This paper presents four major features of L. S. Vygotsky's theory of creative imagination. The first feature discussed is that imagination is the internalization of children's play. It is explained that the development of imagination parallels the development of speech which originates in the child's social dialogue with adults, passes through an egocentric phase, and is internalized as inner speech. This inner speech is credited with allowing for an individual's self-consciousness and self-regulation. Finally it is explained that, at age 7 years, the imagination no longer requires external supports and becomes an integral mental function, a consciously directed thought process learned through collective social interactions. It is explained that imagination may serve either personal wish fulfillment or be used in creative problem solving in art and science. The third Vygotskian feature discussed is that a convergence between imagination and thinking in concepts occurs during adolescence and matures in the creative thinking of the adult. The fourth and final Vygotskian feature considered is that both artistic and scientific creativity require the collaboration of imagination and thinking in concepts. (NB)
"L. S. Vygotsky's Theory of Creative Imagination"

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ABSTRACT

Four principal features of L.S. Vygotsky's theory of creative imagination are discussed in this paper.

First, imagination is the internalization of children's play. The development of imagination parallels the development of speech which originates in the child's social dialogue with adults, passes through an egocentric phase, and is finally internalized as inner speech. It is this inner speech that allows for an individual's self-consciousness and self-regulation. At age 7 years the imagination no longer requires external supports and becomes an internal mental function, daydreaming.

Second, the Vygotskian perspective regards imagination as a higher mental function, that is, a consciously directed thought process that is learned through collective social interactions. Imagination may serve either personal wish fulfillment or be used in creative problem solving in art and science.

Third, a convergence between imagination and thinking in concepts occurs during adolescence and matures in the creative thinking of the adult. And, fourth, both artistic and scientific creativity require the collaboration of imagination and thinking in concepts.
In the process of developing our own theory of creativity as the maturation of symbolic play (1982, 1983, 1984a, b, 1985) we became interested in the writings of L.S. Vygotsky. At first, we worked only with the available English translations, which provided a basis for distinguishing between non-verbal sensorimotor thinking and verbal thought. We also applied Vygotsky's model of the development of inner speech to the development of imagination thus generating a theory of imagination as the internalization of children's play (1985). Recently we have completed original English translations from Russian publications of Vygotsky's writings. These translations reveal that Vygotsky himself was developing a theory of creative imagination.

In this paper we will summarize Vygotsky's theory of creative imagination using quotations from his writings. His theory has four main features:

1. **Imagination is the internalization of children's play.**

2. **Imagination is a higher mental function and as such is a consciously directed thought process.**

3. **Creative thinking involves the collaboration of imagination and thinking in concepts, which occurs first in adolescence but matures in adulthood.**

4. **Both artistic and scientific creativity require the collaboration of imagination and thinking in concepts.**

We will now discuss each of the four features in detail.

1. **Imagination is the Internalization of Children's Play.**

   Vygotsky's cultural-historical theory views higher mental functions as the internalization of previously external social communication. Language is the tool which enables man to distance himself from his immediate perception and feelings. Word meaning occurs at age 2 years when non-verbal sensorimotor thinking merges with vocalizations. (Vygotsky, 1934A, p. 47) Sensorimotor thinking never becomes entirely verbal as illustrated in Diagrams 1-4 in the Appendix. This sets the stage for the development of non-verbal sensorimotor thinking and verbal thought as separate but interacting processes.

   Children's external dialogue with adults becomes internalized into an inner dialogue with the self. This inner speech is responsible for our self-consciousness, self-control, creative imagination, and thinking in concepts. Vygotsky's model of the development of inner speech provides a model for the development of imagination.

   According to Vygotsky, the so-called egocentric speech of early childhood has two functions. Egocentric speech is a social communication that also serves to direct the child's behavior. Vygotsky demonstrated that Piaget's formulation of egocentric speech, as a monologue accompanying children's play, was wrong. Egocentric speech occurs most fre-
quently when the child thinks another person is within hearing distance. (Vygotsky, 1934, p. 136-137). The externalized social dialogue helps the child plan out his activities. At age 7 years speech directed to oneself to help direct one's own behavior is internalized as inner speech. The speech which continues to be spoken out loud is reserved for social communications with others. The inner dialogue becomes the cornerstone for the higher mental functions which all involve self-consciousness and self-control. Questions previously asked by the parent such as "What are you making?" and "What are you going to do next?" or "What did you do that for?" are now asked of the self.

Just as egocentric speech becomes internalized as inner speech so children's play becomes internalized in imagination. Play has a dual function of being both a social interaction and a means of directing one's thoughts and actions. According to Vygotsky the external activity involved in the manipulation of real objects stimulates and helps direct the child's imagination. At age 7 years the imagination no longer needs this external support and becomes an internal mental function, daydreaming.

"Imagination in adolescence is, from the developmental point of view, the successor of children's play. Children can easily distinguish, despite all their excitement, the world created by them in play from the real world; and they willingly look for support for imaginary objects and relations in the tangible real objects of real life. The growing child ceases to play. He replaces play with imagination. When the child ceases to play he gives up the search for support in real objects. Instead of play he now fantasizes. He builds castles in the air; he creates day-dreams.

It is understandable that fantasy being the successor of children's play, is only recently broken away from its supports, which it found in the tangible and real objects of real life. This is why fantasy so willingly searches for support in concrete representations which replace these real objects. Images, eidetic pictures, and visual representation begin to play the same role in imagination which a doll representing a child, or a stool representing a locomotive, fulfill in children's play." (Vygotsky, 1931, p. 5-6).

"Imagination is a new psychological process for the child; it is not present in the consciousness of the very young child, is totally absent in animals, and represents a specifically human form of conscious activity. Like all functions of consciousness, it originally arises from action. The old adage that child's play is imagination in action must be reversed; we can say that imagination in adolescents and school children is play without action." (Vygotsky, 1933, p. 93). This quote introduces the second features of Vygotsky's theory of imagination.
2. **Imagination is a Higher Mental Function and as Such is a Consciously Directed Thought Process.**

Vygotsky sees both Freud and Piaget as articulating the old adage that child's play is imagination in action. Piaget's concept of egocentric thinking is based on Eugene Bleuler's description of autistic thinking. Bleuler, a psychoanalyst, described autistic thinking as being the manifestation of primary process thought in infancy. For Piaget, egocentric thinking is the transitional form from autistic thinking to realistic thinking. (Piaget, 1923, p. 65). Thus Vygotsky sees Piaget as repeating Freud's erroneous assumption that imagination as primary process thought is innate, unconscious, non-social, and only serves emotional wish fulfillment. (Vygotsky, 1932, 1934 B). The Vygotskian perspective sees imagination as a learned thought process originating in collective social interactions and eventually differentiating so that it can serve either personal wish-fulfillment or be used in creative problem-solving in art and science. (Vygotsky, 1931, pp. 14-16; El'Korin, 1978).

3. **Adult Creativity is The Maturation of The Collaboration of Imagination and Thinking in Concepts.**

"We have already said that in the convergence of fantasy and thinking, that the imagination of the adolescent begins to operate in concepts, and this constitutes an essential part of adolescence. But this convergence does not mean a complete absorption of fantasy by thinking. Fantasy and the other function converge but do not fuse together..." (Vygotsky, 1931, p. 5).

"There exists a widespread opinion that the child possesses a great fantasy and that the time of early childhood is the blossoming of fantasy. In spite of its strong prevalence, this opinion is wrong. As Wm. Wundt correctly said, the fantasy of the child is not at all as extensive as people like to think. The whole day is filled up with thinking about the horse that pulls the cart. With the imagining of this scene very little diverges from reality. In the adult a similar activity would signify the absolute lack of fantasy." (Vygotsky, 1931, p. 10).

Even today many adults marvel at the creativity of children's drawings of Superman and Darth Vader, apparently mistaking imitation for creation. Much of the creative fantasy of children is actually the creative fantasy of adults articulated by children in their play.

"The fantasy of the adolescent is more creative in comparison with the child's fantasy, but it is not productive in comparison with the fantasy of the adult...One fact of later origins, artistic creativity demonstrates this." (Vygotsky, 1931, p. 10-11).
4. **Both Artistic and Scientific Creativity Require the Collaboration of Imagination and Thinking in Concepts.**

Vygotsky theory suggests that the social interactions occurring in children's play become internalized as imagination. The way children learn to use and make toys is a case in point. Gombrich has used the 'hobby horse' as a prototype for artistic creativity in children's play (1951). In 1933 Vygotsky used the hobby horse as an example of how play assists in symbol formation. (Vygotsky, 1933, p. 96-99; 1935).

"Play provides a transitional stage in this direction whenever an object (for example, a stick) becomes a pivot for severing the meaning of a horse from a real horse...he (the child) needs to define his action by means of using "the horse-in-the-stick" as the pivot..."

"This is not to say that properties of things as such have no meaning. Any stick can be a horse but, for example, a postcard can not be a horse for a child. Goethe's contention that in play any thing can be anything for a child is incorrect. Of course, for adults who make conscious use of symbols, a postcard can be a horse." (Vygotsky, 1933, p. 97-98).

In conclusion, we would like to present a quote from Vygotsky describing the role of imagination in both artistic and scientific creativity.

"We already said that when in the process of understanding or in the process of practical activity the creation of something new is necessary, perhaps a new concrete construction, a new image of reality, the creation of a new idea, then on the first level appears fantasy as a basic function. With the help of fantasy not only artistic works are created but also all scientific inventions, all technical constructions. Fantasy is one of the manifestations of human creative activity, and specifically in adolescence, converging with thinking in concepts, it receives a broader development in this objective aspect." (Vygotsky, 1931, p. 16).
References:

El'Konin, D.B. Psychologii Igri (The Psychology of Play)  
Moscow: Pedagogika 1978  
Trans. F. Smolucha (in Progress)

Gombrich, E.H. (1951) "Meditations on a Hobby Horse" in Gombrich, E.H.  
Meditations on a Hobby Horse and Other Essays on the Theory of Art.  


Unpublished Manuscript, University of Chicago.

An Interdisciplinary Perspective by an Artist and a Psychologist."  
Paper delivered at the International Conference on Psychology and the Arts,  
Cardiff, Wales. ERIC Document ED 365008

Smolucha, L. & Smolucha, F. (1984A) "Creativity as a Maturation of Symbolic Play."  

Between Analogical and Logical Thinking in Artistic Creativity."  

Between Logical and Sensorimotor Thinking in Artistic Creativity."  
Paper delivered at the 8th Regional Congress of the International Society for  
Education Through Art, Bath, England, April 1985 and the 19th International  
Colloquium on Empirical Aesthetics at the University of California at Santa Cruz,  

Vygotsky, L.S. (1930) "Imagination and Creativity in Childhood" 2nd publication  
in 1967 Moscow: Prosvescheniye  
Trans. F. Smolucha (in Progress).

Vygotsky, L.S. (1931) "Imagination and Creativity in the Adolescent",  
Chapter 12 in The Pedology of the Adolescent from Volume 4 of the  
(F. Smolucha, Trans.)

Vygotsky, L.S. (1932) "Imagination and Its Development in Childhood"  
Lecture 5 in Part 2 of the Development of Higher Psychological Functions.  
(Moscow: Academy of Pedagogical Sciences, 1960). (F. Smolucha, Trans.)

Vygotsky, L.S. (1933) "Play and Its Role in the Psychological Development of the  
Child" in Mind in Society. (Harvard University Press, 1978)  
(M. Cole, et. al.).


APPENDIX

The Relationship Between Thought and Speech During the Development of Creative Imagination
AT BIRTH

SENSORIMOTOR THOUGHT

VOCALIZATIONS
AT AGE 2 YEARS

SENSORIMOTOR THOUGHT  VERBAL THOUGHT  VOCALIZATIONS
AT AGE 2 TO 7 YEARS
INFORMATION PROCESSING DURING CHILDREN'S SYMBOLIC PLAY

SM

VT

EGOCENTRIC SPEECH

PATTERN RECOGNITION AND OBJECT MANIPULATION DURING PLAY

VOC
AFTER AGE 7 YEARS
COMBINATORY IMAGINATION

SM
PATTERN RECOGNITION
MANIPULATION OF MENTAL IMAGERY

VT
INNER SPEECH

VOC

15
AFTER AGE 11 YEARS
CREATIVE IMAGINATION

SM
PATTERN RECOGNITION
MANIPULATION OF MENTAL IMAGERY

CONCEPTUAL THOUGHT
INNER SPEECH

VT

VOC

16