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On the Social Nature of Human Cognition: An Analysis of the shared intellectual roots of George Herbert Mead and Lev Vygotsky

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Inner consciousness is socially organized by the importation of the social organization of the outer world (Mead, 1912a, p.406).

. . . All higher psychological functions are internalized relationships of the social kind, and constitute the social structure of personality. Their composition, genetic structure, ways of functioning, in one word, all their nature — is social. Even when they have become psychological processes, their nature remains quasi-social. The human being who is alone retains the function of interaction (Vygotsky, 1960, p.198).

Contemporary psychology seems to become aware of the 'crisis state' of its theoretical system and methodological knowhow. This awareness shows itself in different areas of psychology in different forms. Perhaps social psychologists have been the most explicit in their calls for re-organization of their discipline (e.g., Gergen, 1982; Gergen and Gergen, 1985; Gergen and Davis, 1985; McClintock, 1985; Thorngate, 1986). However, psychologists in other areas have been wrestling with similar issues (e.g., Brandt, 1973; Cronbach, 1975; Luria and Artemieva, 1970; Meehl, 1986; Toulmin and Leary, 1985; Valsiner, 1987; Vroon, 1986).

There seem to be two focal topics that underlie the crisis of contemporary psychology: the *intentional* nature of thinking and acting by human beings, and the *interdependence of individual consciousness with its social context* (Hales, 1986a, 1986b; Vollmer, 1986). Neither of these issues have been satisfactorily handled by psychology. The intentional nature of human conduct has been overlooked in traditional experimentation (Danziger, 1985; Toulmin, 1986), and personality has been usually conceptualized outside its relationships with its social surroundings (Valsiner and Benigni, 1986). At the same time, a research tradition has emerged at the

intersection of cognitive and social psychology — predictably labelled 'social cognition' research.

The multitude of approaches that are united behind the label 'social cognition' is in need of a comprehensive theory. Such a theory has not emerged in recent decades, and thus its seekers often end up turning to theoretical systems of the past that are built around the idea that cognitive processes are a product of social life. Two major theorists who have become recognized as proponents of that view are frequently mentioned in the contemporary literature — the American George Herbert Mead (e.g., Harré, 1981a; Natsoulas, 1985), and the Russian Lev Vygotsky. Similarities between the ideas of Mead and Vygotsky have been pointed out (Bruner, 1962, Glock, 1986, Kozulin, 1986, Luckmann, 1977, Van der Veer, 1985; 1987, Wertsch & Stone, 1985), but the common origins of their ideas have largely remained hidden in the obscurity of the history of social sciences. The aim of this article is to analyze the historical connection between Vygotsky's and Mead's theoretical views. We will also show how contemporary theorizing in social and cognitive psychology could benefit from the core ideas shared by Mead, Vygotsky and their predecessors.

THE SOCIAL NATURE OF HUMAN COGNITION, AND ITS STUDY

The 'sociogenetic view' on human cognition can be described in general terms by a limited set of postulates. In fact, two are sufficient. First, the ontological postulate: *all human cognition is social in its nature.* By that is meant that adult human thinking processes are interdependent with the social discourse of the given society. Second, the developmental postulate: *the social nature of human cognition emerges in the process of internalization of external social experiences by individuals in the process of socialization.* How, then, have these general postulates emerged in the history of the sociogenetic perspective? What particular ideas have been devised by different thinkers to understand sociogenesis of human cognition and personality? And what are the historical ties that link Mead's and Vygotsky's theorizing?

It is historically correct to say that Vygotsky and Mead did not directly influence each other. Mead's name is never referred to in the whole corpus of currently available 6-volume *Collection of Works* by Vygotsky (1982a, 1982b, 1983, 1984a, 1984b, 1984c). Likewise, Vygotsky was neither referred to by Mead in his lectures (which were published after his death as his major books — Mead, 1932, 1934; Miller, 1982), nor in his posthumously published volume of papers (Mead, 1938). The lack of explicit connection between the two thinkers is not surprising, given the geographical distance (Chicago versus Moscow), disciplinary (philosophy versus psychology), linguistic barriers (Vygotsky's work in psychology was published

mostly in Russian in Mead's lifetime), and differences between them in the ways in which their academic careers proceeded. In the latter respect, Vygotsky's work in psychology started only in 1924 (see Van der Veer, 1984), at the time when Mead had been teaching at the University of Chicago for almost three decades. Nevertheless, both Vygotsky and Mead developed along parallel lines. Careful reading of their original published work — Mead's articles from the turn of the century, and Vygotsky's various publications in Russian — make it possible to find out about the intellectual roots of their similarity. Both thinkers developed under the influence of other scholars who were associated with the sociogenetic viewpoint. Who, then, were those scholars, and how were Vygotsky and Mead indebted to them?

The common predecessors of Mead and Vygotsky were largely inhabitants of the New World: the American philosophers and psychologists James Mark Baldwin, Josiah Royce, William James, John Dewey, and Charles Cooley. All these scholars travelled to Europe for either purposes of education, or in search for convenient working environments. The European philosophical traditions of Kant, Hegel, Dilthey, Wundt, as well as other ideas widespread in European academic circles of the time, were close to the American originators of the sociogenetic viewpoint. Furthermore, it was the influence of French sociology, aside from German philosophy, that had a guiding influence on the originators of the idea that human cognition originates in the social life of its carriers (see Royce, 1894a; Tarde, 1884). Concerns about society's influences on the individuals, and its connection with clinical phenomenology of hypnotic suggestion, were popular in Europe during the last decades of the nineteenth century. The originators of the sociogenetic perspective were sensitive to these issues — hence their interest in social imitation.

Baldwin's views on the sociogenesis of personality

The life and work of James Mark Baldwin was remarkable in a multiplicity of ways (see Baldwin, 1930; Wozniak, 1982). One of his major scientific contributions was his introduction of a developmental perspective in psychology that took place through his conceptualization of imitation (Baldwin, 1894a). A number of themes from Baldwin's thinking constitute the cornerstone of the sociogenetic perspective.

Development of novelty through imitation. Baldwin's conceptualization of imitation did not emerge on an empty place, but was closely intertwined with the intellectual environment of science and philosophy of his time. The early clinical work of Pierre Janet, especially his *L'Automatisme psychologique* (Janet, 1889), was an important source of case descriptions of

the abnormal side of human psyche. Baldwin's own efforts to develop evolutionary thinking further (e.g., Baldwin, 1896, 1897a, 1897b) framed his contributions to developmental psychology, and on the sociogenetic perspective to cognition at large.

For Baldwin, the ontogeny of imitation was embedded in the context of *suggestions* — an explicit link of Baldwin's thinking to that of early Janet, whose definition of suggestion ('a motor reaction brought about by language or perception' — see Baldwin, 1895, p.106–107) he accepted. Suggestion is of three types. First, the *pre-imitative suggestion* covers the whole range of infants' movement responses to external stimulation prior to the rise of imitation. The second type — *imitative suggestion* — was described as

> peculiar only because of its greater or lesser approximation of the "copy" imitated. Further, by reproducing the "copy" this reaction tends to restimulate itself without improvement. The child imitates a word, gets it wrong, and repeats its own mistake over and over (Baldwin, 1892a, p.50).

In contrast, in the case of *persistent imitation* (Baldwin's third type), the child is characterized by a persistent effort to generate novel imitations of the 'model'. That takes the form of introducing novel ways of acting that are absent in the 'model', into the imitative process:

> In persistent imitation the first reaction is not repeated. Hence we must suppose the development, in a new centre, of a function of coordination by which the two regions excited respectively by the original suggestion and the reported reaction coalesce in a common more volumnious and intense stimulation of the motor centre. A movement is thus produced which, by reason of its greater mass and diffusion, includes more of the elements of the "copy". This is again reported by eye or ear, giving a "remote" excitement, which is again co-ordinated with the original stimulation and with the after effects of earlier imitations. The result is yet another motor stimulation, or effort, of still greater mass and diffusion, which includes yet more elements of the "copy" (Baldwin, 1892b, p.287).

Baldwin's description of the process of persistent imitation involves the use of the feedback principle, long before Norbert Wiener, in a process where successive motor imitations of the model are compared with their previous 'traces' in the nervous system. The concept of persistent imitation allows for explanation of how children's voluntary movements emerge. By way of persistent effort, children's muscular activities become more purposive, new combinations of motor elements can be assembled in novel situations, and in conjunction with novel goals (Baldwin, 1892a, p.54).

The sociogenesis of personality. Although worked out in a most detailed way

in the context of motor development in infancy, Baldwin's concept of persistent imitation was subsequently taken by him to the domain of human cognition and personality. The development of cognition can be seen as a process that involves persistent imitation as one of its major mechanisms. Human personality, according to Baldwin, develops with the help of 'personality-suggestion' — by the suggestive models of acting by the 'social others' (Baldwin, 1894b). These models provide the 'input material', from which the developing children learn to assemble their own, novel patterns of personality, still within the frame that is provided for them by the society:

> The growth of human personality has been found to be predominantly a matter of social suggestion. The material from which the child draws is found in the store of accomplished activities, forms, patterns, organizations, etc., which society already possesses. These serve as ready stimulating agencies, loadstones so to speak, to his dawning energies, to draw him ever on in his career of growth into the safe, sound, useful network of personal acquisitions and social relationships which the slow progress of the race has set in permanent form. All this he owes, at any rate in the first instance, to society. His business is to be teachable. He must have the plastic nervous substance known popularly as a brain; he must have organs of sense and sufficient organic equipment to enable him to profit by the methods of personal reaction necessary in the presence of his social fellows; he must be able to imitate, to attend, to invent (Baldwin, 1902, p.75).

Baldwin's integration of the two seemingly opposite views on suggestion can be seen in this quote. One of those — following Tarde (1884) — emphasized the suggestive (we might call it 'socially hypnotic') role that the society is seen to play for the development of individual persons. Everything that would end up in individual persons' cognition as a result of their development within their society is therefore a result of the social suggestion process. On the other hand, the personal results of social suggestion were seen by Baldwin to go beyond the suggested models — along the lines of 'persistent imitation' that makes the person active agent in the internalization process.

Active internalization. Baldwin refused to adhere to the inherently passive view of the developing person who cannot escape the social suggestion and who accepts it. He emphasized the active role of the developing child in the development of his self, which in the context of society follows the logic of 'circular reaction' (persistent imitation). In both acting and speaking, the developing child constantly advances and tests 'inventive interpretations' of the world which he has made up through imitation. The social environment with all its 'suggestions' obviously constitutes the testing ground on which these 'innovative interpretations' are acted out. Feedback from the results of such testing leads to the modification of those

interpretations, which are organized as a structure of knowledge. Gradually, the process of selection (both inside the child's mind — 'systematic determination', and by the environment) leads to the retainment of some form of structured knowledge. In the course of development of knowledge, the external (social) selection mechanisms become internal (personal):

> selection by a social criterion *becomes personal to the learner through his renewed action.* The selected functions, with their knowledge contents *are added to the organization within, so that the 'systematic determination' of the future is influenced by the assimilation of each new selected element.* Thus the inner attitude which the individual brings to his experience undergoes gradual determination by the continued action of the social environment. He himself comes more and more to reflect the social judgement in his own systematic determination of knowledge; and there arises within himself a criterion of a private sort which is in essential harmony with the social demand, because genetically considered it reflects it. The individual becomes a law unto himself, exercises his private judgement, fights his own battles for truth, shows the virtue of independence and the vice of obstinancy. But he has learned to do it by the selective control of his social environment, *and in his judgement he has just a sense of this social outcome* (Baldwin, 1898, pp. 19–20).

The principle of internalization as the developmental-link between personality and its social context is clearly evident in this quote. Later, the same principle was expressed in a modified version by Janet, whom Vygotsky followed quite closely in formulating it in the context of his cultural-historical theory (see Van der Veer and Valsiner, 1987). The linking of actor-bound innovation with the concept of imitation made it possible for Baldwin to grasp the nature of socially guided development of individuals in realistic terms, making him one of the founders of the sociogenetic viewpoint on cognition. He was not alone, though. Baldwin's theorizing was anchored in evolutionary biology. In contrast, his contemporaries were more inclined to address issues of social ethics. In that direction, Baldwin's sociogenetic thinking was complemented by the sociogenetic ideas of Josiah Royce which stemmed from his moral philosophy.

JOSIAH ROYCE'S VERSION OF SOCIAL FORMATION OF PERSONALITY

The American idealist moral philosopher Josiah Royce (1855–1916) is better known in the circles of philosophers (Clendenning, 1985) than among psychologists. His work on psychological issues at Harvard in the 1890s was mostly theoretical, but on rare occasions moved into the realm of experimental psychology (with the help of Hugo Muensterberg — see Royce, 1895a), to the use of parents' everyday observations of their

children's imitative tendencies (Royce, 1894a), analysis of clinical cases (Royce, 1895b) and psychohistory (Royce, 1894b). His analysis of social ontogeny borrowed substantially from Baldwin's work on imitation. Royce, however, extended it in a number of ways. His extension of the idea of imitation to the area of psychopathology (Royce, 1895b) was claimed to be original at his time. Royce's narrowing down of Baldwin's concept of imitation (see Royce, 1895a), and his emphasis on the 'internal dialogue' of the Ego and non-Ego makes his contribution to the sociogenetic perspective unique. The philosophical background for Royce's version of the sociogenetic view of human cognition was his adherence to absolute idealism, paired with Hegelian dialectics.

Royce's sociogenetic view of cognition stems directly from his philosophy — as human beings are social in their thinking, then the idea of the existence of objective (experienced) reality cannot be proved independently of the socially influenced minds (Royce, 1894c). His ontological treatment of human consciousness as a full-fledged result of social influences was intricately related to the developmental interest in the question of how the socially determined individual consciousness emerges. Royce's basis for the elaboration of the sociogenetic nature of consciousness involved a conviction that 'a child is taught to be self-conscious just as he is taught everything else, by the social order that brings him up' (Royce, 1895c, p.474). The details of that process, as well as those of the functioning of the self, are of interest.

Affectively flavoured dialogue between 'Ego' and 'non-Ego'. Similarly to Baldwin, Royce was interested in the internalization of external (social) experience that becomes transformed into the internal system of 'Ego' and 'non-Ego', the dialectical relationship of which leads to one or another act that the person performs. The emotions are intertwined with the dialogue of Ego and non-Ego, in fact they 'distribute' the roles of Ego and non-Ego in a particular situation:

> When social situations involving particular contrasts of Ego and non-Ego are remembered or imagined, we become self-conscious in memory, or idea. When emotions, associated by old habit with social situations, dimly or summarily suggest such situations, with their accompanying contrast of Ego and non-Ego, our self-consciousness gets colored accordingly. Finally, when the varied contents of our isolated consciousness involve in any way, as they pass, contrasts which either remind us of the social contrast between Ego and non-Ego, or excite us to acts involving social habits, such as questioning, or internal speech, we become reflectively self-conscious, even when quite alone with our own states. (Royce, 1895b, p.584)

Royce viewed the internalization process in the context of imitation. However, he considered Baldwin's way of using that term too wide in its universal applicability. In contrast, Royce narrowed down the term 'imitation', using it in ways that are similar to the semiotic emphasis that Vygotsky adhered to much later (see Wertsch, 1983, 1985):

> . . . imitation is definable, from the psychological side, as an act that interprets an uncontrollable perceptive series by setting over it a series of experiences that appear to be similar in content, but to be also in contrast with it by virtue of their controllableness . . . an imitation is an act that tends to the interpretation of what is beyond my power, or is independent of my movements, by contrasting it with what otherwise resembles it, but is in my power, and is a result of my movements (Royce, 1895a, p.223).

The context in which Royce wrote about imitation was experimental, and borrowed largely from his empirical research endeavours (see Royce, 1895a).

Social opposition. Aside from the processes of imitation, processes labelled 'social opposition' were posited to be influential in social life and in the internalization of external experience by him. If Royce's view of imitation looks similar to Vygotsky's views decades later, then his emphasis on 'social opposition' parallels Mead's insistence on the role of comparison of 'self' with the 'generalized other' (Mead, 1934). For Royce, 'social opposition' entailed contrasting one's self with others (and opposing them) in behaviour, opinion, and power (Royce, 1903, p.277). The empirical material that gave Royce multiple insights into the process of social opposition came from his study of parental reports about their children's conduct (see Royce, 1894a).

Restless eagerness, and its social guidance. Both imitation and social opposition are made possible by the child's consistent 'restless eagerness' (Royce, 1903, pp. 322–323), which drives the child to approaching the same activity persistently in novel ways. That pertains equally to the 'try, try again' aspect of child's action (to use Baldwin's term here), to the construction of new images in the child's contrast of 'ego' and 'non-ego', and in child's interaction with others where social contrasting and opposition is used. For Royce, the 'restless eagerness' of children constituted the condition that makes it possible for the child to participate in his own development. However, the 'restless eagerness' is socially guided by people surrounding the child. Thus, the teacher of the child '. . . is to assist the child *to become eager to do something that is in itself of a rationally significant tendency*' (Royce, 1903, p.332). This emphasis on socially guided formation of motivation is remarkably similar to the emphasis that Vygotsky put on the children's learning within the 'zone of proximal

development' (see Wertsch, 1984). Vygotsky's version of the socially guided learning was, however, wider. It went beyond the formation of children's motivation to the formation of all of their knowledge through learning within the 'zone of proximal development.'

To summarize, Royce constructed a view of human cognition that is explicitly social in its nature, and where the developmental process of internalization of social experience by imitation leads to the construction of the reality in terms that make it possible to doubt the existence of the world (beyond that of subjective construction) at all. In this, Royce's philosophical idealism and his psychological research were united in a rather non-contradictory way. As a by-product, Royce developed an elaborate theoretical system to explain the sociogenetic nature of cognition that served as a source for George Herbert Mead.

FROM BALDWIN AND ROYCE TO MEAD AND VYGOTSKY: DIVERGENCE OF SOCIOGENETIC IDEAS

Royce and Baldwin can be seen to occupy a central position in the history of the sociogenetic view of human cognition and personality. In Figure 1, we have tried to capture the major connections between Royce and Baldwin on the one hand, and Mead and Vygotsky on the other.

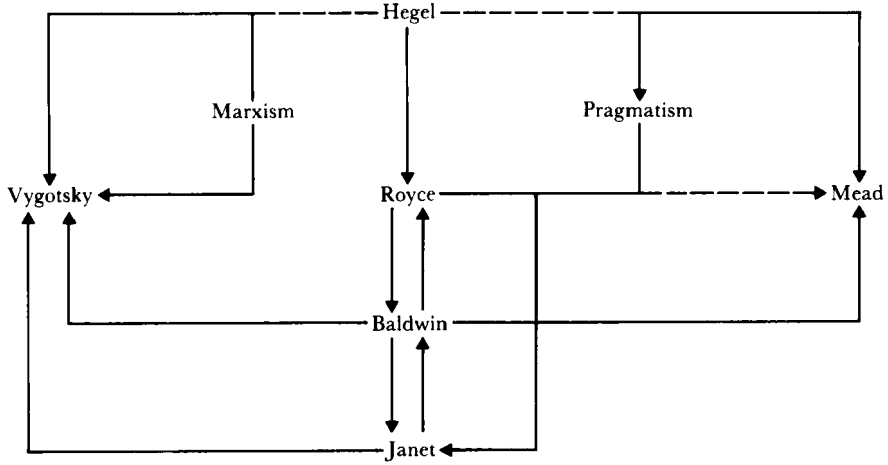

Figure 1. A schematic view of the intellectual connections between major representatives of the sociogenetic perspective and their intellectual background.

Royce had direct influence on Mead (see Mead, 1917) and Pierre Janet (1926, 1928, 1929, 1936), who in his turn was one of Vygotsky's major intellectual resources (Van der Veer and Valsiner, 1987). Baldwin's work was closely connected with Royce's — he acknowledged Royce's work, and

although their emphases remained different both of them were careful to agree with each other on major similarity of their ideas, while carefully pointing to their dissimilarities. Both Baldwin and Royce (although the former more than the latter) influenced Janet's later work, who was a major source from which Vygotsky started to develop his theoretical system. Mead, likewise, is located in the web of the intellectual influences represented in Figure 1, as will be seen below.

GEORGE HERBERT MEAD'S CONTRIBUTIONS TO THE SOCIAL ORIGIN OF PERSONALITY

The fate of Mead's ideas in the social sciences is interesting. His major books (1932, 1934) were never written by him as such, but are only edited versions of his lecture notes. Mead has been labelled a 'social behaviorist', although that label is rather misleading (see Cook, 1977). Mead's earlier publications that appeared in his lifetime exclusively in the form of journal articles or book reviews have been rarely studied in depth (Joas, 1985). However, it is in these less known articles that we can trace the roots of Mead's thinking, and its development.

Development of Mead's views. Mead's earlier work includes short published articles, many of which are reviews of other authors' books (Mead, 1894a, 1894b, 1895a, 1905, 1909). In the context of reviewing others' work, Mead introduced his own ideas in the form of little diversions from the basic reviewing of the target books. These diversions address different local issues of philosophy, ethics, and psychology. Mead's work in the course of the two decades (from the beginning of 1890s to that of 1910s) led him to develop his version of the sociogenetic perspective, which can be seen as basically formulated by him by 1912 (see Mead, 1912b).

The particular ideas by which Mead enriched the sociogenetic perspective were by far more complicated, borrowing in complex ways from the work of his contemporary pragmatists (Dewey), other sociogenetic thinkers (Baldwin and Royce), as well as early contributors to social psychology (Cooley, Wundt, McDougall), Mead explicitly utilized different aspects of the work of his contemporaries: Baldwin's ideas on attention and imitation (Mead, 1894a, 1903, 1909, 1913), Royce's emphasis on the social nature of consciousness (Mead, 1909, 1910c, 1913), Dewey's philosophical (Mead, 1903) and educational views (Mead, 1910a), Cooley's and McDougall's social psychology (Mead, 1910b), Wundt's treatment of myth (Mead, 1906) and language (Mead, 1903, 1904). Mead accepted many of the ideas of his contemporaries, but none of them uncritically. He was critical of the concept of imitation as the ultimate basis of self (cf. Mead, 1909, pp. 405–406), claiming that the probable

beginning of human communication was in cooperation rather than imitation. In that latter emphasis, he benefitted from Cooley's work (see Mead, 1930b), while his position is close to Janet's idea that cooperation is originally a social (divided) act.

Internalization of "I" — "Me" relations. It is in connection with Wilhelm Wundt's theory of gestures that Mead arrives at his idea of internalization of the external social experience (Mead, 1904). In his version, like Royce's, the idea of internalization relates closely to the emotional sphere of interpersonal phenomena (Mead, 1910b). However, differently from Vygotsky (and Baldwin before him), the developmental view of sociogenetic nature of the self was of peripheral relevance for Mead. Although he did at times describe the process by which children develop (Mead, 1925, 1934), what was explained by such description was the adult outcome (e.g., how taking of others' social roles in childhood play leads to the development of self — Mead, 1934, pp. 149–160). This is different from the focus of Baldwin and Royce, for whom the sociogenetic process in personality formation was as important as its outcome.

For Mead, however, the major interest in the person's internalization of the experience is the development of the self, which involved the functioning of the 'I' — 'me' system within the social personality. The beginning of the 'I' — 'me' personality structure were evident in Mead's early major work (Mead, 1903, p.104 and p.109). Baldwin's contribution to Mead's thinking about the sociogenesis of the self can be traced rather directly in that period (Mead, 1903, pp.104–105, 1905 pp.403–404). He seems to follow Baldwin and Royce in the ways in which the self-system of 'I' — 'me' is set up.

However, Mead was critical of Baldwin's efforts to 'exhaust subjectivity' through his imitation-based view on human development. In Mead's concept of self, similarity to Royce's thinking is evident. His separation of the 'I' (the agent self) from 'me' (the object self) seems to mirror Royce's ego vs. non-ego separation and relationships. Like Royce's respective distinction, Mead's 'I' — 'me' opposition is dynamic:

> I talk to myself, and I remember what I said and perhaps the emotional content that went with it. The "I" of this moment is present in the "me" of the next moment. There again I cannot turn around quick enough to catch myself. I become a "me" in so far as I remember what I said. The "I" can be given, however, this functional relationship. It is because of the "I" that we say that we are never fully aware of what we are, that we surprise ourselves by our own action. It is as we act that we are aware of ourselves. It is in memory that the "I" is constantly present in experience. We can go back directly a few moments in our experience, and then we are dependent upon memory images for the rest. So that the "I" in memory is there as the spokesman of the self of the second, or minute, or day ago. As given, it is a "me", but it is a "me" which was the "I" at the earlier time (Mead, 1934, p.174).

The 'I' — 'me' relationships in Mead's thought serve as the mechanism by which the person relates to the society: the active 'I' is constantly in the process of taking social roles (thus becoming 'me', i.e., 'the organized set of attitudes of others which one himself assumes' — Mead, 1934, p.175). In that process, the 'I' of the given moment becomes stored in memory. The 'I' aspect of the self introduces personal innovation into the process of social role-taking ('me'), while the latter curbs the excesses of such innovation.

To summarize, Mead was not involved in research on developmental psychology, but contemplated self and society relationships mostly in the context of social (folk) psychology. From that perspective, the interaction between the self and its social roles was naturally more important for Mead, than the complex development of such interaction in ontogeny. Mead was closer in his thinking to Royce than to Baldwin. Vygotsky, being a developmental psychologist, was in his turn indebted to Baldwin, and not to Royce. This difference may perhaps explain how Mead and Vygotsky proceeded along parallel but clearly distinct routes in the advancement of their thinking, starting from the same roots.

LEV VYGOTSKY AND THE SOCIAL ONTOGENY OF COGNITION

Vygotsky's thinking emerged and developed within an intellectual context that was highly international, and interdisciplinary, in its nature. His intellectual ties with Piaget, the school of Gestalt psychology, and N. Ach are evident on the surface of his writings, and therefore clearly detectable. However, Vygotsky's deeper intellectual roots go back to the originators of the sociogenetic school, more specifically to the work of Baldwin. His intellectual connection with Baldwin was in its a greater part mediated by Pierre Janet's writings, which habitually reflected Baldwin's influence (see Van der Veer and Valsiner, 1987). However, somewhat less extensively, in ways that are more scattered around in Vygotsky's diverse writings, his direct indebtedness to Baldwin is evident.

Vygotsky's appreciation of Baldwin's 'self' — 'other' relationships. The most direct link of Vygotsky's thought with that of Baldwin can be seen in conjunction with the question of the nature of personality. Vygotsky emphasized the social nature of personality development along the lines of Baldwin's 'self' — 'other' dialectics:

> The decisive moment in the development of child's personality at that stage [of first words] is the child's cognizing of his own 'I'. As is known, the child first calls himself by his name and masters the personal pronoun with some difficulty. J. Baldwin was right to note that the child's concept of 'I' develops out of the concept

of others. The concept 'personality' is, thus, a social, reflective concept that is built on the basis of the child's use in relation to oneself, of those means of adaptation that he uses in relation to others. That is why it can be said that personality is the social in ourselves (Vygotsky, 1983, p.324).

In other places in Vygotsky's writings, his indebtedness to Baldwin's sociogenetic thinking surfaces along similar lines, at times without explicit reference to his work:

The mechanism of cognition of oneself (self-cognition) and of others is the same. We are conscious of ourselves because we cognize [Russian: *soznaem*] others, and in the same way which we use to cognize others — since we are the same in relation to us that others are in relation to us. We are aware of our self only to the extent that we are *the other* for our self, i.e. in so far as we can perceive our own reflexes again as stimuli. (Vygotsky, 1982, p.52).

A similar statement about the primacy of the social experience in self-cognition occurs later in the same text by Vygotsky, in an interesting combination with Freud's thinking about personality organization (Vygotsky, 1982, p.96).

Vygotsky and the concept of 'circular reaction'. Vygotsky recognized the relevance of Baldwin's idea of 'circular reaction' (which he called 'chain reaction' — *tsepnaia reaktsia* in Russian), and noted Piaget's use of that concept, while writing about action development in infancy (Vygotsky, 1983, p.320). Aside from Janet, Vygotsky mentioned Baldwin (again in conjunction with Piaget) while describing the social origin of signs (Vygotsky, 1983, p.141). Again, Baldwin is mentioned in connection with the idea that collective disputes of children antedate their development of thinking (Vygotsky, 1983, p.141; 1984a, p.222; 1984b, p.203). Baldwin's developmental emphasis on the unity of evolution and involution was used by Vygotsky from time to time (Vygotsky, 1983, p.178; 1984a, p.21).

Internalization. Vygotsky's indebtedness to the sociogenetic school of thought became transformed into novel forms that went beyond his predecessors. The most relevant aspect of this development was his elaboration of the idea of internalization (see Wertsch & Stone, 1985, for an analysis). The concept of internalization in Vygotsky's thought is closely connected with Janet's similar concept (see Van der Veer & Valsiner, 1987). In the context of children's speech development, Vygotsky related the basic principle of sociogenesis with the actual developmental process:

If, in the earliest stages of child's development, the egocentric speech does not yet include references to the means by which the [experimental] problem can be solved, then the latter is expressed in the speech directed towards the adult. The

child, who could not reach the goal by direct means, turns to the adult and formulates the solution means that he cannot use himself, in words. The big change in the child's development takes place when the speech becomes socialized, when, instead of turning to the experimenter with a plan for a solution, the child turns to himself. In the latter case, the speech that takes part in the problem-solving process, turns from being in the category of the inter-psychical into that of an intra-psychical function. The child, organizing his own behaviour along the lines of the social type, applies to himself that means of behaviour that he previously applied to the other. Consequently, the source of the intellectual activity and control over one's own behaviour in the process of practical problem-solving lies not in the invention of a purely logical act, but in the application to one's self of a social relationship, in the transfer of a social form of behaviour into one's own psychic organization (Vygotsky, 1984c, pp.33–34).

Our treatment of Vygotsky's theoretical thinking necessarily remains fragmentary in the present context (see Van der Veer and Valsiner, 1987). However, we have demonstrated the particular point we set out to make: Vygotsky's thinking emerged along a direct historical line on the basis of his predecessors, Baldwin and Janet. Given Vygotsky's concentration on issues of ontogeny, he extended the basic ideas of the sociogenetic school of thought further in the directions that made it more closely applicable in child psychology. Mead, in contrast, was not working in that domain of psychology. The domain-specificities of the work of Vygotsky and Mead may be behind their differences in particular ways of developing the sociogenetic perspective in the social sciences in this century.

CONCLUSIONS: IMPLICATIONS FROM THE HISTORY OF THE SOCIOGENETIC PERSPECTIVE FOR CONTEMPORARY RESEARCH

Our historical overview of the sociogenetic perspective on personality reveals a fundamental issue that has not been studied directly in contemporary psychology. All the four sociogenetic theorists whose work we overviewed in this article emphasized the *dynamic*, dialectical nature of the emergence and functioning of the self in its social context. Furthermore, ontogenetically the self has been conceptualized as a result of the *process* of internalization. However, neither the dynamic functioning of the self, nor the process of internalization, are currently studied empirically in ways that would preserve the dynamic or developmental nature of the processes under study. There are rather simple reasons for the lack of such empirical endeavours — psychologists' uncritical acceptance of traditional methodology (see Hales, 1986a, p.268) has eliminated the dynamic side of the phenomena from research (Valsiner, 1987).

The lack of empirical methodology for the study of dynamics of the

functioning of the self, and of its development, could be remedied by constructing novel ways of doing research. If the constructionist perspective on human psychology is used as a starting point for one's scientific endeavours (Gergen, 1982; Gergen and Gergen, 1984; Gergen and Davis, 1985, Harré, 1981a), then a step-by-step (time dependent) analysis of the ways in which subjects construct their selves, relationships, world views, prejudices, etc., can become of high priority for investigators. The new methodology must be adequate both to the nature of the phenomena and to the theoretical perspective of the investigators. For example, if Mead's theoretical perspective of "I" — "Me" relationships is taken seriously, the empirical method should specify the specifics of the "I" and "Me" *at every time interval* in the course of ongoing observations of the functioning of the Self. Subsequently, the transformation of the "I"–"Me" relationship, and the emergence of new aspects of the Self, can be traced from the empirical record that preserves the temporal structure of the phenomena under study.

The empirical study of internalization is likewise feasible, if the theoretical heritage of the sociogenetic theorists is advanced further in the more empirical direction. We suggest that the process of internalization can be studied through longitudinal investigation of the process of interaction between the person and others, in conjunction with the description of the unfolding of the person's 'internal dialogue'. In this respect, the empirical methodology involves parallel analyses of two 'dialogues' unfolding over time, one external (the interactive process), and the other internal (the intra-active process). In Mead's terms, the dynamics of the "I" and "Me" can be traced through prospective analysis of the interaction process. In parallel, the internal dialogues of the interactants ("Ego" — "Non-ego" relationships a la Royce) can be traced through interactants' self-analysis (the intra-active process). Both processes — the interactive and the intra-active — are coordinated with each other. However, that coordination does not take the form of 'mirror-image' reflection of interactive processes in the intra-active sphere of the self. Instead, the intra-active processes may 'persistently imitate' (instead of being cases of 'imitative suggestions' — to use Baldwin's terms) the interactive ones. In other terms — the internalized cognition goes beyond the external social experiences of the person in some ways. Hence, psychologists' efforts to find 'behavior — cognition' consistency are misguided on principal grounds. Active selves construct their understanding of the world not in ways that slavishly remain faithful to those experiences, but rather in ways that constantly go beyond them. Human beings consistently create novelty both by their actions and by their thinking, using their social environment as a resource for both. The originators of the sociogenetic perspective, as well as their heirs (Mead

and Vygotsky) understood that very well. They, however, did not proceed very far in the empirical study of the self, as viewed from that perspective. Nevertheless, careful analysis of their thinking, and efforts to go beyond that and try to solve the fundamental problem that psychology has in constructing *adequate* empirical research techniques, is a challenging alley for innovation in our discipline.

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