

INTEGRATING TRADITIONS COMMUNICATION REVISITED

Zsuzsanna Kondor

Institute for Philosophical Research of the Hungarian Academy of Science scientific
research institute, Hungary

kondor@webmail.phil-inst.hu

Abstract

“Technology-enhanced Learning” gains special importance if we look closely at the concept of technology on the one hand, and learning activity placed into the framework of communications technology on the other. The importance of communications technology has been emphasized by many Hungarian scholars in the first third of the 20th century and due to historian István Hajnal technology has become deeply integrated into the framework of human activities. I’d like to delineate the main sources of Hungarian philosophy of communication. As a researcher who is engaged in philosophy, I shall outline some main philosophical considerations related to TEL. In conclusion, I will show the convergence of recent philosophy and the Hungarian traditions regarding communications. This convergence could serve as a basis for collaboration as well as a conceptual framework for further research.

Hungarian Traditions in Communication Philosophy

There were at least four Hungarians who were decisive forerunners of the philosophy of communication: Melchior Palágyi, József Balogh, István Hajnal, and Béla Balázs. They contributed to the understanding of human intelligence mainly by revealing the importance of communication and communications technology.

The philosopher and physicist Melchior Palágyi’s most important findings regarding communication were first, that language is not just means of communication but also the vehicle of thinking. Secondly, he thought that alphabetical writing leads to abstract conceptual distinctions¹. Thirdly, he argued that the phenomenon of silent thinking gives the impression of “pure” reason.

The classical scholar József Balogh’s main research interest, (silent reading and writing) shed further light on Palágyi’s latter remark. That is, this practice which was bound up with different intellectual activities became silent after the invention of the printing press. When only manuscripts were available, reading was practiced aloud and others participated. It was not a solitary activity. The practice of reading and writing was accompanied by the conviction that the activity of *audire*, *legere* and *intelligere* constituted a complete unity – to listen, to read and to understand were not

¹ “I can not imagine that a primitive human being, who never learnt to read and write, could in his soul discover two kinds of thoughts, that is concepts and judgments... Indeed, of someone who could write, but had no idea of alphabetic writing, and used only a picture of language like e.g. Egyptians, of this human being one could hardly assume that it was inclined to find ... in its soul concepts on the one hand and judgments on the other...” (Melchior Palágyi, *Az ismerettan alapvetés* [Foundations of Epistemology], Athenaeum, 1904 quoted by K. Nyíri, “From Palágyi to Wittgenstein”, in: P. Fleissner and J. C. Nyíri (eds.), *Philosophy of Culture and the Politics of Electronic Networking*, 1999, p. 4)

separable activities. After the invention of the printing press, it became much easier to read. However, it subsequently provided an opportunity to dissolve the unity of *audire, legere* and *intelligere*. This was the first step towards the over-mechanization of the word. Balogh regarded all instruments of communication – such as typewriters, dictating and speaking machines, telegraphs and telephones – to be tools of mechanization. These instruments made reading and writing more comfortable, but this convenience resulted in superficiality and speediness, through which the "art of writing degenerated into mass production".²

István Hajnal's concept of literacy led to a similar conclusion, though its theoretical background is totally different. Literacy, according to Hajnal, defined a special culture which became possible due to the invention of the new recording system of alphabetical writing. This system created new demands on thought processes, and new cognitive skills to deal with the demands. As he put it: "With the appearance of literacy, we know that what had been happening instinctively to this point in a human being's inner and outer life, now starts to become conscious. This sphere of life becomes *objectified and abstracted*; the human being projects this sphere in front of himself and examines it *consciously and from the outside*. There arises the possibility for methodical purposefulness, for the conscious handling of concepts and for combinational and complicated work."³ Literacy was able to impact on different spheres of human consciousness because it was a kind of objectification. As Hajnal formulated, "[m]ovements and sounds do disappear, still, humans can use them and their matter-relatedness to produce something that is objective, something that functions as an extrinsic mediator for inner life."⁴ There are different ways to objectify ideas. Hajnal grasps technology through the process of objectification and internalization. New technologies should be rooted in everyday life (i.e. it should fit earlier experiences and knowledge of materials and different kinds of power of nature). They should harmonize with the needs of human interrelationships, social customs and institutions. The success of the printing press depended on previous technical inventions, the blossoming writing culture and the "reading audience" of the Middle Ages.⁵

Writing is actually an artificial instrument for thinking, through which ideas can free themselves from the context of real life that gave them life. In the long run "[l]etters produced letters, writing produced writing. Purely speculative thinking was highly refined, even in the smallest of tasks, and more perfectly so since the more one-sidedly it functioned, the more it divided the professions into mechanical details,

² J. Balogh, *Voces Paginarium. Beiträge zur Geschichte des lauten Lesens und Schreibens*, Budapest, 1921, p. 29

³ I. Hajnal, "Európai kultúrtörténet – írástörténet" (1932), in: F. Glatz (ed.), *Technika, muvelodés*, Budapest 1993, p. 18

⁴ I. Hajnal, "Történelem és szociológia", (1939), in: Glatz (ed.) op. cit. p. 203

⁵ "Book printing press, as it is well-known, the produce of the exact melting of many details of masterly transcribing work, of school dictata, of paper manufacturing, of several types of inks/paints, of the metal industry and the finest engraving craft." (Hajnal, "A európai város kialakulása", 1941, in: Glatz (ed.) op. cit. p. 228)

"The invention of printing press was only an inevitable consequence of the deep-rooted and large-scale writing culture of the late Middle Ages. As many people understood written texts, there was a large reading audience and also a wide-scale book-production in the last centuries of the Middle Ages, which brought forth by pure practical expediency the invention of printing." (Hajnal, "Európai kultúrtörténet – írástörténet", 1932 in: Glatz (ed.) op. cit. p. 24)

the more it exempted them from sensing the heavy material of life.”⁶ As we can see Hajnal’s criticism is the obvious consequence of the process of objectification.

Béla Balázs, the film aesthete, called attention the importance of non-verbal communication as opposed to the dominance of verbal expression. As he wrote, “In film ... speaking is a play of facial gestures and immediately visual facial expression. They, who *see* speaking, will learn things very different from they who hear the words”. And “ideas did not always first appear in concepts and words, so that painters would only subsequently provide illustrations for them with their pictures.” However, words heavily form our thoughts. “Psychological and logical analyses have proven that our words are not subsequent representations of our thoughts, but forms which will from the beginning determine the latter.”⁷

Main Research Perspectives

The relatedness of thinking and language, the notion of literacy, and a certain criticism of the dominance of written language are very similar concerns to the findings of McLuhan’s Toronto Circle. The impact of Hajnal is obvious as Walter J. Ong referred to him explicitly.⁸ The basic idea common to both is that the mode of expression is decisive regarding its content. Before I delineate some main concerns of philosophy related to TEL, I will sketch the periodization elaborated by Walter J. Ong, a prominent member of the Toronto Circle. He distinguishes three main epochs of communications technology.

In the age of primary orality, according to him, the only possibility to maintain and preserve knowledge was communication, i.e. sustaining living language. This restriction required a special technology. Expression itself was additive, redundant, and the expressions and words used were very heavily embedded in concrete situations. Intercourse was empathetic, participatory and agonistic. Literacy emerged as verbally expressed knowledge became recordable due to alphabetical writing.⁹ With this invention, a new way of interweaving ideas became necessary as a substitute for the living situation, i.e. to make it complete. This necessity induced thinking to retire from everyday life: general subjects, abstract concepts detached from the human life-world, linearly structured arguments, and the time-scale emerged. Secondary orality set in with telephone, radio, television and various kinds of sound tape, electronic technology. “This new orality “– as Ong put it – “has striking resemblances to the old in its participatory mystique, its fostering of communal sense, its concentration on the present moment, and even in its formulas.

⁶ Hajnal, “Évforduló” (1948), in: Glatz (ed.) op. cit. p. 449

⁷ B. Balázs, *Der Sichtbare Mensch* (1924) quoted by K. Nyíri, “From Palágyi to Wittgenstein”, in: P. Fleissner and J. C. Nyíri (eds.), *Philosophy of Culture and the Politics of Electronic Networking*, 1999, pp. 7-8

⁸ W. J. Ong referred to one of Hajnal’s paper, *L’Enseignement de l’écriture aux universités médiévales*, in his book, *Orality and Literacy: The Technologizing of the Word*. London: Methuen, (1982) 1983, p. 157. More about Hajnal’s Anglo-Saxon reception see Kritóf Nyíri, *A hagyomány filozófiája*, Budapest: T-Twins Kiadó –Lukács Archívum 1994. p. 137 and K. Nyíri, “*Netzwerk und Erkenntnismacht*”,

http://www.hunfi.hu/nyiri/NKW_nyiri.htm

⁹ About the special character of alphabetical writing see Eric A. Havelock, *The Muse Learns to Write. Reflections on Orality and Literacy from Antiquity to the Present*, New Haven, London, 1986, p. 59. Havelock underlines the fact, that –in respect to social control and governance – the alphabetical writing was the only one to create a flexibility comparable to oral communication, because it did not ritualize and simplify the contents of it, these contents were not turned into any sort of authority.

But it is essentially a more deliberate and self-conscious orality based permanently on the use of writing and print, which are essential for the manufacture and operation of the equipment and for its use as well.”¹⁰ In the last decade, of course we can see some new tendencies in connection with tools we use to communicate, which suggests the consideration of a certain revival of literacy.¹¹ In any case, for each main epoch a special comprehension of the surrounding world, characteristic intellectual attitude and demands regarding the horizon of knowledge are distinguishable.

These modifications are easily comprehensible in the framework of three different perspectives: historical, cognitive and representational point of view.

From a historical point of view the main endeavor of metaphysics shows an impressive trajectory: from the Pre-Socratic notion of *arkhé*, which is tailored according to the physical world, to the Heideggerian “thrown-ness” into the world which suggests to leave behind the analyzing, speculative and from the everyday activity alienated tradition of Western philosophy. To look not at the hardcore and sometimes quite esoteric part of philosophy, but at the concept of language, which was a crucial topic of philosophy in the 20th century, we find a trajectory similar to that of metaphysics.

At the very start of Western Philosophy, Heraclitus said that Logos controls how things function, and it is common in everyone. Logos is in one way a kind of ruling principle and in another way, some sort of articulation of this functioning, i.e. a certain revealing force.

After the invention and spread of alphabetical writing, Logos gained new characteristics. The main point of Aristotelian logic is to provide a proper instrument (i.e. a set of rules which can help to decide whether an argument is true or false), and to arrange knowledge gained by everyday experience. Modern logic eliminated the importance of the reference to the facts of everyday life and the algorithm gained crucial importance. According to Leibniz, signs are instead of things. However this logic aimed to improve language, it eliminated the anchor of language in everyday practice, i.e. there were no need for reference.

The emergence of the communal character of language was a turning point and it happened in the age of secondary orality. Wittgenstein considered language a changing phenomenon which changes in accordance to its use. “[T]he speaking of language is part of an activity, or a form of life.” The term “language-game” emphasizes this fact. The so-called “private language argument” stresses the communal character of language, i.e. the fact that speaking a language means obeying rules – agreement in definitions and implicit presuppositions which gain sense only in a community. “If language is to be a means of communication there must be agreement not only in definitions but also ... in judgements.”¹²

Heidegger in his famous work *Being and Time* calls attention to the fact that language can be seen as something which is ready-at-hand [zuhandene] in the

¹⁰ Walter J. Ong, *Orality and Literacy: The Technologizing of the Word*, London: Methuen, 1982, p. 136

¹¹ See **Maurizio Ferraris**, *Where Are You? Mobile Ontology* (<http://www.socialscience.t-mobile.hu/2005/index.htm>) The paper is going to be published in the volume of Kristóf Nyíri (ed.), *Mobile Understanding The Epistemology of Ubiquitous Communication*, Vienna: Passagen Verlag, 2006.

¹² Ludwig Wittgenstein, *Philosophical Investigations* § 242

everyday activity we articulate our comprehension “Being-with others”. In that case language is “a tool to be used in social intercourse”, i.e. an instrument of communication on the one hand, but language is also a constituent element of being-in-the-world as it is an important moment of revealing, on the other hand. As we can see, language became anchored again in the realm of everyday intercourse, albeit with some distinctive consciousness due to centuries of literacy.

If we take a look at the concept of the individual, crucial alterations are apparent. We can distinguish three main epochs: the age of involvement, then a long period of solitude and recently, the time of the reintegrated individual. “Once upon a time” – as Ernest Gellner put it – “mankind lived, by and large, in closed intimate communities, governed by practices simultaneously geared both to maintaining internal order and adjusting to nature The criteria adapted for judging the acceptability of practices ... were, so to speak, self-validating, traditional.”¹³ Later on the individual emerged whose attitude towards their micro and macro world changed. With literacy, solitary reason set in. Atomistic individualism, labeled thus by Gellner, and started by Descartes, considered human knowledge a step by step development stemming from the intellectual effort of the individual. This conviction led to the division of intellectual integrity – that is, the concern of solitary reason and the experience of everyday practice (which shows humans to be socially committed beings) created anomalies which were explicitly realized only much later. Epistemology, philosophy of history and ethics were hardly comprehensible in the same coherent framework. As new communications technology provides the opportunity to communicate continuously, new forms of life and new norms arose which started to dissolve both epistemological individualism and the ivory tower of the solitary reason. The individual is on the way to being integrated in their worlds again.

Cognitive perspective convinces us of the importance of social intelligence as opposed to the immanence of the individual mind on the one hand, and calls attention to the importance of the surrounding world in which humans are immersed on the other hand. In his famous book *Origins of the Modern Mind*¹⁴, Merlin Donald outlined the history of cognitive evolution. According to his theory, the development of representational skills was closely related to social intelligence. He distinguished three main transitions in human cognitive evolution: the shift from episodic to mimetic, then from mimetic to mythical, and finally from mythical to theoretical culture. Each of these changes means the emergence of a new kind of representation as well as an increased load on biological memory. Episodic memory completed with mimetic representation could now create community with special habits and organization which would provide a certain kind of identity. Attaching verbal representation to the mimetic one was the first stage, when mythical constructions as orienting world-views and orders could come to life. The transition from mythical to theoretical culture presupposes the existence of an effective external storing system. “[T]he first two evolutionary transitions would have greatly increased the load on biological memory. However, the final step in this tremendous cognitive expansion might have reduced the load on some aspects of biological memory, by gradually shifting many storage tasks onto the newly developed E[xternal]S[ymbolic]S[toring

¹³ E. Gellner, *Language and Solitude. Wittgenstein, Malinowski and the Habsburg Dilemma*, Cambridge: University Press 1998, p. 189

¹⁴ Merlin Donald, *Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition* Cambridge: Harvard Univ. Press, (1991) 1993

system]. At the very least, the existence of the ESS must have forced a great change in priorities and memory organization.”¹⁵

Andy Clark similarly stressed the importance of the environment, although in a wider sense than the realm of ESS. “We build ‘designer environments’ in which human reason is able to far outstrip the computational ambit of the unaugmented biological brain. Advanced reason is thus above all the realm of the *scaffolded* brain: the brain in its bodily context, interacting with a complex world of physical and social structures.”¹⁶

The third research perspective is served by **representation**. In the age of multimedia, the ability to clarify the difference between verbal and pictorial representation gains special importance. Verbal representation has some special requirements and limits which presuppose some cognitive capabilities. The structure of verbal representation unintentionally creates a distance from the phenomena, by just obeying the possibilities and limitations provided by the use of words. Verbal expression is linear, detailed and ordered according to structured priorities. The use of words in a given situation means a special point of view, a special perspective.¹⁷ “All that words can deal with, however, are similarities. The simple reason for all this is that words, with the exception of proper names, relation words, and syntactical devices, are mere conventional symbols for similarities. Although differences are just as perceptible as similarities,” words are not able to cope with them. “But that these differences are not expressible in words does not mean that they are ineffable, for they are clearly communicable in non-verbal ways.”¹⁸

Pictorial representation of course “can deal with” both similarities and differences. It provides a holistic view, i.e. we can capture the whole as well as the details of an image at a glance. An image, as opposed to verbal expression, is able to mediate “the immense wealth of living shapes” without decreasing exactness.¹⁹ The research of William M. Ivins Jr. clearly proves that our intellectual horizon is deeply determined by the means we can formulate and communicate our experiences, thoughts and problems. As he put it: “I have a notion that much of the philosophical theory of the past can eventually be traced back to the fact, that whereas it was possible after a fashion to describe or define objects by the use of arbitrary and

¹⁵ Donald op. cit. p. 320

¹⁶ Andy Clark, *Being There. Putting Brain, Body, and World Together Again*, Cambridge: MIT Press, 2001, p. 191

¹⁷ See Tomasello, Michael, *The Cultural Origins of Human Cognition*, Cambridge: Harvard Univ. Press, 1999

¹⁸ William M. Ivins Jr., *Prints and Visual Communication*, Cambridge, Massachusetts: Harvard University Press 1953, p. 139

¹⁹ “Higher degrees of formalization make statements of science more precise, its inferences more impersonal and correspondingly more ‘reversible’; but every step towards this ideal is achieved by a progressive sacrifice of content. The immense wealth of living shapes governed by the descriptive sciences is narrowed down to bare pointer-readings for the purpose of the exact sciences, and experience vanishes altogether from our direct sight as we pass on to pure mathematics. – There is a corresponding variation in the tacit coefficient of speech. In order to describe experience more fully language must be less precise. But greater imprecision brings more effectively into play the powers of inarticulate judgement required to resolve the ensuing indeterminacy of speech. So it is our personal participation that governs the richness of concrete experience to which our speech can refer. Only by the aid of this tacit coefficient could we ever say anything at all about experience – a conclusion I have reached – said Polányi – already by showing that the process of denotation is itself unformalizable.” (M. Polányi, *Personal Knowledge - Towards a Post-Critical Philosophy*, London: Routledge & Kegan Paul, 1962, pp. 86f.)

exactly repeatable word symbols addressed, mediately or immediately, to the ear, it was not possible to describe or define them by exactly repeatable images addressed to the eye.’²⁰

This rough draft of the main characteristics of these two important forms of expression poses the question, what kind of modifications can be expected due to the easy use of both kinds of representations. Could it affect our conceptual framework directly? Could we comprehend a wider horizon for our micro and macro world due to these easily accessible and different forms of expression?

Conclusion

As we can see, communications technology gains special importance regarding cognitive skills, social institutions, norms and ideals. The environment of learning is also changing, even some institutional changes are imminent. The idea of “Life Long Learning” stems from the increasing mobility and the speed of technological change. As the different spheres of individual life (public and private), the scheduling which was traditionally static and organization of everyday activities were differentiated according to the workplace and home) are being altered radically, the traditional role of the school must be changing as well. Considering computer program-design, these technologically determined social conditions are definitive. Taking into consideration the Hajnalian concept of technology, cognitive abilities and the notion of scaffolding in the sense of Clark, it becomes clear that extant forms of communication have crucial importance. Accordingly, everyday use, (i.e. the way pupils/students communicate) is a good basis to create new and helpful tools for learning.

The popularity of different chat forums calls attention to some of these changes.²¹ As our cognitive settings are considerably determined by our social makeup, this new way of communication can modify our close circle of friends. According to Robin Dunbar’s “social brain hypothesis” there is certain limit to the number of individuals we can have in a certain sense intensive relationship.²² The

²⁰ W. M. Jr. Ivins, *Prints and Visual Communication*, Cambridge, Massachusetts: Harvard University Press 1953 p. 62. Cf. Ivins’s further remark: “Plato’s Ideas and Aristotle’s forms, essences, and definitions, are specimens of this transference of reality from the object to the exactly repeatable and therefore seemingly permanent verbal formula. An essence, in fact, is not part of the object but part of the definition. Also, I believe, the well-known notions of substance and attributable qualities can be derived from this operational dependence upon exactly repeatable verbal descriptions and definitions – for the very linear order in which words have to be used results in a syntactical time order analysis of qualities that actually are simultaneous and so intermingled and interrelated that no quality can be removed from one of the bundles of qualities we call objects without changing both it and all the other qualities.” (Ivins, op. cit. p. 63)

²¹ The last workshop of our team, which is engaged in the Philosophy of TEL, was to clarify the role and importance of chat. The next few sentences focus on some of its results.

²² “Although humans can obviously cope with very large urban environments and even nation-states, the number of people within those large population units with whom one can say that one has a direct personal relationship is very much smaller. Censuses of the population units of hunter-gatherers, the size of scientific sub-disciplines, the number of people to whom one sends Christmas cards and the number of people of whom one can ask a favour all turn out to be about 150 in number... .. number of individuals that can be held in a relationship of a given degree of intensity. There is some longstanding evidence, for example, that the number of individuals we can have a particularly close bond with is limited to around 12–15, and that within this there may be an inner circle of about 5 individuals with whom this relationship is especially strong. There is, in addition, evidence to suggest that there may in fact be a series of layers, with boundaries at around 35 and 80–100, each associated

intensity is highly dependant on the intensity of connectedness. So it is not possible to extend the circle of relationships which are close to some extent, but the visible awareness of the other's presence could restructure the membership of closer circles. The other important finding is the phenomenon of media convergence. In a multimedial framework, chat makes the differences visible among live voice, written text, image and animation on the one hand, and helps to use them simultaneously (i.e. to create a certain merged literacy) on the other hand.

Last but not at least, I think, it is obvious that collaboration is the best way of integration. If we consider the Hungarian sources of communication philosophy, recent findings of cognitive science and psychology, and tendencies in 20th century philosophy, the convergence we can experience suggests a reconfiguration of the network of basic concepts, like traditional dichotomies of individual vs. social, natural vs. artificial, and knowledge vs. skill.

with a declining level of emotional intensity and closeness. It is as though each of us sits in the centre of a series of expanding circles at 5, 15, 35, 80 and 150 individuals." R. I. M. Dunbar: "Are There Cognitive Constraints on an EWorld?", in: Kristóf Nyíri (ed.), *Mobile Communication. Essays on Cognition and Community*, Vienna: Passagen Verlag, 2003 pp. 58