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Think Human

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Think Human – What does this mean in a communications perspective?

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Abstract

The paper probes the background of the dire rhetoric of the Danish National Health Board's 40 week anti-alcohol consumption campaign, in particular the model of communication implied by the campaign's strategy. Contrasting the campaign's strategy in 2011 with the results of evaluations of previous years' campaigns suggests that the theory of communication underlying the campaign has its basis in mechanical action rather than in human communication. The practice of 'Communication design' is investigated in relation to this metaphorical 'machine thinking' model of communication and contrasted with the human-centered theory of communication advocated by integrationism.

Machines cannot think

"A machine is a machine because it cannot think." With this quotation from G.K. Chesterton Erik Hollnagel (2003) opens his article "Affective Computing." In his article Hollnagel uses the quotation to emphasize that the computer is a calculator to which we must not ascribe human activities such as feeling, thinking and understanding. Linguist Roy Harris used the same quotation as the introduction to his paper "Minds, Brains and Language Machines" at the "Integrationism 2.0" conference on 'the language machine' at the University of Birmingham 21st-23rd July, 2011. Harris used the quotation in his discussion of mechanical metaphors and how they are used in cognitive science to describe the human mind and consciousness phenomena. According to Harris machine metaphors equate a human being with a calculator. The price paid for this metaphor is that human attributes such as situation awareness, emotions, thinking and understanding are depreciated. A computer can only reckon with data. Nothing more. Peter Naur emphasized the same argument in 1966 when giving the name of "datalogi" to Computer Science

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as a discipline in Denmark, because for him the computer did not and cannot do anything other than calculate, to "compute."[1]

The image of human beings as functioning like machines is an idea that thrives in so-called modern communications research. When human interaction is put into the equation, popular authors on public relations and advertizing such as Preben Sepstrup and Pernille Fruensgaard Øe define communication as "interpreted information" which "may be identical with the sender's code". But how can something be identical in two distinct human brains? It is hard to imagine that a natural "language" or some physical "signs" that constitute the "code" could exist in any form that could be transported or transferred from one conscious lump of meat to another. How would you get "it" into the body, or should it be hung on the outside of it?

In what follows I will describe some communication situations involving machine metaphors and discuss how thinking of communication according to such mechanical metaphors produces language that becomes increasingly bizarre. One example is the death metaphor used by the government in its latest finger-waving campaign against alcohol consumption, a metaphor which, as I will demonstrate, is a direct consequence of a thinking machine that is way off track.

The machine metaphor
Why compare a human being with a calculator? Machine metaphors fit in well with everyday language: "He has figured it out," we say about someone who is well on his way to or has already discovered something. Yet it is difficult to say anything coherent within a theory rooted in technology-based metaphors.

Information theory as presented in *The mathematical theory of communication* by Claude E. Shannon and Warren Weaver (1969), clarified the three levels of communication that a machine metaphor entails:

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[1] Daylight (2011). For those readers who would argue that today's computers do more than calculate the author suggests reading the works of Hollnagel and Harris as well as Naur.

The first level deals with technical problems related to the transmission of symbols, and thus is closely related to mathematical problems. The second level deals with semantic problems and the accuracy of transmission, but must be understood only as signal transfer, and not used for linguistic meaning created between people, as for example in conversation. The third level involves the matter of efficacy and addresses the results of the transmission: how effective was the transmission? The metaphor employed by Shannon & Weaver—communication as something that involves signal transfer—was, one would think, put to rest decades ago in modern research on communication design, but such is not the case. So why do we still speak, write and theorize as though we believe that we communicate in this fashion, like machines transfering signals?

Machine metaphors in action

Preben Sepstrup & Pernille Fruensgaard Øe (2011) for example use human-computer interaction metaphors for communication in their book *Tilrettelæggelse af information, kommunikations- og kampagneplanlægning*, which is now in its fourth edition. According to Sepstrup & Øe information is "signs or data which the sender by its encoding expects a receiver to understand in a certain way. In the recipient's actual understanding, information becomes communication." [page number] Human beings work, according to Sepstrup and Øe, as communication always has, like a calculator. Where is this calculator - in the brain or in the senses? Integrationist Roy Harris asks Where does it come from, and can you can get it replaced if it does not work so well?

Sepstrup & Øe cultivate an even more science fictionesque but popular scenario: the idea of communication as machine-driven. According Sepstrup & Øe communication requires a medium that can hold and distribute "information". At Aalborg University you can even attend a course entitled "Mediated Communication" in the Informatics Department. Communication is therefore assumed by Sepstrup & Øe to occur in the encounter between a communication device and a receiver, ie. in Shannon & Weaver's metaphors, communication occurs when a "message" is transported to a receiver via a channel.

Language and communication are both matters of dialogicality (Márkova & Foppa 1990). A simple example of this view is that when we express ourselves in writing, we do so with an

expectation of how it might sound to the reader. In our expressions we reveal or prejudge who we think our readers are and what we think about his / her expectations and prior knowledge. We assume a communication situation.

Publicity campaigns are one of the most common examples of attempts to manufacture communication by "designing communication" and they are familiar to everyone.

The Danish National Health Board's anti-alcohol campaign designed with Everett M. Rogers & J. Douglas Storey's theoretical framework presumes that the campaign communicates by itself (Nielsen 2002). This idea of the campaign is based on the belief that communication involves spreading information among individuals, as in Sepstrup & Øe's metaphor above. A campaign based on such an understanding makes it clear why an often sought improvement in communication research and design concerns methods of dissemination. It is an accepted view that campaigns have the capacity to influence people in a certain way. The distinguishing feature of public communication is that the communicating parties are a sender and multiple unspecified addressees. There is also a time lag in the process of communication. It is impossible for the sender and the addressees to ask clarifying questions of each other - something is left to chance, fortunately – and a lot can happen along the way, for a communication situation is always concrete. 'Language' is not a system of signs that can be considered independently of where, when, why and by whom it is used. When we argue that language is dialogically determined, this has implications for how we approach texts in the sense that we will have to abandon the idea of an inherent meaning, for example, in what the announcer in a television news program says or what is stated in an information booklet. The notion of a signal has to be abandoned because one of the assumed communicating parties and actual knowledge of each other is always absent. This absence is noticeable in several ways - in texts, design, the sender's ideas about the recipient, the communication situation and so on. If we assumed that information / messages could be sent from sender to receiver and be the same for both, it would mean that people were like machines and could transmit information / messages from one to the other, affected only by noise pollution. The idea of communication as an exchange of signals is inhumane because it involves a fictional idea of 'language' based on a model of mechanical action rather than human activity.

Machine metaphors make language an objective rather than dialogical dimension between us in which the persons involved (including senders / receivers) achieve identical understandings through the exchange of words.

When people communicate

In an integrationist understanding of communication, a message is considered to be a message in the moment someone takes 'something' to be a message, that is, when someone gives 'something' the capacity to be a sign. That state of affairs redefines our semiology. When we say that the decisive factor is that someone should consider something as a message in order for it to be one, we are saying that it is up to the recipient to judge whether something is a message, and not (only) the sender. How this selection between what constitutes a message and what is merely background 'noise' happens in our universe is determined uniquely in each case through the integration of people into their times and places. It is a process richly supported by theory. In *Signs, language and communication* (1996) Roy Harris formulated a human based semiology as an alternative to a semiology based on a mechanical metaphor:

> Integrational semiology starts from the premiss that signs occur in and as the products of communication processes. Given that no communication is contextless and that all communication is uniquely contextualized (the participants being time-bound agents), it follows that signs also are unique. To put the point another way, the integrationist views the communication process as one which requires a continuous creation of signs (and thus of signification). (Harris, 1996: 154)

Harris claims that signs are never 'communication neutral', as he later calls it (Harris 2008b: 87), because signs are created by people and not by language itself. People communicating and their actions is the starting point for language creation and thus for all linguistic phenomena. It is human beings, therefore, who constitute the subject to be studied, and not language. People are always in situations and situations are experienced differently by each of us (Harris 1996; Harris 1998; Harris 2009a). Communication situations are managed by individuals and determined by certain factors that Harris's semiology also takes into accout, although I will not elaborate upon those factors here.

The point of an integrational theory of communication is that human beings are at the center of the model, so that "receivers of messages" cannot meaningfully be assumed to be just some 'objects' sitting around waiting to be fed messages, but are on the contrary human beings who are constantly engaged in communication on an individual basis.

Man in language

Thinking about the psychology of language requires a comprehensive, holistic approach to people and their language. That is why people with all their manifest differences in understandings are analyzed, rather than analyzing a "process" abstracted from concrete situations and the people involved in it. Thus language is investigated in a psycholinguistic light concerned with people rather than with the mechanical transfer of messages. In addition the language psychologist can explain why our experience of meaning turns out to be different when we talk about the recent campaign and its message. Psychologists of language describe actual understandings and thereby examine *meaning rooted in concrete situations* (Hermann & Gregersen 1978; Hermann 2011; Hermann et al. 2005; Rathje & Svenstrup 2004).

Thinking about communication from the human perspective makes new demands on an analysis of communication:

- The idea of meanings as something pre-established must be dismissed. Thus we may not isolate words and say something about them independently of the communication situations they are produced in.

- Meanings must be considered as values conferred by specific individuals while they are in the process of doing something - for example, people who are trying to understand something.

- Meanings must be assigned provisional status in specific interactions, because we are constantly in the process of working out our understanding, resulting in a constant dynamic production of meaning anchored in personal experience.

Deficiencies of machine metaphors

It is both problematic and a clear mistake to assume that communication has to do with the dissemination of messages, as though it is enough that they reach the intended recipients without fail. Communication requires efforts from both sides, and if the recipient is not interested in what is being said—which situation is not hard to imagine—then there is no communication - he / she can, in principle, just think of something else while he / she is 'exposed' to the message. How and why this can happen language psychologists explain with the concept of relevance structure. Relevance structure is a term Hermann & Gregersen used in 1978 to explain why we do not always agree on the interpretation of language:

> Relevance structure determines what of the language that we encounter can be perceived and how we perceive it to be structured. Not only is each person already unique in terms of relevance structure (although it also includes experience of what others have done), it also means that the "same" new experience will be integrated (understood) differently. (translated after Hermann & Gregersen 1978: 108)

Hermann & Gregersen refer to 1) life unfolding in time and space means that understanding is always structured by relevance. We therefore never have identical understandings of the same matters. This implies that 2) signs must in part be understood as person-bound, and therefore will be appreciated differently. That can only mean that people always understand and integrate signs in an ongoing process (Hermann & Gregersen 1978: 110; Harris 1998)

Users of the human-computer interaction metaphor cannot account for relevance. They have difficulty explaining why it is that their promotional campaigns have so little impact. Let me conclude with the good example of the Danish anti-alcohol campaign and some advice to the intended audience of people who works professionally with "communication".

The campaign message that did not sink in

"Alcohol campaign will put a plug in your life" is the headline of an October 19th article in *Dagbladet Information* on the Danish government's 2011 anti-alcohol campaign. According to

the article the campaign used apocalyptic and doomsday metaphors. The case concerns the Danish National Health Board, pioneering a new campaign tragedy in its latest attempt to get the Danes to drink less. The Board seeks to foster a controlled life by a dramatic framing of the campaign: "Put the plug in and let your light burn longer."

The notion of a promotional campaign to which the National Health Board's alcohol campaign suscribes is a good example of a machine metaphor versus "human thinking". How else can such drastic language be explained?: "No alcohol is safe for your health (...) even a little alcohol can cause cancer." What will the Health Board achieve with these words, and from whence comes the need to raise the stakes and turn up the drama? The Health Board with its machine thinking about the campaign's communicational effects will be broadcast on all Danish television stations in week 40 of the campaign. The language used reflects the idea of information as transferable in the sense that information is supposed to be implanted in humans, who as a consequence will act in accordance with the desired outcome – at least in the best case scenario. The only potential problem lies in the accuracy of the transmission. Effective transmission clearly depends upon finding the right frequency, and so we witness an increase in the drama! Apparently the conclusion thus far reached by the campaign designers has been that the Danes have not been able to hear clearly what the Board of Health is saying, since people continue to drink. So the Board of Health just speaks louder and more directly to the people, which we now hear at full blast in the 2011 campaign. The article in *Dagbladet Information* notes that an exact parallel can be found in Juli Zehs newly translated futuristic novel describing a health dictatorship, *Corpus Delicti*.

Oddly enough, there is a discrepancy between the Health Board's strategy and the Health Board's campaign evaluations. Year after year the campaign evaluations reveal a very good knowledge of the campaign message among the population—a stark contrast with the increasing drama, volume and apocalyptic metaphors in this year's campaign due to its evident ineffectiveness in halting alcohol consumption. Why this knowledge does not lead to behavioral change is the unsolvable problem which the Health Board is now trying to respond to by threatening us with a campaign machine that promises death and destruction if people do not stop drinking soon! The alcohol campaign is a prime example of how bad things get in public language when the attempt

is made to translate machine metaphors into communication practices: message received = receiver understands (and reacts mechanically - in the best case scenario).

I have no answer to the question of how one gets the public to behave (to do what the government wants them to do) for I do not support totalitarianism, neither in communication studies. But I am sure that humanizing the relationship, making it a personal conversation between parties who offer each other help to solve specific problems concerning alcohol abuse, would produce much better behavioural results. Modern promotional campaigns, such as the graphically stunning alcohol campaign which the Board of Health annually launches, is what we confuse with communication because there is money in those presuppositions. The campaign will at least keep many intermediaries and graphic artists in the Agency's own in-house advertising agency well employed. For anyone who desires a future in the advertising industry, such publicity campaigns mean bread on the table. Anyone seeking employment in advertising agencies will be asked at the first job interview to consider the question of how to know what really works between people, and what the employer wants to hear is a discussion of communication and dissemination – even though it is somewhat expensive nonsense.

So they say
In the analysis of human communication we cannot meaningfully isolate people who are trying to understand something from their language. The conclusion is that it is people who understand, and understanding takes place through their language. The idea of the existence of transmissable messages requires us to imagine that persons who are unknown to each other have a directly telepathic connection. Communication, however, requires action by more than just senders, for otherwise we are may only be talking about perception.

Putting it all into perspective
A new article on which I am working regarding the Think Human concept concerning the basic conditions for an integrationist description of the human mind. The article - "A New Mind? Enhancement of Knowing About " (Nielsen 2013) confirms that I am in urgent need of new terms for the description of man as free-thinking and acting being, especially for a critique of the discourses of clinical research on autism (Nielsen 2011). This is a more serious matter than an

anti-alcohol campaign because it turns out that autism research founded upon a subscription to a machine metaphor of "mind" has resulted in stigmatizing autism as "Mindblindness" (Baron-Cohen 1995; Frith 2005), which could mislead people evaluating their fellow human beings and lead them to acts of dehumanization. There is for example a high risk of stigmatization in the communicational relationships between teachers and students even in an inclusive school.

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