think that the purpose of human communication behaviour stayed the same but the means of communicating our intentions, because of recent technological advancements, have changed significantly. The change is especially apparent in the media environment and advertising where the goals and intentions of the communicators are sometimes in a strong conflict with the individual or group utility of recipients or a society [13]. When we interact with other people we want something. The questions remaining are these: are our needs justifiable, do they reflect on the needs of targeted individuals or groups and will their present resources or even life be in danger as a consequence of expressing our social or antisocial intentions?

#### **4. Conclusions**

It is not possible to analyse all aspects of various forms of individual or group motivations but I am confident to say that we can assume that, behind each form of communication behaviour, there is a subjective expected-utility function to be fulfilled. As such it can be identified and analysed from various

perspectives which can help us to shed more light on the research topic at hand. The utility function covers a complex set of psycho-physiological needs which either reflect or do not reflect on other people's needs. The actual character of the relevant form of communication behaviour is affected by the ability to share mental states and express an appropriate and socially acceptable extent of empathy. The problem is that we do have a different metric to assess and measure the extent of empathy which should be applied to members of different groups/categories to which we belong or with which we identify. Communication behaviour is often used as a deception tool which helps people to achieve their goals at the expense of others and this fact was expressed by the saying "You will know them by their fruits" (Matthew 7.15-20). In my opinion, the most important in any information exchange is the actual change in individual or group utility resulting from such an exchange.

The relationship between significant global players suggests that we still cannot expect communication behaviour filled with empathy and understanding. It is more likely that we will see the same kinds of conflicts for geographical territories and resources as we have witnessed throughout history. On the local level, however, there is more empathy and understanding being expressed but the challenge will come to face us when resources become scarce and when our basic individual utility functions will be in danger.

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