

:

가 , 가  
가 가  
가 가  
가 가  
:

(mind)

:  


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 , 가  
 가 Chomsky(1980)  
 Fodor  
 (conceptual  
 component)  
 (computational  
 component)  
 . Piaget (domain-general approach)  
 , (semantics) (pragmatics)  
 , (syntax)  
 (phonology)  
 (domain-specific approach) 가 ). Chomsky  
 ,  
 가 . 가 ,  
 가 Fodor Chomsky  
 가 (Rondal, 1994).  
 가 (modularity)  
 (theory of mind)  
 , ,  
 (modularity  
 theory) Fodor(1983) . Perner(1991)  
 Chomsky(1980, 1988) . Fodor(1983)  
 , ,  
 가 , (Leslie, 1987; Leslie  
 (module) & Thaiss, 1992). , Leslie(1987)  
 18 가  
 가  
 . Chomsky(1988)  
 (language faculty), ,

( , 2000; Bloom, (false belief)  
 2000; Bloom & Markson, 1998; de Villiers, (sentential complement) 가  
 2000; de Villiers & Pyers, 1997, 2002;  
 Diesendruck & Markson, 2001; Gelman &  
 Bloom, 2000; Sabbagh & Baldwin, 2001).

가

(Bloom, 2000; Bloom  
 & Markson, 1998; Diesendruck & Markson,  
 2001; Gelman & Bloom, 2000; Sabbagh &  
 Baldwin, 2001).

( , 2000; Bloom, 2000;  
 Bloom & Markson, 1998; Sabbagh & Baldwin,  
 2001),

18 24

(Bartsch & Wellman, 1995;  
 Meltzoff, 1995; Repacholi & Gopnik, 1997).

3 가

(Bloom, 2000; Diesendruck & Markson, 2001).

(Bartsch  
 & Wellman, 1995),

4 가

( , 1997, 2001; Perner, Leekam,  
 Wimmer, 1987; Wimmer & Perner, 1983).

가

가

(de Villiers, 1995, 2000; de Villiers & 가  
 Pyers, 1997, 2002; Hale & Tager-Flusberg,  
 2000; Miller, 2001). de Villiers

(de Villiers, 2000; de Villiers &  
 Pyers, 1997, 2002)

:

가

가

가 (gaze following)  
(joint attention)

1 가

가

(Heider & Simmel, 1994)

가

가?

Butterworth(1991)

9

18

(Bartsch

가

& Wellman, 1995; Meltzoff, 1995).

Meltzoff

가

가

(1995) 18

가

가

가

가

가

(Baron-Cohen,

가

(

1995; Bloom, 2000).

가 가

)

가

가

. Johnson, Slaughter,

Carey (1998)

12

( )

가

가

( )

가

(

)

가

( )

( )

가  
Bloom(1996) 가

Bloom

(goal)

가

(Joseph & Tager-Flusberg, 1999).

가

5

가 ,

가

가

Bloom(1996)

. Bartsch Wellman(1995)

3 가

Bloom(1996)

가

4 가

. 3

가 .

Maxi

가 .

2

4

가

가

Perner

Smarties

(1987)

. Perner (1987)

4 가

가 ( , 1997, 2001; Perner,

Smarties

Leekam, Wimmer, 1987; Wimmer & Perner, 1983).

Smarties가

Smarties

‘ , ’

‘Maxi’

：“

‘Smarties’ 가 (Perner, Leekam,

& Wimmer, 1987; Wimmer & Perner, 1983).

?”, “

Wimmer Perner (1983)

?”, “

?” Maxi

가

4

( , Maxi ). Maxi 가

( A)

가

( B)

Maxi가

“Maxi

?”

. . 3

Maxi가

( A) 가

( B)

4

Maxi가

( A)

Maxi가 가

가

, Maxi가

가

가

가

가

Bloom(1996)

가

가

(Bloom & Markson, 1998; Gelman & Bloom, 2000; Gelman & Ebeling, 1998). Bloom Markson(1998)

3

4

가

, Landau, Smith, Jones(1988)

Bloom(1996)

(Baldwin, Markman, Bill, Desjardins, Irwin, & Tidball, 1996; Bloom, 1996; Bloom & Markson, 1998; Gelman & Ebeling, 1998). Baldwin (1996) 15

가

. Bloom Markson (1998)

3

4

20

( 1 ).

10

15

가

가

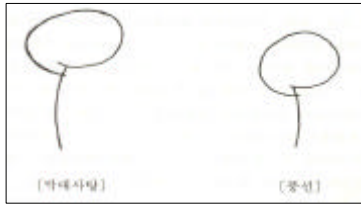
3

4

가

(3 -73% 4 -87%).

:



1. Bloom & Markson(1998)

( , ) “ ”

( , ) “

” ,

“ ”

“ ”

가

가

가

가

. Gelman Ebeling(1998)

(Gelman & Bloom, 2000).

(2000)

가

3

가

John

( ).

‘John 가

Soja, Carey, Spelke(1991)

John

3

가 가

5

).

(

가

가

?’

4가

가



( ).

( ). 가 (constraint)

가 (whole object assumption), 가 (taxonomic assumption), 가 (mutual exclusivity assumption)

가 가 가 (Markman, 1994).

( , 1995, 1998, 2002) (2000) (bias)

가 (Landau, Smith, & Jones, 1988)

(Kemler-Nelson, 1995) 가 .

가 .

가 .

가 . Markman Watchtel(1988)

3 ( , ) ( , 가 )

“dax ?” .

2 (naming 80% explosion) ( , dax) ( , )

6 가 ) .

가 . ,

(Woodward & Markman, 1998). Markman Watchtel(1988)

, Woodward Markman (1998)

가 가 가 .

Clark(1987)

(Bloom, 2000).

,  
가 ,  
가

(Gelman & Bloom, 2001).

Markman Watchtel(1988)

, Bloom(2000)

: “ 가 가

. Bloom(2000)

dax

가

가

가

( , 가 )

”.

. Bloom(2000)

Diesendruck

Markson(2001)

(label condition)

(fact condition)

가

가

가

가

가

가

( , zev)

( , jop)

가

가

.”

“

(2000)

. Bloom

“ 가

?”

가

,

,

가

가

,

가 가

가 de Villiers (de Villiers, 1995, 2000; de Villiers & Pyers, 1997, 2002)

Diesendruck, (sentential complement)

Markson(2001)

가 ‘(think)’, ‘(believe)’, ‘(remember)’

가 “ 가 ”

가 “ ”

가 ‘want’

‘wish’ 2 ,

‘think’ ‘know’ 3

(Bartsch & Wellman, 1995).

3 4

가

(Astington & Jenkins, 1999; de Villiers, 1995, 2000; Hale & Tager-Flusberg, 2000; Miller, 2001). Astington Jenkins(1999)

59 3

( ) 가

( ) 가

) 7 3 가 ,

가 ,

. Kirparsky Kirparsky (1970)

(factivity) , 가 가 .  
 (factive verb) (non-factive verb) .  
 verb) . de Villiers (de Villiers, 1995;  
 , ‘know’ ‘remember’ 2000; de Villiers & Pyers, 1997, 2002)  
 (truth value) ‘ (true)’  
 ‘believe’ , 가  
 ‘ (false)’ 1).  
 , “ 가  
 ” , 가  
 . “ 가  
 ” Hale Tager-Flusberg (2000)  
 가 . Hale Tager  
 ‘ , -Flusberg(2000)  
 ‘ , 가  
 ‘ , ( , 가 “Y”  
 ), : (1) (2)  
 ( , (3)  
 ). ‘ ,  
 , ,  
 가 가 ,  
 : (1) Maxi ( 가  
 ) (2) Smarties  
 ( ) (3)  
 가

1)

가 가

가 가

de Villiers (2000)

가

de Villiers Pyers(2002) 가

3.5 1 가

가 가

(Specific Language Impairment, SLI) (Miller, 2001), (de Villiers, 2000)

de Villiers(2000) 가

가 가

Fodor(1983) 가

Fodor 가

가 가

가 de Villiers(2000) 1988) Chomsky(1980,

:

. Chomsky

.  
가  
가 Chomsky

. , Bloom(2000)

가?  
가

가

가

Chomsky

가

. 1

가

Markman(1991)

Bloom(2000)

? 4  
가

Bloom(2000)

가 4 가

(German & Leslie, 2000; Gopnik,

가?

1993).

가

가

?

Gopnik

(1993)

가

3

가

가  
 3  
 (Moses, 1993; Siegal & Beattie, 1991). , Bloom German(2000)  
 3  
 , 가  
 (conceptual competence)  
 German Leslie (2000) . 가  
 가  
 가? 가 2 가  
 3 가 가  
 , 3  
 . Gopnik(1993) 가 3  
 가  
 6 1  
 . ? Bloom  
 German(2000) 3  
 가  
 가  
 가? 2), 가  
 가 가? Perner(1991)

2)

( , 2002; Bruell & Woolley, 1997; Leslie & Thaiss, 1992).

:

. Leslie(1994) ,  
 가 ,  
 Perner(1991) 가 ,  
 가  
 . Perner 1 .  
 (primary representation), 2 (secondary  
 representation), (metarepresentation) 가  
 . 1 SP가 .  
 . 2 SP  
 . Leslie(1994)  
 . Perner , , 4  
 가 , 4 SP가 ToMM 가  
 , Leslie  
 가 .  
 가  
 , Lang Perner(2002)  
 .  
 de Villiers  
 가 .  
 ‘Maxi’ “  
 ” Maxi  
 .  
 Leslie ,  
 (1994) (innate module)  
 (ToMM: theory of mind mechanism)  
 가 , ToMM  
 가  
 . Leslie(1994) 가 . 가  
 ToMM  
 “ (SP: selection processor)”가 가 가



가

,

Fodor

가

(quasi-module)

가?

가

가

가

가

,

가

가

,

Leslie가

.

,

가

가

,

가

가? Fodor

Chomsky

가

Tsimpli

Smith(1998)

,

(predicate)

가

. Chomsky

가

(mental lexicon)

,

---

가

가

3

4 가 ,

가

가

가?

Bloom German(2000)

김혜리(1997). 아동의 마음에 대한 이해 발달: 틀린 믿음에 대한 이해로 살펴본 마음이론의 발달. : , 10 1 , 74-91.

김혜리(2001). 마음에 대한 이해 발달. 성현란 (편), 인지발달. 학지사.

김혜리(2002). 마음 이해능력의 발달과 표상 능력의 발달 1: 정상아동의 마음 표상과 사진표상에 대한 이해. : , 15 4 , 25-42.

이현진(1995). 단어의미 습득에서의 존재론적 범주와 통사적 단서의 역할. : , 8 1 , 95-106.

이현진(1998). 한국어에서의 단어의미 습득: 지각적 속성, 존재론적 범주, 통사적 단서. : , 11 2 , 107-120.

이현진(2002). 한국어에서의 단어의미 추론: 존재론적 개면, 온전한 대상제약, 형태의 역할. : , 15 4 , 77-92.

이현진과 이경화 (2000). 한국어 단어의미 추론에서 존재론적 개념, 의도, 형태 복잡성의 역할. : , 13 2 , 15-26.

- 
- / :
- Astington, J. W., & Jenkins, J. M. (1999). A longitudinal study of the relation between language and theory of mind development. *Developmental Psychology*, 35(5), 1311-1320.
- Baldwin, D. A., Markman, E. M., Bill, B., Desjardins, R. N., Irwin, R. N., & Tidball, G. (1996). Infants' reliance on a social criterion for establishing word-object relations. *Child Development*, 67, 3135-3153.
- Baron-Cohen, S. (1995). *Mindblindness: An essay on autism and theory of mind*. Cambridge, MA: MIT Press.
- Bartsch, K., & Wellman, H. M. (1995). *Children talk about the mind*. NY: Oxford University Press.
- Bloom, P. (2000). *How Children Learn the Meanings of Words*. Cambridge, MA: MIT Press.
- Bloom, P., & German, T. P. (2000). Two reasons to abandon the false belief task as a test of theory of mind. *Cognition*, 77, B25-B31.
- Bloom, P., & Markson, L. (1998). Intention and analogy in children's naming of pictorial representations. *Psychological Science*, 9, 200-204.
- Bruell, M. & Woolley, J. D. (1997). Children's understanding of false photographs and false beliefs: Conceptual deficit or faulty analog? *Poster presented at the Society for Research in Child Development*, Washington, D. C.
- Butterworth, G. (1991). The ontogeny and phylogeny of joint visual attention. In A. Whiten (Ed.), *Natural theories of mind*. Blackwell.
- Chomsky, N. (1980). *Rules and Representations*. Blackwell, Oxford.
- Chomsky, N. (1988). *Language and problems of knowledge*, Cambridge, MA: MIT Press.
- Clark, E. V. (1987). The principle of contrast: A constraint on language acquisition. In B. MacWhinney (Ed.), *Mechanisms of language acquisition: The twentieth annual Carnegie symposium on cognition*. Hillsdale, NJ: Erlbaum.
- de Villiers, J. G. (1995). Steps in the mastery of sentence complements. *Paper presented at the biennial meeting of the SRCD*, Indianapolis, IN.
- de Villiers, J. G. (2000). Language and theory of mind: What are the developmental relationship? In S. Baron-Cohen, H. Tager-Flusberg, & D. Cohen (Eds.), *Understanding other minds: Perspectives from developmental cognitive neurosciences*, 2nd edition, Oxford: Oxford University Press.
- de Villiers, J. G., & Pyers, J. (1997). Complementing cognition: the relationship between language and theory of mind. In *Proceedings from the Boston University conference on language development*, Somerville, MA: Cascadilla Press.
- Diesendruck, G., & Markson, L. (2001). Children's avoidance of lexical overlap: A pragmatic account. *Developmental Psychology*, 37(5), 630-641.
- Fodor, J. A. (1983). *The modularity of mind*:

- 
- An essay on faculty psychology*. Cambridge, MA: MIT Press.
- Gelman, S. A., & Bloom, P. (2000). Young children are sensitive to how an object was created when deciding what to name it. *Cognition*, *76*, 91-103.
- Gelman, S. A., & Ebeling, K. S. (1998). Shape and representational status in children's early naming. *Cognition*, *60*, 35-47.
- German, T. P., & Leslie, A. M. (2000). Attending to and learning about mental states. In P. Mitchell, & K. Riggs (Eds.), *Children's reasoning and the mind*. Hove: Psychology Press.
- Gopnik, A. (1993). How we know our own minds: the illusion of first person knowledge of intentionality. *Behavioral and Brain Sciences*, *16*, 1-14.
- Hale, C. M., & Tager-Flusberg, H. (2000). Will training on language influence theory of mind development? In *Proceedings from the Boston University conference on language development*, Somerville, MA: Cascadilla Press.
- Heider, F., & Simmer, M. (1994). An experimental study of apparent behavior. *American Journal of Psychology*, *57*, 243-259.
- Kirparsky, P., & Kirparsky, C. (1970). Fact. In M. Bierwisch, & K. Heidolph (Eds.), *Progress in linguistics*. The Hague: Mouton.
- Johnson, S., Slaughter, V., & Carey, S. (1998). Whose gaze will infants follow? The elicitation of gaze following in 12-month-olds. *Developmental Science*, *1*, 233-238.
- Joseph, R. M., & Tager-Flusberg, H. (1999). Preschool children's understanding of the desire and knowledge constraints on intended action. *British Journal of Developmental Psychology*, *17*, 221-243.
- Kemler-Nelson, D. G. (1995). Principle-based inferences in young children's categorization: revisiting the impact of function on the naming of artifacts. *Cognitive Development*, *10*, 347-380.
- Landau, B., Smith, L. B., & Jones, S. S. (1988). The importance of shape in early lexical learning. *Cognitive Development*, *3*, 299-321.
- Leslie, A. M. (1994). Pretending and believing: issues in the theory of ToMM. *Cognition*, *50*, 193-200.
- Leslie, A. M., & Thaiss, L. (1992). Domain specificity in conceptual development: Neuropsychological evidence from autism. *Cognition*, *43*, 225-251.
- Markman, E. M. (1994). Constraints of word meaning in early language acquisition. In L. Gleitman & B. Landau (Eds.), *The Acquisition of the Lexicon*. Cambridge, MA: MIT Press.
- Markman, E. M., & Wachtel, G. F. (1988). Children's use of mutual exclusivity to constrain the meaning of words. *Cognitive Psychology*, *20*, 121-157.
- Meltzoff, A. N. (1995). understanding the intentions of others: re-enactment of intended acts by 18-month-old children. *Developmental Psychology*,

- 31, 838-850.
- Miller, C. (2001). False Belief: understanding in children with specific language impairment. *Journal of Communication Disorders, 34*, 73-86.
- Moses, L. J. (1993). Young children's understanding of belief constraints on intention. *Cognitive Development, 8*, 1-25.
- Perner, J. (1991). *Understanding the representational mind*. Cambridge, MA: MIT Press.
- Perner, J., Leekam, S. R., & Wimmer, H. (1987). Three-year-olds' difficulty with false belief: The case for a conceptual deficit. *British Journal of Developmental Psychology, 5*, 125-129.
- Repacholi, B. M., & Gopnik, A. (1997). Early reasoning about desires: evidence from 14- and 18-month olds. *Developmental Psychology, 33*, 12-21.
- Rondal, J. A. (1994). Exceptional Cases of Language Development in Mental Retardation: The Relative Autonomy of Language as a Cognitive System. In H. Tager-Flusberg (Ed.), *Constraints on Language Acquisition*. LEA.
- Sabbagh, M. A., & Baldwin, D. A. (2001). Learning words from knowledgeable versus ignorant speakers: links between preschoolers' theory of mind and semantic development. *Child Development, 72*(4), 1054-1070.
- Siegal, M., & Beattie, K. (1991). Where to look first for children's knowledge of false beliefs. *Cognition, 38*, 1-12.
- Soja, N., Carey, S., & Spelke, E. (1991). Ontological categories guide young children's inductions of word meaning: Object terms and substance terms. *Cognition, 38*, 179-211.
- Tsimpli, I-M., & Smith, N. (1998). Modules and Quasi-Modules: Language and Theory of Mind in a Polyglot Savant. *Language and Individual Differences, 10*(3), 193-215.
- Wimmer, H., & Perner, J. (1983). Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition, 13*.
- Woodward, A. L., & Markman, E. M. (1998). Early word learning. In W. Damon (Series Ed.), D. Kuhn, & R. Siegler (Vol. Eds.), *Handbook of child psychology: Vol. 2. Cognition, perception, and language* (pp. 371-420). New York: Wiley. 103-128.

# Theory of Mind and Language: Based on Children's comprehension

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We attempt to investigate the relation between theory of mind and language based on children's understanding. One hand, some researchers provide evidence that the mental state such as intention affects children's inference of word meanings. Moreover, Bloom(2000) argues that the mutual exclusivity assumption is a product of children's theory of mind. On the other hand, de Villiers(2000) argues that understanding of sentential complement should be followed by that of false belief. The question then arises as to how to account for the discrepancy between these two research groups. We propose that the evidence might not reject the modularity of language or the modularity of theory of mind, and understanding false belief might require abilities other than theory of mind. It might need the knowledge of sentential complement or selection processor.

*Key words : word meaning, theory of mind, sentential complement, intention, false belief*