

## KNOWLEDGE AND INTERACTION THROUGH DIVERSE LENSES

**Ivana Markova**

Department of Psychology, University of Stirling, Scotland, UK  
ivana.markova@stir.ac.uk

### **Abstract**

The concepts like knowledge and interaction have acquired many different meanings in human and social sciences and consequently, the knowledge construction in cognitive science, computing, socio-biology and dialogicality refers to diverse processes. This article draws attention to such diversities in meanings of knowledge and interaction and to their ontologies. It first discusses the Cartesian, connectivist and neuro-biological approaches to knowledge and processing of information. It then presents a dialogical theory of knowledge based on the Ego-Alter interaction. It argues that knowledge is co-constructed jointly by the Ego-Alter, leading to the epistemological triadic relation the Ego-Alter-Object. Dialogical theory brings communication into the centre of the theory of knowledge. The last part of the paper discusses the construction of knowledge in and through communication genres, giving as examples persuasion and argumentation.

**Key words:** Knowledge; Interaction; Dialogicality; Ego-Alter; Ego-Alter-Object; Communication genre.

### **Resumo**

Conceitos como conhecimento e interação têm assumido muitos sentidos diferentes nas ciências humanas e sociais e, conseqüentemente, a construção do conhecimento em ciência cognitiva, computação, sócio-biologia e dialogicalidade refere-se a diversos processos. Este artigo chama a atenção para estas diversidades nos sentidos do conhecimento e da interação e para as suas ontologias. Começa por discutir as abordagens do conhecimento e processamento de informação Cartesianas, associacionistas e neuro-biológicas. Apresenta, em seguida, a teoria dialógica do conhecimento, baseada na interação Ego-Alter. Assume que o conhecimento é co-construído conjuntamente pelo Ego-Alter, levando à relação triádica epistemológica



Ego-Alter-Objecto. A teoria dialógica traz a comunicação para o centro da teoria do conhecimento. A última parte deste artigo discute a construção do conhecimento em e através dos estilos de comunicação, dando como exemplos a persuasão e a argumentação.

**Palavras-chave:** Conhecimento; Interação; Dialogicalidade; Ego-Alter; Ego-Alter-Objecto; Estilo de comunicação.

'Knowledge', the term used abundantly both in mundane and in scientific language, takes on many different meanings and consequently, the 'construction' or 'acquisition of knowledge' refers to a variety of processes that may have very little, or indeed, nothing in common. Thus, if this special issue focuses on 'knowledge construction as a dialogical or interactive endeavour', it is concerned with a very different meaning of 'knowledge' than, for example, the meanings that are used by cognitive, biological, socio-biological or computational scientists. While until two or three decades ago the construction or acquisition of knowledge referred mostly to the question as to whether, and to what extent, the human mind mirrors the external world correctly, or whether mental representations are biased by language, context or otherwise, such questions have become, today, at least in some cases, obsolete and even meaningless (see below).

One can suggest that the diversity of approaches in the study of knowledge during the last two decades has been due to technological advances in the brain research and this also implies the changes of some basic epistemic concepts, including that of knowledge itself. When discussing interactional or dialogical knowledge, one cannot ignore these conceptual changes for several reasons. Above all, one cannot disregard the fact that psychologists who are involved in research in hard sciences like computation or neurobiology imply that the 'scientific' concept of knowledge in genes or brain cells is, or could become, also applicable to human knowledge. Since such a hypothesis is totally incongruent with the dialogical theory of knowledge, it is important to bring it into the open discussion in order to explain the differences in presuppositions on which these diverse approaches are based. Moreover, the dialogical theory of knowledge can expose its full meaning only if confronted with other theories of knowledge. As an alternative approach, it operates at a particular level of understanding and is irreducible to the kinds of knowledge based on simple sensory



units or information in genes and memes, as we shall see below.

Considering these matters, the purpose of this article is twofold; first, to draw attention to diverse meanings of knowledge and interaction and to their ontologies; and, second, to present the meaning of 'dialogical knowledge'. Within the latter context, I shall focus in this article on the construction of social knowledge in and through communicative genres and on its societal implications.

### **The Disappearance of the Object of Knowledge**

From the Cartesian doubt to the disposal of reality

Since the publication of Harré and Secord (1972) classic book on *The Explanation of Social Behaviour*, it has become commonplace to raise critiques against the Cartesian individualistic and static theory of knowledge, which has dominated, since the 17<sup>th</sup> century, cognitively orientated human and social sciences. The main line of the critical argument goes like this:

The question as to how the human mind acquires knowledge of the external world has been, in the history of European scholarship, based on the idea that the individual knower accepts sensory information coming from objects, e.g. rocks, plants, stars, or even nations or systems of democracy, and that the mind re-constructs such information into a meaningful percept (or a mental representation), mirroring the image of the object in question. The individual knower of course is never sure whether he/she mirrors the external world correctly. Therefore, there is always doubt about the verity of knowledge due to a possible deception of senses. And thus, skepticism with respect to what one knows never disappears.

All scholars from Plato through to Descartes, Locke and Kant have adopted some version of this general model of doubt. Their philosophical approaches have subsequently strongly influenced the development of cognitive sciences and specifically, the answer to the question concerning the relation between the individual seeking knowledge and the object to be known. The Kantian model has been particularly pervasive. Humans only obtain 'knowledge' of *appearances* of worldly objects but they remain totally ignorant of *things-in-themselves*; there is no access to things as they really are. For example, the distinguished cognitive psychologist Neisser (1967) drew attention to the 'fact' that although there is no doubt that the world of trees, people, books and other objects actually exists and that this world has a great deal to



do with people's experience, nevertheless, 'we have no direct, immediate access to the world, nor to any of its properties' (Neisser, 1967, p.3). What we know about the real world is only mediated to us by senses and through interpretation and re-interpretation of sensory information.

In view of this, the problem for the researcher was to find out how the individual, who reasons and thinks, can minimize the effect of phenomena that produce false knowledge on the one hand and, bring about conditions that maximize true knowledge, on the other hand.

#### *Language and culture as militating against the acquisition of true knowledge*

As early as in the 17<sup>th</sup> century, the British philosopher John Locke, in his famous book on the *Essay Concerning Human Understanding (1690)*, suggested a tight association between language and the theory of knowledge. According to him, words can both facilitate and hinder knowledge. The correct use of words means making correct representations and so, facilitating knowledge. In contrast, the abuse and wrong use of words prevents the perfection of knowledge. For example, speakers may take words for things rather than treat them as representations; they may give words ambiguous meanings and wrong interpretations; sometimes they use them rhetorically or without having clear ideas about what they are saying.

The belief that language can 'bias' information and hinder scientific knowledge has persisted until today. Only pure facts and 'neutral' language, which is not influenced by emotions and which does not have imprecise meanings is suited for science, including social science, argues the sociologist and philosopher Ernest Gellner (1992; 1998). Moreover, as Linell (2005, p.138) shows, the idea of 'perfect language', i.e. language as a maximally integrated system, 'precise, logically consistent, exhaustive, and free from irrelevant features of deception, ambiguity, emotion, etc.', dominates much of the contemporary linguistics. This is why the perfect language of science and a messy language of the human world are conceived as two independent and distinct entities. For linguistics, the former is based on the model of language used in written texts. Written texts establish 'textual worlds detached from the external referential world' (Linell, 2005, p.62) and, above all, separate it from spoken language in interaction. Therefore, the scientific study should remove from language all factors that are not related to formal logic, propositional truth and a rule-based formal calculus. And, only so conceived language can become a medium for the study of



human cognition, defined narrowly as 'an intraindividual information processing by means of natural language or perhaps a more abstract, "internal" language' (ibid, p.146).

Another factor that militates against the acquisition of true knowledge is culture. In his influential book *Reason and Culture* Gellner (1992) claims that human rationality is universal and exists independently of culture. However, although all humans have a *potential* for rationality, it is culture and common knowledge, which may hinder this potential. While 'reason is latent in us all', 'most cultures fail to promote it' (ibid. p.53). And it is because culture militates against true knowledge that this single potential for rationality, which all people share, is thwarted. As a result, Gellner argues, we must distinguish between two kinds of knowledge:

The first kind of knowledge, superior and entirely rational, is universal. It originates from the universal rationality and therefore, it is the knowledge that comes from the mind of the individual and the individual achieves it on his or her own. And so, Gellner (1998, p.3) insists that while 'we discover truth alone, we err in groups'. This rational knowledge of the individual is to be found, for example, in the laws of physics and mathematics. The laws of these disciplines must be universally valid in order to count as scientific laws. Scientific rationality follows the principle that concepts must subscribe to the same rules in relation to evidence; rationality rejects contradiction and the logic of the argument must be seen through. The ideals of scientific knowledge are universal truths.

The second kind of knowledge, Gellner argues, is communitarian and cultural. It is less rational and therefore, it is inferior to the former kind. This knowledge is the product of the collective. It is based on the assumption that no individual can achieve knowledge on his or her own, but that knowledge is essentially 'a team game'. Individuals interpret and understand the world in terms of concepts, which have been transmitted to them from generation to generation through culture and language. While the former kind of knowledge is universalistic, this latter is relativistic; the former represents rationality and reason, whereas the latter represents irrationality and culture. Communitarian knowledge, it follows, is antithetical to science.

#### *Maximizing true knowledge through internal representations*

The ambition 'to be scientific' seems to have led to questions concerning the relationship between knowledge and mental representations on the one hand and



reality on the other. In fact, this question is very old going back to the beginning of the European philosophy. Its current versions conceive mental representations as symbols, images, computations and formalisations. This conception seems to have led to the loss of grips with reality and has become highly abstract.

One example of such versions comes from the argument of Fodor (1980) which postulates that mental states and processes are computations. However, it is hard to say to what kind of reality do computations refer. It appears that according to this position psychology can account for the mind's mental representations purely in terms of a syntactic machine and be concerned with the internal workings of its cognitive mechanisms. The mind (or the mind/brain) is assumed to have built-in innate concepts, innate representations and formalised language, which can operate both as a medium of representation and a medium of computation. However, innate mental representations do not tell us anything about reality.

In the end, it appears that the notion of mental representation may totally lose its ground. Jackendoff (1992) expresses his own position with respect to mental representations with some hesitation:

*“A representation is not necessarily about anything; if you like, it does not strictly speaking represent anything...The point of this notion of representation is that it can in principle be instantiated in a purely combinatorial device like the brain as I understand it, without resort to any miraculous biological powers of intentionality such as Searle (1980) wishes to ascribe to the brain” (Jackendoff, 1992, p.162).*

Having disposed of reality as an object of knowledge, theories of the mind/brain have reinforced their presuppositions concerning the specificity of independent modules, of formal computations, of synchronic cause-effect structures or of teleological characteristics of mental representations. At the same time, doubts seem to be creeping in about what the cognitive science has achieved. While praising the computational theory of the mind as far the best and a strikingly elegant theory of cognition, Fodor (2000) acknowledges that this theory accounts for no more than a little part of truth. There are things that are right and wrong about the idea that the mind is a computer and that the structure of the mind is largely modular. And he concludes:

*“In fact, what our cognitive science has done so far is mostly to throw some light on how much dark there is. So far, what our cognitive science has found out*



*about the mind is mostly that we don't know how it works"* (Fodor, 2000, p.100).

### **The Connectionist Concept of Knowledge**

Against the Fodor model of innate concepts and innate representations, a new perspective, arising from the advances in neurobiology, has revived the old question of nature-nurture. The issue of *nature* versus *nurture* has been abundantly debated for centuries with respect to various matters including psychological ones, e.g. intelligence, personality, and physical characteristics of humans, among others. Recently, this issue has become a subject of scholarly debate in connectionism, a theory of neural information processing, which attempts to model mental or behavioural phenomena as emergent processes in interconnected networks. True, most psychological theories, including connectionism, have accepted that knowledge comes both from genes and environment. Today, however, the disagreement among experts concerns a more subtle question. Considering that both nature and nurture contribute to the development of knowledge, how does knowledge actually emerge in the developmental process? Does environment simply trigger of the pre-specified knowledge as, for example, Descartes or Chomsky assume, or is there something else to it?

The well known experts and authors of *Rethinking Innateness* (Elman et al. 1996) answer the question 'where does knowledge come from' by presenting a perspective that knowledge arises from the *interaction* between nature and nurture. This as such would not be an original claim, because many classic developmental theories have already embraced interactionist perspective. It seems that the difference between the connectionist perspective and that of the classic theories relates to the question as to what it means to say that something is innate. For example, the researcher working in the framework of connectivism asks: what does it mean exactly to say that the child is born with the knowledge that human languages have nouns and verbs? In attempting to answer questions like this one, the authors of *Rethinking Innateness* oppose the radical Chomskyan linguistics that argues for extreme representational nativism; instead, they encourage researchers to adopt more 'sensible nativism', giving more weight to the environment.

But importantly, one of the main ambitions of *Rethinking Innateness* is to provide an exact definition of knowledge. Arguing against loose definitions knowledge (e.g. p.367), the authors' point of departure are the simplest units in the brain structure: knowledge 'ultimately refers to a specific pattern of synaptic connections in the brain'



(p.359). This definition implies their criticism of Chomsky's and Fodor's position of representational innateness. According to the authors of *Rethinking Innateness*, no higher-level kinds of knowledge are innate, but they develop through interaction with the environment. The authors also claim that their developmental perspective provides 'the key to the problem of how to get complex behaviours (in the mature animal) from a minimal specification (in the genes)' (p.365). Development, of course, takes time; its 'long period ... allows greater time for the environment (both sociocultural and physical) to play a role in structuring the developing organism' (p.365). These are highly challenging claims bearing in mind that knowledge in the connectivists perspective refers to no more than patterns of synaptic connections in the brain. The gap between synaptic connections on the one hand, and sociocultural and physical environment on the other, one would think, is enormous. Moreover, the very question of what possibly could count as 'environment' in the process of development surely will need a very careful consideration.

In one of the final paragraphs of their book the authors refer to the possibility of developing social models. They point out that the infant is highly social from early life and that they would welcome models which would have 'a more realistic social ecology' (p.394), accounting for language, awareness of others and group activities. They conclude: 'recent cognitive science may provide a good theoretical basis for developing social connectionist networks', e.g. those based on distributed cognition.

We can conclude that while *Rethinking Innateness* offers an elegant theory of knowledge, it is the knowledge of genes and not that of humans; environment seems to refer to everything that environs genes (and probably also humans?). In other words, this *ontology of knowledge* is based on *genes-environment interaction*. We shall see that it sharply contrasts with *ontology of dialogical knowledge*, which is based on the *Ego-Alter interaction*.

### **From Social Neuroscience to Politics**

Another mode of thought that has been attracting a great deal of interest during the last two decades is social neuroscience. It shares with connectionism a common goal: to bring together advances in neurosciences on the one hand, and explanations of psychological, including social psychological, phenomena, on the other. While approaches within social neuroscience, in contrast with connectivism, do not seem to use the term 'knowledge', notions like 'information processing' or 'information





transmission' are the common currencies both in connectionism and in social neuroscience. Let us consider two social neuroscience approaches, which follow somewhat different directions.

#### Darwinizing culture

One approach labels itself as 'darwinizing culture' (e.g. Auger, 2000; 2002). It is based on the idea that the nature of sociality can be sought in the structure of the brain. This idea has a long past and we can find its rise and fall in the history of sciences since the nineteenth century. More recently, Mclean (1973) postulated a conception of a triune brain which suggested a direct neurological connection between the structure of the brain and the organism's awareness of others or, one could say, a general characteristic of sociality and more specifically, of socio-emotional functions.

But while biological bases of social behaviour have been well recognized for a long time and do not lead to any particular disputes, its newest version, aiming at exploring neurological bases of social behaviour and cognition, goes much further. Its extreme position is seeking to identify specific centres of sociality located in brain cells and even in genes. This perspective uses the concept of a 'meme' as a unit of cultural inheritance of information residing in the brain that replicates itself 'by leaping from brain to brain' (Dawkins, 1976, p.206) via the process of imitation. It treats memes either as germs or as genes and talks about them in terms of epidemiology, i.e. of spreading through the contact of brains. Memes are hypothetical particles of culture that copy their information 'into the heads of other people' (Auger, 2002, p.18). This 'social memetics' postulates that evolution starts as a neural communication and subsequently, by replication, it turns into social communication. In this way, Auger argues, if replication of information within the brain is viewed as 'part of the *evolutionary* history of the meme, then it must be included in the project to explain the social phenomena' (ibid. p. 330). And so it is not clear whether psychological and social psychological characteristics like, for example, human agency, tension in communication and intentionality, have any role to play in this 'new theory of how we think'.

#### Functional neuroimaging of complex social activities

The other neuroscience approach is based on the search for biological and physiological correlates of social behaviour. One must remind here, again that the idea



has a long history and we can find it already in the nineteenth century. The empirical search for psycho-physiological approaches in social psychology has dominated various periods of social psychology and we can find it already in the nineteen twenties. We can remind, as examples, Riddle's (1925) work on aggression, the famous experiments by Schachter and Singer (1962) on the relation between bodily arousal by drugs and emotions, among many others (for a review, see Shapiro and Crider, 1969). More recently, extensive explorations of physiological and neurophysiological correlates of emotions, empathy, sympathy, motivation, and of many other phenomena have been described in Van Lange (2006). Within the most recent advances in several techniques of neuroimaging, functional magnetic resonance imaging (fMRI) seems to be making the highest impact on social psychology, promising to contribute to the understanding of brain functional behaviour as well as complex social activities. A special issue on social neuroscience and political psychology in the journal of *Political Psychology* in 2003 testifies to these expectations.

The main aim of functional brain imaging appears to be focused on the identification of specific regions in the brain and their temporal relationships with the performance of well-designed tasks. The end result of this aim would be a detailed picture of the processing architecture of brain networks (e.g. Raichle, 2003; Cacioppo et al., 2003). Among the topics of complex social phenomena that attract social psychologists is political behaviour. For example, Lieberman et al. (2003) attempt to understand how the brain (rather than a human being), is wrestling with political information. Following this perspective, Albertson and Brehm (2003, p.766) explain what it implies. A social neuroscientist

*“should not be looking for political attitudes in the brain so much as what kinds of political stimuli activate which systems for political sophisticates and nonsophisticates that political information processing concerns the question as to ‘how people think about politics rather than what people think about politics”* (Albertson and Brehm, 2003, p. 766).

Despite these significant technological advances, one assumes though that the answer to the question ‘*how people think about politics*’ can be given in terms of rather general brain activities and functions, as represented by magnetic resonance imaging rather than in terms of specific socio-psychological phenomena. For example, will neuroimaging differentiate how people think about politics from how they think about health, economics, or life and death?



## Conclusion

In this first part of the paper I have tried to indicate that the search for scientific knowledge has its deep historical and philosophical roots in philosophical rationalism and empiricism. Today, it reflects itself in the in researchers' anxieties to provide an exact definition of knowledge and of information processing in genes, memes or in localised areas of the brain. Its ambition is, moreover, to extend these exact conceptions of knowledge to complex human social activities. However, these elegant models are unable to suggest, as yet, how such an extension could be achieved – if indeed it could be achieved. And thus, the main question remains: may one reasonably assume that the epistemic differences between 'knowledge' of genes and of memes, as well as information involved in functional activities in localised areas of the brain could be extended to human knowledge constructed in mundane life, know-how skills, innovations, common-sense knowledge and practical daily activities? Do all these highly diverse activities justify using the single term 'knowledge'? Where is left human agency, intentionality, self-other interdependencies in the acquisition of knowledge? Or perhaps, should we assume that they do not count in the construction of knowledge?

## Dialogical Knowledge

The tremendous gap between 'knowledge' as a mental representation, or as a pattern of synaptic connections, in which reality and its content has disappeared, sharply contrasts with the dialogical theory of social knowledge. This gap, I argue, cannot be bridged either by theoretical or empirical means because the former and the latter approaches are based on incommensurable presuppositions.

In order to explain this claim, the second part of this paper will be devoted to outlining the dialogical theory of knowledge; this theory

- restores knowledge as a human activity that has something to do with the content of the real world
- ties knowledge closely with dialogical communication
- and emphasizes that humans are concerned with their life experiences.

I shall presuppose that knowledge is not generated by a single knower, whether the by the individual in the sense of the French philosopher René Descartes, or by the collective in the sense of the French sociologist Emile Durkheim, or by a connectivist



gene or a socio-evolutionary and hypothetical meme. I shall presuppose, instead, that knowledge is generated mutually by humans, specifically by the self and other(s) (or the Ego-Alter), whoever the self and the other(s) might be. The self and other(s) are in a complementary dialogical engagement in communication and an essential feature of their interaction is that in and through communication their thought and knowledge develops. Before I characterize the concept of knowledge in this theory, I need to turn to the concepts of interaction and dialogicality so that their fundamental role in the dialogical theory of knowledge can be brought into focus.

#### Interaction between Self and Others

The point of departure for the theory of dialogical knowledge will be the concept of interaction, and in the present context, specifically interaction in social development. When I speak about interaction as a basic notion in social development, I mean more than that the infant is highly social from early life and that therefore 'a more realistic social ecology' (Elman et al. p.394, see above), should be developed. Instead, what I mean here is that while each individual is born as an individual in the physical and biological sense with his/her own body and brain, and with capacities for intellectual and linguistic development, he/she is also born with a social sense, that is, with openness towards others. I further assume that this social capacity cannot be regarded as something *accompanying* the development of thought, communication, social knowledge, reflexivity and the self; instead, it is a *fundamental* characteristic of these processes and they would not exist without this social capacity.

It is in this sense that the Ego and the Alter (the Ego-Alter) co-constitute one another in a dynamic figure-ground set-up, both transforming in and through dialogical communication and multifaceted symbolic interactions. In developmental psychology the innate 'openness to others' has been given different names. Researchers choose their specific names in order to express their theoretical priorities and their focus of interest – and so we have, for example, 'innate intersubjectivity' (Trevarthen, 1992), 'pre-morality' (Linnel and Rommetveit, 1998), 'virtual other' (Bråten, 1992), 'attunement to the attunement of the other' (Rommetveit, 1992), 'a priori trust' (Simmel, 1950) and perhaps other names. All these notions refer to some kind of 'innate sociality' – which is conceived as a potential for further self/other development. This potential, however, does not imply the presuppositions of the approach called above the 'darwinizing culture'. It is not based on the postulate of 'social memetics', according to which



cultural phenomena and complex forms of social communication can be explained on the basis of replication of information within hypothetical memes. Instead, although interaction between the self and others starts as a biological/social potentiality, very soon after the infant's birth (Newson, 1979; Papoušek and Papoušek, 1975; Stern, 1985; Trevarthen, 1979; 1992), this potentiality is actualised and differentiates itself into the search for intersubjectivity of the one hand and the search for the social recognition on the other, both involving tension, asymmetries and mutualities in communication (Marková, 2003). These fundamental phenomena involving interaction between the self and others have been well explored in sociology and in developmental social psychology.

The German sociologist Georg Simmel (1858-1918) views the Ego-Alter interaction as an essential characteristic in the process of socialisation, communication and thinking. For Simmel, interaction in humans starts as the orientation of one human towards another one; he calls it a-priori trust. Trust is a feeling that is immediately apprehended and therefore, it is not always conscious. Simmel (1950) views trust both as situated within - as well as outside - the boundaries of knowledge that individuals can form of one another. Without trust society could hardly become established, and instead, it would run a considerable risk of falling into pieces. At the same time, Simmel (1955) conceives of conflict as a driving force of social movement, which draws individuals and members of social groups together. For him, although conflict involves negative relations, it also leads to innovation and dynamics.

The early part of the twentieth century is marked by original theories of interactionist social developmental psychologists, including James Mark Baldwin (1861-1934), George Herbert Mead (1863-1931) and Lev Vygotsky (1896-1934) who have proposed that self-consciousness develops through mutual interaction of the Ego-Alter. In their theoretical approaches they used, respectively, terms like the 'dialectic of social growth', 'conversation of gestures' and 'inter- and intra-psychological processes'. Baldwin viewed the concept of the 'dialectic of personal growth' as a process of mutual interaction between the Ego-Alter through give-and-take relationships (Baldwin, 1895, p. 342). He postulated a theory according to which the self is originally crude, unreflective and largely organic, and it is through interpersonal interaction that it becomes 'purified and clarified'.

George Herbert Mead's analysis of the interaction between the self and others was based on his presupposition that the self has an ability to call out in oneself a set



of definite responses that it acquires from others (Mead, 1934, p. 277). As the self develops this ability, it becomes an object to itself: it regards itself through the eyes of others. In his essay on 'The Objective Reality of Perspectives', Mead (1927) develops this idea, which includes all environmental conditions around the self. But equally, the baby learns, first through basic needs, such as hunger, coldness and other kinds of discomfort to posit him-/herself as experiencer and agent attempting to exert control over his/her environment. Testing the limits of his or her ability to control events and to explore objects in his/her environment becomes facilitates the child in defining the boundaries between the self and the environment. Environmental conditions, Mead insists, exist only for concrete human agents who use them in their own idiosyncratic ways. Human agents, on their part, are never imprisoned in their own little cages but are orientated towards others and their perspectives.

Vygotsky's (1979, p. 29) analysis of self-consciousness, again, is based on the interaction between the Ego and the Alter. For him, '[t]he mechanism of knowing oneself (self-awareness) and the mechanism for knowing others are one and the same'. Consciousness of speaking and of social experience both emerge simultaneously and together with one another. According to Vygotsky, there is no difference between the fact that one can repeat one's own word and that of the other person. This capacity grows for self- and other-communication simultaneously. Moreover, words also express the social and historical nature of human self and other-awareness.

The idea of the interaction between the self and others was also fundamental in neo-Kantian philosophy of dialogism in the early part of the twentieth century. The neo-Kantians based their philosophy on the 'dialogical principle', which involved the interaction between 'I' and 'you' (or 'I' and 'Thou'), that is, the relation of co-authors in communication. The dialogical principle, the neo-Kantians argued, is established and maintained through speech and communication and it enables people to express their life experiences, emotions and concerns; it facilitates their construction of social reality.

The dialogical approach drew attention not only to the social nature of humankind, but it also placed a considerable weight on the idea that the activity of thought creates human reality. Michail Bakhtin (1895-1975) and his Circle, which included scholars like Voloshinov and Medvedev in Russia, expressed the interaction between the Ego-Alter above all through their ideas of self- and other-consciousness. Bakhtin argued that the most important acts constituting self-consciousness are determined by a relationship toward another consciousness and through



communication: to be means to be for another, and through the other, for oneself (Bakhtin, 1984, p.287). In other words, consciousness is only collective: 'justification cannot be *self*-justification, recognition cannot be *self*-recognition. I receive my name from others, and it exists for others (self-nomination is imposture)' (Bakhtin, 1984, pp. 287-288). One consciousness always stands in relation to one another. Even looking at oneself in the mirror is not a sole activity: 'I look at myself simultaneously with the eyes or myself and of the others, so we have here an intersection of different world views, an intersection of two consciousnesses. Human life is an open-ended dialogue' (ibid. p. 293), in which a reified model of the world is being replaced by a dialogical one.

In communication, words are never neutral signs. Neutrality can be only artificially imposed, but daily speech is never neutral. Since words are always doubly orientated, i.e. towards the self and towards the other, they are always open to different interpretations and in this sense they are ambivalent. Dialogical relations are not engaged solely in search for intersubjectivity and a peaceful contemplation. Instead, cognitions and affects are in tension; they clash, judge and evaluate one another. Bakhtin (1981, p.314) foregrounds dialogue as a strife of divergent perspectives: 'one point of view is opposed to another, one evaluation opposed to another...this dialogic tension...permits authorial intentions to be realised' in heterogeneity of languages and of ideas. Understanding, precisely because it is active, is always evaluative.

### Dialogicality

The ideas of interaction and of the Bakhtinian dialogism lead us to the concept of *dialogicality* (Marková, 2003). I am using the term 'dialogicality' to characterise the fundamental *capacity* of the human mind to conceive, create and communicate about social realities in terms of the Alter. I assume that this capacity is such a basic condition of human existence that we can talk about it as *ontology*, i.e. the existence, of the human mind. What the human individual has become and what his/her prospects are for the future – all that is due to this capacity. Each individual lives in the world of others, interacts with others, influences others and is influenced by them. Consciousness must be in interaction with another consciousness in order to achieve its proper existence.

The 'Ego-Alter' is an abstract and theoretical term and in concrete dialogical situations it is always expressed as a specific Self – Other(s) e.g. 'I -you', 'minority - majority', 'I- group', 'group - another group', 'I - culture', and so on. In each such case



their dyadic relation is dynamic, one constituent affecting the other one, and so leading to changes in both constituents who communicate, simultaneously, in and through different selves and others. For example, a conversation between two interlocutors is more than an exchange of messages here and now. Not only do the interlocutors bring into communication their different positions or identification (e.g. now speaking as a friend, now as a professional, now as a member of a political party, etc), but they also express the point of view of their culture, doxa or any other 'third party'.

### Constructing knowledge through communicative genres

In the dialogical perspective knowledge is characterised broadly: it includes historically, socially and newly co-constructed meanings of humans; interpretations and re-interpretations of symbols; doxa transmitted from generation to generation. It equally concerns knowledge that changes in the process of public discourse; and that is static as well as dynamic. In other words, there are diverse forms of knowledge ranging from theoretical and symbolic ones, to know-how skills, and to knowledge involved in social practices. To that extent, the dialogical theory of knowledge is incommensurable with the theory of knowledge that is based on narrowly well-defined knowledge of synaptic patterns in genes.

If the dialogical theory of knowledge stems from ontology of the Ego and the Alter, then the construction of knowledge involves, in each instance of knowing, these two interacting knowers and the object of knowledge. Thus, while many theories of knowledge involve the knower (whether the individual or gene etc) and the object of knowledge, in the dialogical approach the minimum unit of knowing is the Ego-Alter-Object. This triadic relation is dynamic, involves different kinds of intentions and is multifaceted; we can say that mundane knowledge is often constructed in and through different styles of communication that we shall call *communicative genres*.

The term 'communicative genre' comes from the literary theory, where it refers to the author's way of achieving unity and continuity of the literary work. But the term is slippery and has been criticized for its ambiguity. In ordinary speech, communicative genres are social conventions. They are socially constructed and socially maintained. There can be no genre that belongs purely to the individual but through genres individuals express their belongingness to a certain culture or group as well as a commitment to particular social practices. Communicative genres can be characterised as temporarily fixed symbolic communicative forms that speakers and listeners





mutually recognize as having specific purposes, intentions, aims and topics in communication. They are expressed by specific lexical, grammatical, compositional and thematic means. Although they are conventions, they are dynamic; they emerge, are sustained for a while and change into new genres.

Different communicative genres involve various kinds of the Ego-Alter relations, intentions and motivations and therefore, they contribute to the co-construction of knowledge in different ways. They employ specific features of language and a variety of activities, e.g. persuasion, argumentation, negotiation of meaning or simply the transmission of messages. However, communicative genres are characterised by specific and prevailing communicative activities, e.g. attempt to influence the other person, to negotiate outcome, to give advice, and so on. However, it does not mean that a communicative genre would involve only one activity and exclude others. Genres always include a mixture of activities like persuasion, argumentation, conversation, and so on.

Co-construction of knowledge through communication genres involves different kinds of intentionality. Already in the early part of the twentieth century Carl Bühler (1982) identified three meanings of intentionality. First, a person expresses what he/she has in mind, whether it is content, ideas, feelings and so on. At the same time, the speaker addresses someone and attempts to direct the other's attention to him-/herself as the speaker. And finally, the speaker refers to certain objects or contents by means of speaking. Graumann (1990), building on Bühler's conception of intentionality, points out that a triple intentionality is present in each speech act. First, the speaker has intention to utter his/her thought to addressee and this intention is not necessarily conscious. Second, the speaker has intention to communicate with another. Finally, the speaker has intention to refer to specific things or events. Yet the speech act necessarily involves other kinds of intentionality. People intend to create history of a particular kind but it may turn to something different than what they originally envisaged. Intentionality brings into communication tension between the speakers and the object of their knowledge: intentionality is fundamentally different from the idea that messages merely spread from person to person (or from meme to meme). Different communication genres bring into focus different kinds of intentionality. Let us consider some examples.



### *Persuasion*

The Ego and the Alter influence one another in and through speech, each having desire to be mutually acknowledged as agent. Their mutual influence may be unintentional and can take place implicitly without awareness; alternatively, it can be intentional and explicit. In the latter case it is usually called persuasion. It is often said that persuasion, an attempt to alter the mind of others by means of communication, is as old as human speech.

Just like other forms of dialogical communication, persuasion can involve different kinds of the Ego and the Alter. For example, persuasion can take place between individuals at an interpersonal level; between individuals and groups; between minorities and majorities; between the media and audience; and so on. The speakers persuade one another both through silences and verbalisations, like rhetoric, authentic statements, as well as through deception and secrecy, and through direct and indirect meanings. Persuasive communication can display diverse and even opposite ways of thinking which are suited to, and articulated in, specific contexts. We may persuade by flattering, by making nuances in meaning, we may appeal to the third party and so on. In other words, like any form of communication, persuasion displays heterogeneous forms. For great novelists and writers heterogeneous forms of persuasion are taken for granted; dialogue provides infinite resources for exploring the creative nature of conversation, dialogical cognition, emotions and, we can say, for exploring the human drama in its entirety. Considering the above discussed kinds of intentionality, intentionality in persuasion is directed above all at the other interlocutor: persuasion is characterised by explicit intention to accomplish changes of opinions, beliefs or otherwise, in the other.

The propagator or an educator may represent the institution and transmit the doctrine or the message. In this case, the institution must make the object of education or of propaganda credible in order to be acceptable to the addressee. This may not be always an easy task. For example, during the AIDS epidemic in the 1980s governments were delivering messages urging that everybody protects him-/herself from catching HIV/AIDS. Yet some addressees, to whom this message was directed, become suspicious of the ulterior motive of institutions or the State. For example, the slogan: 'AIDS: you are as safe as you want to be' reminded the public that it is everybody's responsibility to protect themselves against the virus. The slogan was presented as part of the campaign in the United Kingdom called 'Don't die of



ignorance', in the attempt to stop the spread of AIDS during the 1980s when the epidemic was at its peak. However, some people viewed this slogan as part of the official propaganda that implicitly emphasized traditional societal and moral values, insinuating that homosexuals were responsible for the spread of AIDS. Such discrimination of homosexuals, in Watney's (1990) view, was based on 'the typically individualistic approach of the work of the health Education Authority, whose adverts share a common by-line, AIDS: You're as safe as you want to be' (Watney, 1990, p.171).

### *Argumentation*

Argumentation is a language based activity in which an individual supports his/her view with reasons and considers alternative perspectives with the ultimate goal of getting that view accepted by the addressee. While intentionality in persuasion is driven by the persuader's interest to influence the other, the focus of argumentation is on intentionality directed towards the object of communication in and through construction of arguments and counter-arguments. In this process, the participants display multiple perspectives opposing one another, and evaluating one another's message. As a resource for knowledge building, argumentation involves a constant reviewing of positions from which conceptions regarding the world are continually formulated, reviewed and transformed (Leitao, 2000). Like persuasion, argumentation can take place at interpersonal, intergroup and even intrapersonal level.

At the intrapersonal level, the individual can carry out an *internal dialogue*, i.e. postulate 'the inner Alter'. Internal dialogue could be an attempt, by means of inner argumentation, to solve the author's conflict, whether relational, personal, and moral, choice-related and so on. 'The inner *Alter*' can take multiple and multifaceted forms, for example, as participants' reference groups, conscience, individual and collective memories, commitments and loyalties, the selves' internal dialogues, their mutually shared knowledge, the distrusted *Alter*, the superimposed *Alter* and otherwise. This multiplicity is not surprising because, as already emphasised above, a concrete dialogue in which the *Ego* and the *Alter* are involved is no more than a momentary episode in the life-long continuing dialogue. Each subject enters a concrete dialogue with all their previous social experience which, unavoidably, shapes their encounters. Equally important, 'the inner *Alter*' also manifests itself linguistically and through diverse speech activities of the *Ego* and *Alter*. We may, in and through internal



dialogue express distrust of our communication partner but hide, for one reason or other, an external expression of that feeling.

## Conclusion

I have tried to present in this paper the old dilemma concerning different forms of knowledge. In one case knowledge refers to a scientific 'kind of marble temple shining on a hill' and in the other case, to the world of 'concrete personal experiences to which the street belongs ... multitudinous beyond imagination, tangled, muddy, painful and perplex', is not new. William James (1975, pp. 17-18) discussed these two separate worlds as a dilemma in philosophy at the beginning of the twentieth century. We can see that the dilemma has not disappeared. Instead, the simple and classic sanctuary has become a model of many social sciences.

This paper argues for dialogical knowledge based on the ontology of the Ego-Alter and consequently, it views knowledge in terms of the joint construct of the Ego-Alter. Bringing communication genres into the centre of the theory of social knowledge has both theoretical and practical implications.

On the theoretical side, different communication genres draw attention to heterogeneous ways in which knowledge is constructed as well as to different purposes of knowledge construction. For example, construction of knowledge in and through persuasion foregrounds the power of belief, the leader, personal charisma, control, and so on. In other words, it brings out the interaction between the Ego and Alter. Argumentation, on the other hand, foregrounds the negotiation of opposite perspectives, the power of evidence and of argument. In other words, it emphasises the Ego-Object relation. Other genres, for example, conversation in the construction of knowledge, might build on socially shared experience, on hidden and implicit meanings. Communicative genres, therefore, bring out different agendas associated into the knowledge construction.

On the practical side, all forms of higher education are concerned, in one way or other, with the construction of knowledge. But which forms of knowledge should be privileged? As we have seen, different approaches in the construction of knowledge may be conceptually incommensurable. This does not mean, though that we can ignore some approaches and treat them as non-existent because despite their incommensurability, different approaches use concepts like interaction, 'knowledge', 'culture', 'representations', 'language', 'complex social behaviour'. The student may not



immediately see that contents of these concepts fundamentally differ when used in different approaches, e.g. in connectivist, neurobiological, computational, dialogical and interactionist. The clarity in use of concepts is essential for the development of knowledge (yet another usage of the term of 'knowledge') in social sciences.

## References

- Albertson, B. & Brehm, J. (2003). Comments. *Political Psychology*, 24, 765-768.
- Aunger, R. (2000). *Darwinizing culture: The status of memetics as a science*. Oxford: Oxford University Press.
- Aunger, R. (2002) (Ed.). *Darwinizing culture: The status of memetics as a science*. Oxford: Oxford University Press.
- Bakhtin, M. M. (1981). *The dialogic imagination*. Austin: University of Texas Press.
- Bakhtin, M. M. (1984). *Problems of Dostoyevsky's Poetics*. Manchester: Manchester University Press.
- Baldwin, J. M. (1895). *Mental development in the child and the race: Methods and processes*. New York and London: Macmillan.
- Bråten, S. (1992). The virtual other in infants' minds and social feeling. In A. Heen Wold (Ed.), *The dialogical alternative* (pp. 77-98). Oslo: Scandinavian University Press.
- Bühler, K. (1982). The axiomatization of the language sciences. In R. E. Innis (Ed.), *Karl Bühler. Semiotic foundations of language Theory*. New York and London: Plenum.
- Cacioppo, J. T., Berntson, G. G., Lorig, T. S., Norris, C. J., Tackett, E. & Nusbaum, H. (2003). Just because you're imaging the brain doesn't mean you can stop using your head: a primer set of first principles. *Journal of Personality and Social Psychology*, 85, 650-661.
- Dawkins, R. (1976). *The selfish gene*. Oxford: Oxford University Press.
- Elman, J. L., Bates, E. A., Johnson, M. H., Karmiloff-Smith, A., Parisi, D. & Plunkett, K. (1996). *Rethinking innateness: a connectionist perspective on development*. Cambridge and London: The MIT Press.
- Fodor, J. (2000). *The mind doesn't work that way*. Cambridge (Mass.) and London: The MIT Press.
- Gellner, E. (1992). *Reason and culture*. Oxford: Blackwell.
- Gellner, E. (1998). *Language and solitude*. Cambridge: Cambridge University Press.
- Graumann, C. F. (1990). Perspectival structure and dynamics in dialogues. In I.



- Marková & K. Foppa (Eds), *The dynamics of dialogue* (pp. 105-126). New York and London: Harvester Wheatsheaf.
- Harré, R. & Secord, P.F. (1972). *The explanation of social behaviour*. Oxford: Blackwell.
- Jackendoff, R. (1992). *Languages of the mind. Essays on mental representation*. Cambridge (Mass.) and London: The MIT Press.
- James, W. (1975). *Pragmatism*. Cambridge (Mass.): Harvard University Press.
- Leitao, S. (2000). The potential of argument in knowledge building. *Human Development*, 43, 332-360.
- Lieberman, M. D., Schreiber, D. & Ochsner, K. N. (2003). Is political cognition like riding a bicycle? How cognitive neuroscience can inform research on political thinking. *Political Psychology*, 24, 681-704.
- Linell, P. (2005). *The written language bias*. London: Routledge.
- Linell, P. & Rommetveit, R. (1998). The many forms and facets of morality in dialogue: Epilogue for the special issue. *Research on Language and Social Interaction*, 31, 465-473.
- Locke, J. (1690/1975). *An essay concerning human understanding*. Oxford: Clarendon Press.
- Marková, I. (2003). *Dialogicality and social representations*. Cambridge: Cambridge University Press.
- MacLean, P. D. (1973). *A triune concept of the brain and behavior*. Toronto: Toronto University Press.
- Mead, G. H. (1927). The objective reality of perspectives. In E. S. Brightmann (Ed.), *Proceedings of the Sixth International Congress of Philosophy* (pp. 75-85). New York: Longmans.
- Mead, G. (1934/1967). *Mind, self and society*. Chicago: The Chicago University Press.
- Neisser, U. (1967). *Cognitive psychology*. New York: Appleton-Century-Crofts.
- Newson, J. (1979). The growth of shared understandings between infant and caregiver. In Bullowa, M. (Ed.), *Before speech: The beginning of interpersonal communication* (pp. 207-222). Cambridge and New York: Cambridge University Press.
- Papoušek, H. & Papoušek, M. (1975). Cognitive aspects of preverbal social interaction between human infants and adults. In E. Hofer (Ed.), *Parent-infant interaction* (pp. 243 -269). Amsterdam: Elsevier.
- Raichle, M. E. (2003). Social neuroscience. A role for brain imaging. *Political*



*Psychology*, 24, 759-764.

- Riddle, E. M. (1925). Aggressive behaviour in a small social group. *Archives of Psychology*, No. 78.
- Rommetveit, R. (1992). Outlines of a dialogially based socio-cognitive approach to human cognition and communication. In A. Heen Wold (Ed.), *The dialogical alternative* (pp.19-44). Oslo: Scandinavian University Press.
- Schachter, S. & Singer, J. E. (1962). Cognitive, social and physiological determinants of emotional state. *Psychological Review*, 69, 379-399.
- Shapiro, D. & Crider, A. (1969). Psychophysiological approaches in social psychology. In G. Lindsay & E. Aronson (Eds.), *Handbook of Social Psychology, Volume 3*, (2<sup>nd</sup> edition) (pp. 1-49). Reading (Mas.): Addison-Wesley.
- Simmel, G. (1955). *Conflict and the web of group affiliations*. New York: Free Press of Glencoe.
- Simmel, G. (1950). *The sociology of Georg Simmel*. New York: The Free Press.
- Smith, T. S. (2004). Where sociability comes from: Neurosociological foundations of social interaction. In C. Camis and H. Joas (Eds.), *The dialogical turn* (pp. 199-220). Lanham: Rowman & Littlefield.
- Stern, D.N. (1985). *The interpersonal world of the infant*. New York: Basic Books
- Trevarthen, C. (1979). Communication and cooperation in early infancy: a description of primary intersubjectivity. In Bullowa, M. (Ed.), *Before speech: The beginning of interpersonal communication* (pp. 321-347). Cambridge and New York: Cambridge University Press.
- Trevarthen, C. (1992). An infant's motives for speaking and thinking in the culture. In A. Heen Wold (Ed.), *The dialogical alternative* (pp. 99-137). Oslo: Scandinavian University Press.
- Van Lange, P. A. M. (2006). *Bridging social psychology: Benefits of transdisciplinary approaches*. Mahwah, NJ: Erlbaum.
- Vygotsky, L.S. (1979). Consciousness as a problem in the psychology of behaviour. *Soviet Psychology*, 17, 3-35.
- Watney, S. (1990). Practices of freedom: 'Citizenship' and the politics of identity in the age of AIDS. In J. Rutherford (Ed.), *Identity: Community, culture, difference*. London: Lawrence and Wishart.