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*Iranian Journal
of
Language Teaching Research*



Urmia University

An explication of concordance between man's mental structure and the narrative structure in the light of Vygotsky's SCT

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ABSTRACT

This paper seeks to throw light on the concordance between man's mental structure and the structure of narrative with regard to Vygotsky's sociocultural theory. In so doing, the author first provides the backdrop of the literature on the topic by first explaining Vygotsky's approach to the genesis of mind, and then gives a synoptic account of the views expressed by the men of letters regarding the structure and function of short stories. According to Vygotsky, man's higher mental development is mediated by cultural inheritances – the process whereby man wins over his biological constraints, manages to control his internal processes as well as the external world, and accumulates his cultural assets throughout history. In literary studies, views regarding the effect of structure and function of story on shaping up the child's mind are rampant. Almost all of the literary critics are committed to the belief that the formal structure of story (a) affects the child's emergent mind, (b) helps him to store, organize, and recall events in the story, (c) aids him, as he grows up, to understand the working of social life, and (d) serves as a means for the child to record events and things in the fashion of narrative when receiving any data. All these points attest to the viable fact that man's mind is genetically attuned to order and organization.

Keywords: mental structure; narrative structure; sociocultural theory; phylogeny; ontogeny; genetic method; innatism; empiricism

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ARTICLE SUMMARY

Received: 31 May 2013

Revised version received: 10 Sep. 2013

Accepted: 15 Sep. 2013

Available online: 15 Oct. 2013

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Introduction

I was engaged during the past months in reading an MA dissertation by an English Major in Applied Linguistics about the effect of short story on the retention of abstract words by the second language learner. I had been assigned the supervisor of the dissertation and indeed I welcomed the occasion as I used to be and still am very much interested in literature, in general and in English literature, in particular, mainly because I regard literature a vicarious experience as it affords the reader the second thought on the meanings and values of life. Literature, to me, serves as a mirror whereby I can see myself in the past, perceive myself at the present, and view myself in the future. It is a thread that binds me with the other human beings, their joys and sorrows, their hopes and despairs, agony and ecstasy irrespective of their race, country, religion, and social class.

Well, back to the thesis of the paper. While I was reading through the work, I came upon a statement which suddenly wised me up to a fact which I had imperceptibly felt but had not voiced or committed it to paper until then. The statement ran as 'There is concordance between man's mental structure and the structure of narrative genera.' The statement was indeed a spark that set aflame my concept of Vygotsky's sociocultural genesis of human mind. Having been inducted into the theoretical speculations over man's mental development under the influence of social and historical/cultural artifacts, I did not spend much time to come up with an answer to the question which had haunted me for a long time: 'Why do we enjoy reading or listening to short stories?' Is it because we have the tendency to visualize ourselves as one of the characters of the story or the novel? Is it because we, while interacting with one of the characters involved in the story, give vent to our indignation, hence discharge our pent up emotions, the process that is called 'catharsis' by psychologists? Is it because we seek sanctuary from the harassment of events in our lives, which leave a bitter taste in our mouths? Any answer given by the presumptive reader to these rhetorical questions may sound legitimate, but amid the various speculations on the question raised above, one answer, yet unvoiced, sounds so plausible. Now I venture to explain it in detail.

Sociocultural Theory (SCT)

In Vygotskian Sociocultural theory (SCT), man's cognition is studied within its social context; the belief is that man's cognitive development and functioning is contingent on man's ubiquitous use of artifacts, the most important one being language which is *species specific*.

SCT, a theory of the development of higher mental functions, is rooted in the 18th and 19th century German philosophy of Kant and Hegel and economic writings of Marx and Engels (Lantolf & Thorne, 2006).

In Vygotsky's genetic method, the dualism of mind and body is rejected. Within SCT, higher mental processes are mediated by the psychological tools (artifacts, the most important one being language) whereby man is endowed with a capacity to organize and gain voluntary control over his biologically specified mental functions. Unlike physical tools that are directed at outside world, psychological tools (numbers, charts, figures, art, music, language) have a dual directionality, 'reversibility', in Vygotsky's term. They may be outwardly or inwardly directed to regulate and control our mental processes such as memory, attention, rational thinking, learning and so forth.

Traditional research methods, for example, S-R model, do not capture the historical or sociocultural features of psychological development of our species. Vygotsky objects to 'hypothetic-deductive' structure in conducting research in which the researcher proposes a set of hypotheses concerning unobservable cognitive processes and examines their deducible consequences. Also, in this theory, the notion that man is the product of some innate properties

with which he is born is rejected. There is no room for the innatist's or the behaviorist's ideas regarding man's mental behavior in this theory. The tenets of Vygotsky's position on the genesis of man's mind are: a) to learn about man's mind, one has to approach it both at the phylogenic level (historical development) and at ontogenetic level (present existing social context); b) biologically-endowed elementary functions are influenced by environmental circumstances; c) man's elementary functions (shared with primates) are biological in origin whereas higher mental functions are historical in origin; d) symbolic artifacts and cultural practices empower us to control our biological endowments.

Previously, research on mental functioning assumed a unidirectional relationship between human beings and nature. Innatists (those who believe man is born with some mental capacities) and behaviorists (those who maintain that man is the product of experiences perceived through his senses) are committed to this tradition of thinking. With former school of thought, innatists, directionality flows from the brain to the world. The behaviorists, on the contrary, hold that directionality flows from the world to the brain. Vygotsky believes in bi-directionality, namely natural endowments form the foundation for thinking, and socioculturally organized activities and artifacts transform elementary functions into higher mental functions which are specific characteristics of thinking man. Thus elementary mental functions provide the foundation for the development of higher mental functions which in return reshape the elementary functions throughout the history; directionality being first from inside out and later from outside in. At the risk of laboring the point, we may say that natural mental functions, for example, memory, attention, reflexes, spatial recognition, quantification, and so on, interact directly with the environment; higher mental functions, for example, reasoning, analysis, synthesis, comparison, deduction, etc., although organized on the foundation of biologically given functions, are mediated by culturally created auxiliary artifacts over the course of history. Artifacts as such build on each other, giving rise to accumulated knowledge which of its nature produces a ratchet effect – the process which has a faster rate than the operation of biological evolution, entailing the sequel that the following progeny turns out intellectually sharper than their ancestral generation.

As cultural artifacts, either physical (e.g. hammer) or symbolic (e.g. language) spread throughout the community, they pave the road for the collaboration between the members of the community through linguistic interaction whereby sign meanings become increasingly independent of the particular 'spatiotemporal' context in which they are used (Wertsch 1985; Tomasello, 1999), the process which is termed 'displacement' by Luria (1976).

To recapitulate the central tenet of Vygotsky's SCT briefly, we may say that the individual development is contingent on two lines: biological line and cultural line. While fundamental biological traits are shaped up at the early stage of man's development, the cultural development is connected to what transpires in the sociocultural domain both at the level of general human culture as well as at the level of a specific culture. We may put it differently: the phylogenetic and sociocultural domains merge in ontogenesis so that the individual organism arises from the interaction between our biological and cultural inheritances. This great idea of Vygotsky allowed him to overcome the dualism of *man* and *society* which has prevented the construction of unified psychology for a long time. It is within this psychology that we posit the view that man's mental structure is wrought by being exposed to narrative genera throughout history since he dwelt in caves up to the present time when the mother recounts nursery tales to him as a baby while rocking the cradle. In a sense, the concordance lies at the cross-point of man's mental structure and the structure of short story. Now, it is time we took up the story line of the discussion.

Narrative Genera

Since man dwelt in caves in ancient times, he in one way or another has been narrating his experiences of hunting beasts, his encounter with untoward episodes, his doing trades ... to his fellow cave dwellers. The life experiences in those far-off days have never stopped leaving their impact on man's mental structure. Indeed, since the earliest days man's mind has been shaped up through the recounting to his fellow hunters his daily activities. The narrative genera, on the phylogenetic level, was the first dominant language function that developed compared to descriptive and expository types of verbal interaction, hence prominent in man's verbal repertoire. Interestingly enough, on the ontogenetic level, too, it is the narrative genera that engulf the infant's world. From the early months when the child is capable of responding to the objects and events in his immediate environment, the mother begins interacting with the infant, pitching her words and utterances at its perceptual level, generally in a story fashion. The formal structure of the story is more compatible with the child's emergent mind, enabling the child to store, organize, and recall the things in the story (Haven, 2005). As the child grows up, narrative fulfills a critical sense-making function. Stories told by the mother provide the child with a way to make sense of happenings around him. The structure of stories, as an external input, often with an interactive tilt, affects the child's way of understanding the intricate working of social life, increases his memory capacity, and aids him to remember his past percepts in a systematic way (Trousedale, 1990; Swatton, 1999). There is a grain of truth in the statement that people understand the world in terms of the stories that they have already understood. It is also psychologically true to claim that man's earlier experiences affect his later learning experiences (Kahn, 2001; Denning, 2001; Schank, 2000; Boyce, 1996; Tannen, 1999; Coles, 1989). The literature on the impact of stories on man's mind is rampant, attesting to the fact that our brain is hardwired for stories; namely, our brain is predisposed for grasping and understanding stories. Story is said to be built into the human genetic code instructions to wire the brain to think in story terms by birth (Haven, 2005). It is because of the narrative nature of human minds at and before birth that we are impelled as adults to make sense of our lives in terms of narrative (McAdams, 1993; Pinker, 2000).

The brain's story predisposition is reinforced and strengthened as the brain develops. Beyond the age of about 12, the brain's physical, neural 'maps' have been made. Child begins quite early to make use of the conventions of story to interpret his direct experiences of the world. Infants and toddlers use narrative to explain and to create meanings because that is what parents and their cultures do (Applebee, 1978; Kotulak, 1999). To put it in a nutshell, the human brain is predisposed to think in story terms. This mental set of man, compared with the descriptive and expository genera, is tilted towards the narrative genera, to which it is exposed and with which he comes into contact while interacting with his fellow human beings along the history line and from the outset he comes into the world.

It goes without saying that the brain can process limited amount of information, so instead of complete analyses, it relies on some crude rules of thumb such as:

- a) Events have causes in past events (temporal sequencing),
- b) Actions are driven by beliefs and goals,
- c) Human behavior follows predictable patterns, and
- d) The human mind imposes narrative structure on the information available from experiences and then interprets experiences through this structure.

It is due to mental story maps that human beings make sense of other human being's behavior and create meaning from sensory input. The human mind operates by structuring input and experiences into story fashion. Mind is never free of pre-commitments (Turner, 1996; Pinker, 1997). Alongside these mental maps, we not only interpret the world, real or fictional, but also provide principally the missing links when encountering partial information. It is interesting to note that the elements of story are said to be universal (Hobbs, 1990; Haven, 2005; Polkinghorne, 1988). Man is a goal seeker animal, and intelligence is the ability to attain goals in the face of obstacles by means of decisions and actions based on rational rules. This quality of 'intelligence' is awarded to those who follow structure (Pinker, 1997). Narrative details help the young child create images; images are believed to be more convincing and more memorable than either facts or abstract principles (Tannen, 1999).

There is a consensus among research workers that human mind, when receiving any data, records them on narrative arrangement in order to make sense of them. Novels are interpreted like experiments. Readers explore the consequences of varying one or more parameters within the fictional world while holding all other aspects constant. Also, it is argued that readers interpret experiments like novels. Equally important is the observation that paradigmatic truth (science) is time-independent. Once, the scientific truth becomes time-bound, i.e. truth is placed within time-dependent sequences, the scientific genera take on the narrative tone. Conversely, if we omit the story elements from a discourse, i. e. divest the discourse of its time-dependent feature, we convert the narrative discourse into the scientific discourse.

Recent research suggests the text structure is an important determinant of text comprehension. Man's mental structure, having taken shape along the story lines since the early days of his evolution, conforms to the narrative text structure, hence ready to comprehend and retain the text content in the memory. Memory champions are said to link what they want to remember to colors, familiar names, events, visual images, and then string them along familiar paths. They remember by creating story that provides context and relevance for meaningless information (Foer, 2006; Mandler, 1984). Nath (2004) has posited the view that narrative experience is the same as direct experience. This means that when we hear/read a story, it is as if we have experienced and lived that story. Now it is easy to understand why some men of letters have defined literature as *vicarious* experience. However, there is a big difference between narrative experience and direct experience; namely, the writer of the story may opt to impose an artistic arrangement on direct experiences in order to render the story more palatable to the reader's sense of beauty. This artistic fashioning of the events in the story, like the pragmatic meanings in the text, fascinates the reader by invoking his curiosity to delve into the deeper strata of the story. Further, the artistic composition of the story, according to Vygotsky (1971), leads to *catharsis* which contributes to the release of suppressed emotions, thus ensuring the retrieval of psychological and mental health of the reader.

Concluding Remarks

To put the finishing touches to the topic of this paper, I may recapitulate the discussion, saying that all the evidence available in the literature on the structure of the narrative and man's mental structure attests to fact that the structure of man's mind, having contact with the narrative since the earliest days of history (phylogenesis) and from the days he started as an infant to interact with his/her mother and peer group (ontogenesis), is in concord with the structure of story. Man is genetically attuned to *order* and *organization*. The artistic creation will enjoy a transcendental value if it exhibits a reasonable system; if it does not, it is relegated to no man's land, and its creator will be banished from the pantheon of men of celebrity forever. Men of letters across the world have tried their hands at producing short stories and novels, but few of them have come off with flying

colors, so to speak. Those who won the admiration of public readership have indeed responded to the intellectual and emotional needs of the reader.

Regarding the pedagogical implication of the theme of this paper, I, speaking from my personal experience, say almost assuredly that the L2 learner has always been responsive to English narratives perhaps because of the link forged between the structural patterns of this genre and his mental structure. 'Tell me a story' has been the refrain in the verbal interactions among people of different races, cultures, and nationalities. In a nut shell, short stories and novels, being vicarious experiences, offset the shortcomings of learning the target language in non-native environment. To provide the EFL learner with genuine natural language specimens, I would recommend using appropriate English short stories, in terms of the student learner's language proficient and area of interest, mostly as an outside classroom activity. Retelling the story by the student either orally or in writing in class will aid him, as evinced by literature on foreign language instruction, to enhance both his English knowledge and skill.

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(*Note: The books marked by the asterisk sign in the list above are translated from English language into Persian (Farsi) by the present author, Behrooz Azabdaftari).

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