# Between Nature and Culture: Dialogicality as a Basic Human Feature

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# **General Idea of the Chapter**

Human speech, learning and use of language are very specific phenomena which enable a person to communicate with other people but also provide proper tools for meaning-giving and meaning-negotiating inside the self as well as with others. Nevertheless our main interest is not the communicative or expressive function of speech, but that form of reflective activity in particular which seems to be parallel or equivalent to dialogues between people – internal dialogical activity. We define internal dialogical activity as engagement in dialogues with imagined figures, the simulation of social dialogical relationships in one's own thoughts, and the mutual confrontation of points of view representing different I-positions relevant for personal and/or social identity (Oleś, 2009b; see also: Hermans, 1996, 2002; Hermans & Kempen, 1993; Josephs, 1998; Marková, 2005). Dialogicality originates from: (1) social interactions as the basis of human development and functioning, (2) the use of symbols and the ability to make meaning (interpretation), (3) the ability to represent the external world with all its complexity in one's own mind (Hermans, 1996; Hermans & Kempen, 1993; Cooper, 2003; Marková, 2005). "Why do we think and speak in antinomies? Because, I hypothesise, thinking and speaking in antinomies is an expression of dialogicality of the human mind. Dialogicality is the capacity of the Ego to conceive and comprehend the world in terms of the Alter and to create social realities in terms of the Alter" (Marková, 2005, p. 203).

According to the Dialogical Self Theory, "The dialogical self can be described in terms of a dynamic multiplicity of voiced positions in the landscape of the mind,

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intertwined as this mind is with the minds of other people" (Hermans, 2003, p. 90). Thus the self is constructed under interpersonal, social and cultural influences which contribute to the creation and variety of different *I*-positions originating from various ideological perspectives (DeSouza & Gomes, 2005; Hermans & Dimaggio, 2007; Hermans & Kempen, 1993). Different internal voices, called *I*-positions, function in mutual interchange, between themselves as well as in interactions with the surrounding world (other people, and ideas introduced within social, political and philosophical systems). The encounter of two or more separate perspectives can lead to meaningful insights and innovation of the self. Thus, the dialogical self is conceptualized as being composed of different perspectives of valuation, both individual and collective (Hermans, 1996, 1999, 2001; Hermans & Kempen, 1995). The notion of the self as a society of mind clearly expresses the internal variability of different *I*-positions representing rich internal and various external worlds, for example parents, partners, authorities, celebrities and imagined friends or enemies (Hermans, 2002; Puchalska-Wasyl, 2006, 2007).

Moreover, internal dialogues imply a certain level of uncertainty. Both the theory (Hermans & Hermans-Konopka, 2010) and the empirical results (Oleś et al., 2010; Oleś & Puchalska-Wasyl, in print) suggest that some level of uncertainty is not only important but probably necessary for dialogical exchange of ideas between two or more *I*-positions. And all four components of uncertainty mentioned by Hermans and Hermans-Konopka (2010) are very relevant for higher inner dialogical activity: complexity, ambiguity, knowledge deficit and unpredictability. This also seems to be confirmed by our analysis of the correlates of dialogicality (e.g., neuroticism and openness as positive correlates, and self-esteem and self-clarity as negative ones). In particular, exploration of what other people think, readiness to exchange ideas and willingness to revise one's own point of view on the basis of the interchange with the dialogical partner, and the possible resolution of internal conflict, necessarily imply some degree of uncertainty.

In the first part of the chapter we address the problem of human development and theoretical propositions as well as empirical evidence supporting the idea that dialogical capacities are constitutive for the development of thinking and making contact with other people. In the second part we discus the essence of internal dialogical activity – is it a trait-like disposition or a general human feature, and what does it originate from? In the third part we try to connect both ways of arguing and introduce dialogicality as a basic anthropological feature of *Homo sapiens*.

## Dialogical Phenomena in Human Development

Learning the rules of dialogue is a long and complicated process and its beginnings should be sought in the first days of a human's life. During the earliest interac-

tions between a mother and her baby, the most important formal feature of dialogue is acquired – the **pattern of alternation of actions**. This is also a prerequisite for further development of dialogue. The acquisition of this pattern is enabled by the special structural and functional characteristics of infants (Schaffer, 1994, 1995).

Among structural features particularly worth noting is an infant's sensitivity to the human face and voice. It has been noted that a baby is especially sensitive to objects which are characterized by a high density of angles, three-dimensionality and mobility. These three features are typical of the human face. Additionally, the optimal point of an infant's visual fixation is convergent with the distance between the faces of a mother and her baby. Therefore, the caregiver's face becomes one of the most attractive sources of stimuli for a child (Schaffer, 1994, 1995). Perhaps this fact is crucial for the infant's readiness to imitate another person's facial expression. As Meltzoff and Moore (1994) have shown, from birth onward infants are capable of imitating tongue protrusion modeled by an experimenter pausing with a still face between several instances of tongue protrusion. From the perspective of the development of dialogicality it is even more interesting that two-month-old infants increasingly show tongue protrusion when the experimenter interacts with the child during and after the tongue protrusion and actively engages the infant in protoconversation (see: Hermans, 2001). This can be treated as proof that the second month of life marks the emergence of intersubjectivity and the infant's ability to share experiences with social partners, and thus also as an argument for the dialogical nature of people.

An infant's sense of hearing is also particularly attuned to sounds which are typical of the human voice (Hutt, Hutt, Lenard, Bernuth, & Muntjewerff, 1968). It is well known that even though a child does not understand words, he/she is sensitive to intonation (Hermans, 2001). The great significance of this type of stimulation for taking up dialogue – not only verbal but also nonverbal – was shown by Wood (1995).

The second group of factors which enable humans to acquire the rules of dialogue are functional characteristics. They find expression in the fact that from its very first days human life is organized in time, owing to different rhythms. Among them is the micro-rhythm of sucking which creates one of the earliest contexts of a meeting between a baby and another person (Wolff, 1968). The pattern of this high-frequency rhythm is described as "burst-pause", since a burst of sucking is followed by a pause. Mothers tend to respond to the sucking pattern of their babies from birth onward. It turns out that during the bursts they are generally quiet and inactive, whereas during the pauses they talk to the babies and touch them. The mother treats the baby's bursts of sucking as if the child were taking turns in an actual conversation. In this way she creates a pattern of alternating actions. This means that person A (the baby), after playing the part of A' (sucking), becomes passive in order to enable person B (the mother) to present her role B' (talking to

the baby) and then to allow her to take an inactive attitude which is necessary for the reappearance of part A' played by person A.

This pattern is also typical of many other interactions between infants and their parents, for example their "conversations", where the mother or father fills the pauses in the baby's babbling with his/her words. This exchange of sounds and intonations, which resembles a sequence of questions and answers, in fact can be conducted alternately owing only to the adult's control.

The second pattern – mutuality of actions – usually appears at the end of the first year of a child's life. In comparison to the pattern of alternation where part A' is followed by B', mutuality means that while person A is playing part A', person B is playing part B'; then comes a reversal of roles and person A takes part B' and person B – part A'. This pattern can be exemplified by the game of "take and give back". Bruner (1977) claims that a child's participation in this game is limited to "take" until the seventh or eighth month of their life. Mothers give their child a toy and the child (usually after playing briefly) drops it. At about the tenth month an infant starts to initiate the sequence by showing or giving a toy to their mother. When, however, the infant is about one year old, the game definitely becomes a set of routine actions. The child already knows that his/her action is part of a sequence for whose proper progress he/she is responsible to the same degree as his/ her partner. There are two separate actions in this game and the meaning of each comes from the cooperation between the infant and the other person. When the infant assumes the role of giver, the mother (in order to keep the game going) has to play the role of taker, and after that they both have to switch parts with their partner. Taking up the action, the child simultaneously has to analyze everything that his/her partner is doing and that supplements his/her own action. This is why the child can hold out his/her hands in time to take the toy. This is the moment when the child gets to know the complementary character of the components of an interaction pattern. Thus, at the end of the first year of life children learn the two main elements of the dialogical rule of mutuality, namely the reversibility and complementarity of roles.

Additionally, twelve-month-olds intensely acquire language. The dialogical pattern of mutuality finds expression in this field as well. The acquisition of a word usually begins with a situation in which the child points at an object and an adult names it. After that the object is repeatedly shown and the question "what is it?" is posed to urge the child to switch the previously assumed complementary roles. The assimilation of the rule of mutuality in this case is equivalent to learning the word. From this moment the child is able to ask about the object and to give the answer to this question. Thus, after infancy the rules acquired by means of practical actions can be applied by the child in the field of verbal dialogues.

Even though children discover the world of verbal dialogue, they do not give up their dialogues in actions. As Vygotsky (1978) claims: "Every function in the child's

cultural development appears twice: ... first between people (interpsychological), and then inside the child (intrapsychological). ... All the higher functions originate as actual relationships between individuals" (p. 57). This means that thinking is also a dialogical process.

In fact, most things that people learn are acquired in a similar way. In the beginning children assume the role that is complementary to the teaching person's role, that is they allow themselves to be guided. Then they switch roles with their "teacher" in order to be giving the instructions on how to attain the goal, first to the tutor and finally to themselves. In this way the actions are internalized. With reference to the theory of Vygotsky (1962, 1978), this level of dialogicality can be called the **acquisition of a tool** (Puchalska-Wasyl, 2003).

The second level of dialogicality in thinking is connected with **using a tool** which had been acquired previously. Generally, it resembles the process of acquisition, however there is also a difference. On this level the literal exchange of roles between the partners of the interaction is impossible. The reason is that the teaching adult is replaced with inner speech, which is conducive to intellectual orientation, being aware of and overcoming difficulties with understanding a problem.

Finally, a person is able to conduct imaginary dialogues. They are an expression of the third level of dialogicality in thinking – **anticipation of the meaning of a tool which is to be used in the context of the interlocutor's tool** (Puchalska-Wasyl, 2003). This level concerns only some types of tools and the direct receiver of the results of using these tools is always another person, who can respond and modify the context in which the actions are taken.

An attempt to determine the meaning of a tool is usually made when we are going to use the given tool and want to know what the result will be of using it in the given situation. The task, however, is difficult since "the given situation" which is taken as the starting point will change as soon as we start to use the given tool. The reason is that the other person involved in the problem will use his/her own tool to modify the meaning of the procedure used by us. In this context the best way to establish the meaning of the behavior in question seems to be testing it in our imagination. In practice, this means that first we formulate our statement in our mind from the perspective of one tool and then the interlocutor's statement consistent with the other tool, both of which are offered by our inner speech. Thanks to this a person can tentatively discover the sense of his/her own words, for this sense appears, in fact, only in the context (Vygotsky, 1962).

It is worth noting that when we analyze thinking as a dialogical phenomenon from the perspective of Vygotsky's theory, we can easily notice some analogies between the view of this theoretician and the standpoint of Hermans – the author of the concept of the dialogical self. This similarity not only confirms the presence of dialogicality as a phenomenon but also opens up possibilities of a consistent explanation for the mechanism of different types of internal dialogue.

## Internal Dialogicality as a Human Feature

What is the essence of dialogicality? Is it a trait-like disposition of personality which corresponds to other traits – which has been empirically proved (Oles et al., 2010; Oleś & Puchalska-Wasyl, in print), or is it a unique form of internal activity which has only some foundation in traits, which is on the level of basic dispositions?

On the one hand, we can refer to the notion of a trait: "The trait perspective views personality as involving a group of relatively consistent patterns. These patterns, called *traits*, involve an individual's most persistent styles of feeling, thinking, and responding to situations" (Pervin, 1994, p. 94-95; emphasis in the original). Provided that internal dialogical activity is influenced or inspired by "persistent styles of thinking, feeling and responding", we could consider it to be a trait, and perhaps look for its biological markers or genetic background. It is quite an interesting empirical result that dialogicality as measured by the Internal Dialogical Activity Scale by Oles (2009a) does not correspond to extraversion, thus internal dialogues are not a direct or indirect effect of higher brain arousal or mental activity typical for low extraversion (for the relationship between extraversion and brain activity see: Pickering & Gray, 1999). According to our results, internal dialogical activity has two other correlates on the level of the Five Factor Model, namely: Openness and Neuroticism. However, these two traits taken together explain no more than 20% of variance of the intensity of internal dialogical activity (Puchalska-Wasyl, Chmielnicka-Kuter, & Oleś, 2008).

On the other hand, having links to all three levels of personality organization - traits, characteristic adaptations and the self-concept (Oleś et al., 2010; Oleś & Puchalska-Wasyl, in print), internal dialogical activity seems to be a very broad human feature, rather a kind of general ability, like meaning-giving, reflective thinking or creative imagination. We can find clear expressions of dialogicality in Gilgamesh, in Socrates' and Plato's philosophy, in the writings of Thomas Aquinas, Saint Augustine, the poetry of Petrarca and many, many others. One of the most spectacular examples is the Copernican revolution, which is exemplified in Dialogue Concerning the Two Chief World Systems, Ptolemaic and Copernican published for the first time in 1632. This is Galileo's (1967) work in which he introduces the basic concepts of classical mechanics. The dissertation is constructed as a dispute among three people: Salviati, Sagredo and Simplicio. For Galileo, the choice of such a form seemed to be the best way to avoid being accused of heresy because, according to the Inquisition's regulations, as of 1616 the heliocentric theory could be considered only as a hypothesis useful for the mathematical calculation of planet movements, not as scientific truth. If Galileo had directly subscribed to Copernicus' theory, he would have shared Giordano Bruno's fate. Being aware of this, he decided to present his ideas as one of the standpoints in a discussion.

Each of the three characters in Galileo's work represents a different logical position. Simplicio opts for traditional scholastic philosophy, full of reverence for the unquestionable Aristotelian authority, and that is why he claims that Copernicus' point of view, which contradicts the Aristotelian one, is nonsense. Salviati holds the opinion of Galileo himself, so he is a follower of the heliocentric theory. Sagredo, as a pragmatist, does not know the latest discoveries in the fields of mathematics or astronomy, but his remarks aim to help remove all ambiguities from the discussion.

What is characteristic of the *Dialogue* is that Galileo is not only able to raise objections to the heliocentric theory from the perspective of his opponents (Simplicio or Sagredo) and rebut them from his own point of view (Salviati), but he can also take the logical position of his adversary to prove the validity of his own logic (consistent with that of Copernicus).

Galileo thought that this apparent balance in the dispute guaranteed him safety. However, it seems unlikely that the dialogical form of the work served only as his defense against the Sacrum Officium. Research by Kuchinski (1983) shows that a complex inner dialogue is necessary for the correct generalization of knowledge one has collected. A discussion appears to be the most natural, and therefore the most adequate form for expressing Galileo's thoughts. It is well known that the astronomer started to lean towards the heliocentric theory many years before publishing his work, when the facts he had observed turned out to be inexplicable in the light of the knowledge of his time. Nevertheless, he wanted to be sure of the correctness of the heliocentric theory in order to be able to defend it if necessary. Therefore, before he decided to convince others (Simplicio and the readers of his book) of the validity of Copernicus' thesis, he had to be sure of it himself. Thus, he began to search for empirical arguments in its favor. At the same time he had to find arguments against it in contemporary knowledge, and then either (1) rebut these counterarguments, (2) prove they were not at variance with the heliocentric theory, or (3) modify his own ideas under their influence.

The aforementioned mental operations are consistent with the functions of internal dialogues as proposed by Kuchinski (1983). He calls them, respectively, (1) the structuralization of a given point of view (as opposed to the rebutted one); (2) the formulation of prerequisites for a synthesis of the points of view involved in the dialogue and (3) the correction. Apart from the above-mentioned cognitive functions, regulative ones are also emphasized. The former enable exploration and extension of the self beyond one rigid point of view. The latter result in the fact that a person's action is subordinate to the dialogues which are used as a means of verifying or invalidating the point of view under consideration. With regard to Galileo, his inner dispute may have also helped him search for empirical arguments for the heliocentric theory. Such forms of mental activity in which an internal dialogue is of great importance are not only vital to theoretical cognitive work (Kuchinski, 1983), but in a broader perspective they contribute to culture creation.

### **Towards Conclusions**

Connecting both threads presented above, namely data related to the dialogical development of human beings and considering what is the essence of a dialogical disposition, we propose the following conclusion. Dialogicality is probably rooted in an inherited and general disposition for development which is based on interactions. Two particular abilities in this context are thinking and inner speech emphasized by Vygotsky (1978). Thus we are inclined to conclude that internal dialogical activity belongs to a broad set of basic anthropological features, like intentionality and self-reflection (see e.g., Bandura, 2006; McCrae & Costa, 1999), and it should not be reduced to a trait. A trait is a disposition for specific behaviors like extraversion, agreeableness or neuroticism, however dialogicality is much more general, it is not an inclination towards internal dialogues focused on any topic, neither general (e.g., religion) nor specific (e.g., continuity of contact with a loved one). Rather, dialogicality belongs to human potentials like self-awareness (Oleś, 2009b) and can be developed in many different ways (according to languages, cultures and shared values), for example a typical expression of dialogicality in adulthood is dialectical thinking (Sternberg, Grigorenko, & Oh, 2001).

The question is, what is the genesis of the broad range of dialogical phenomena: culture-specific as the connection to inner speech might suggest, or nature-specific as suggested by developmental data on early mother-child interactions?

It is very difficult to give a clear answer to such a question. We can offer some new questions rather than introduce a well-documented conclusion. For example: Provided that dialogicality is a general human feature, is it evolutionarily created and/or is it specific to *Homo sapiens*? In other words, when we extend dialogicality beyond internal speech, do we find particular signs of such or similar phenomena in other species? A person is definitely able to establish dialogical relationships with his or her pet; what does this look like from the animal's viewpoint – does it interact with the person in a dialogical though not verbal way? Note that according to developmental data, we can easily find signs of dialogical interaction between a very small child and its parents (Lewis & Todd, 2004; Schaffer, 1994, 1995).

Another intriguing question concerns the latent level of personality. Since we find tacit knowledge, tacit affects and tacit motivation, can we also find tacit processes equivalent or parallel to dialogicality? Which tacit processes, if any, are evoked by or associated with inner dialogues? Do dialogical phenomena also function on the tacit level of personality? If dialogical processes are as universal as cognition, emotion or motivation, the answers obviously should be yes, however so far we have no empirical evidence of tacit dialogicality. Neurobiological research on dialogicality is quite new (Lewis, 2002; Linell, 2007), nevertheless very promising.

### References

- Bandura, A. (2006). Toward a Psychology of Human Agency. *Perspectives on Psychological Science*, 1, 164-180.
- Bruner, J.S. (1977). Early Social Interaction and Language Acquisition. In H.R. Schaffer (Ed.), *Studies in Mother Infant Interaction* (pp. 271-289). London: Academic Press.
- Cooper, M. (2003). "I–I" and "I–Me": Transposing Buber's Interpersonal Attitudes to the Intrapersonal Plane. *Journal of Constructivist Psychology, 16,* 131-153.
- DeSouza, M.L. & Gomes, W.B. (2005). Temporality and Spatiality in Dialogue. In P.K. Oleś & H.J.M. Hermans (Eds.), *The Dialogical Self: Theory and Research* (pp. 131-140). Lublin: Wydawnictwo KUL.
- Galileo, G. (1967). *Dialogue Concerning the Two Chief World Systems Ptolemaic and Copernican*. California: University of California Press.
- Hermans, H.J.M. (1996). Voicing the Self: From Information Processing to Dialogical Interchange. *Psychological Bulletin*, *119*, 31-50.
- Hermans, H.J.M. (1999). Dialogical Thinking and Self-Innovation. *Culture & Psychology*, *5* (1), 67-87.
- Hermans, H.J.M. (2001). The Dialogical Self: Toward a Theory of Personal and Cultural Positioning. *Culture and Psychology*, 7 (3), 243-281.
- Hermans, H.J.M. (2002). The Dialogical Self as a Society of Mind. Introduction. *Theory and Psychology, 12,* 147-160.
- Hermans, H.J.M. (2003). The Construction and Reconstruction of a Dialogical Self. *Journal of Constructivist Psychology, 16,* 89-130.
- Hermans, H.J.M. & Dimaggio, G. (2007). Self, Identity and Globalization in Times of Uncertainty: A Dialogical Analysis. *Review of General Psychology*, *11* (1), 31-61.
- Hermans, H.J.M. & Hermans-Konopka, A. (2010). *The Dialogical Self: Positioning and Counter-Positioning in a Globalizing World.* Cambridge: Cambridge University Press.
- Hermans, H.J.M. & Kempen, H.J.G. (1993). *The Dialogical Self: Meaning as Movement.* San Diego, CA: Academic Press.
- Hermans, H.J.M. & Kempen, H. J. G. (1995). Body, Mind and Culture: The Dialogical Nature of Mediated Action. *Culture and Psychology, 1 (1),* 103-114.
- Hutt, S.J., Hutt, C., Lenard, H.G., Bernuth, H.V., & Muntjewerff, W.J. (1968). Auditory Responsivity in the Human Neonate. *Nature*, *218*, 880-890.
- Josephs, I.E. (1998). Constructing One's Self in the City of the Silent: Dialogue, Symbols, and the Role of 'as-if' in Self-Development. *Human Development*, 41, 180-195.
- Kuchinski, G.M. (1983). *Dialog i myshlenie* [*Dialogue and Thinking*]. Minsk: BGU Lewis, M.D. (2002). The Dialogical Brain. Contributions of Emotional Neurobiology to Understanding the Dialogical Self. *Theory & Psychology*, *12*, 175-190.

- Lewis, M.D. & Todd, R. (2004). Toward a Neuropsychological Model of Internal Dialogue. Implications for Theory and Clinical Practice. In H.J.M. Hermans & G. Dimaggio (Eds.), *Dialogical Self in Psychotherapy* (pp. 43-59). Hove and New York: Brunner-Routlege.
- Linell, P. (2007). Dialogicality in Language Minds and Brains: is There a Convergence between Dialogism and Neuro-Biology? *Language Sciences*, *29*, 605-620.
- Marková, I. (2005). *Dialogicality and Social Representations: The Dynamics of Mind.* Cambridge: Cambridge University Press.
- McCrae, R.R. & Costa, P.T. Jr. (1999). A Five-Factor Theory of Personality. In L.A. Pervin & O.P. John (Eds.), *Handbook of Personality: Theory and Research* (pp. 139-153). New York: Guilford Press.
- Meltzoff, A.N. & Moore, M.K. (1994). Imitation, Memory, and the Representation of Persons. *Infant Behavior and Development*, 17, 83-99.
- Oleś, P.K. (2009a). Czy głosy umysłu da się mierzyć? Skala Wewnętrznej Aktywności Dialogowej (SWAD) [Is It Possible to Measure the Voices of the Mind? Internal Dialogical Activity Scale (IDAS)]. *Przegląd Psychologiczny, 52*, 37-50.
- Oleś, P.K. (2009b). Dialogowość wewnętrzna jako właściwość człowieka [Internal Dialogicality as a Feature of the Person]. In J. Kozielecki (Ed.), *Nowe idee w psychologii* [*New Ideas in Psychology*] (pp. 216-235). Gdańskie Wydawnictwo Psychologiczne.
- Oleś, P.K., Batory, A., Buszek, M., Chorąży, K., Dras, J., Jankowski, T., Kalinowska, I., Kubala, D., Parzych, J., Sadowski, S., Sosnowska, K., Talik, W., & Wróbel, M. (2010). Wewnętrzna aktywność dialogowa i jej psychologiczne korelaty [Internal Dialogical Activity and Its Psychological Correlates]. *Czasopismo Psychologiczne*, 16, 113-127.
- Oleś, P. & Puchalska-Wasyl, M. (in print). Dialogicality and Personality Traits. In H.J.M. Hermans & T. Gieser (Eds.), *Handbook on the Dialogical Self.* Cambridge: Cambridge University Press.
- Pervin, L.A. (1994). A Critical Analysis of Current Trait Theory. *Psychological Inquiry*, 5, 103-113.
- Pickering, A.D. & Gray, J.A. (1999). The Neuroscience of Personality. In L.A. Pervin & O.P. John (Eds.), *Handbook of Personality* (pp. 102-108). New York: Guilford Press.
- Puchalska-Wasyl, M. (2003). Dialogowość jako sposób funkcjonowania człowieka aspekty rozwojowe [Dialogicality as a Way of Human Functioning Developmental Aspects]. *Psychologia Rozwojowa*, 8 (4), 47-62.
- Puchalska-Wasyl, M. (2006). Nasze wewnętrzne dialogi. O dialogowości jako sposobie funkcjonowania człowieka [Our Inner Dialogues. About Dialogicality as a Way of Human Functioning]. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Puchalska-Wasyl, M. (2007). Types and Functions of Inner Dialogues. *Psychology of Language and Communication*, 11 (1), 43-62.

- Puchalska-Wasyl, M., Chmielnicka-Kuter, E., & Oleś, P. (2008). From Internal Interlocutors to Psychological Functions of Dialogical Activity. *Journal of Constructivist Psychology*, 21, 239-269.
- Schaffer, H.R. (1994). Wczesny rozwój społeczny [Early Social Development]. In A. Brzezińska & G. Lutomski (Eds.), *Dziecko w świecie ludzi i przedmiotów* [Child in the World of People and Objects] (pp. 96-124). Poznań: Zysk i S-ka.
- Schaffer, H.R. (1995). Przyswajanie zasad dialogu [Acquiring the Concept of Dialogue]. In A. Brzezińska, T. Czub, G. Lutomski, & B. Smykowski (Eds.), *Dziecko w zabawie i świecie języka* [Child in the Play and the World of Language] (pp. 89-123). Poznań: Zysk i S-ka Wydawnictwo s.c.
- Sternberg, R.J., Grigorenko, E.L., & Oh, S. (2001). The Development of Intelligence at Midlife. In M.E. Lachman (Ed.), *Handbook of Midlife Development* (pp. 217-247). New York: John Wiley & Sons.
- Vygotsky, L.S. (1962). Thought and Language. Cambridge, MA: MIT Press.
- Vygotsky, L.S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Wolff, P.H. (1968). The Serial Organization of Sucking in the Young Infant. *Pediatrics*, 42, 943-956.
- Wood, D. (1995). Społeczne interakcje jako tutoring [Social Interaction as Tutoring]. In A. Brzezińska, G. Lutomski, & B. Smykowski (Eds.), *Dziecko wśród rówieśników i dorosłych* [Child among Peers and Adults] (pp. 214-245). Poznań: Zysk i S-ka.