The Battle for Language: from Syntax to Phonics David Pesetsky/MIT pesetsk@mit.edu

1. Shinichi Suzuki's "Mother Tongue Method" for music instruction

(1) Shinichi Suzuki 's (1898-1998) revelation

"Oh — why, Japanese children can all speak Japanese! The thought suddenly struck me with amazement. In fact, all children throughout the world speak their native tongues with the utmost fluency. Any and every Japanese child — all speak Japanese without difficulty. Does that not show a startling talent? How, by what means, does this come about? I had to control an impulse to shout my joy over this discovery.

The children of Osaka speak the difficult Osaka dialect. We are unable to imitate the Tohoku dialect, but the Tohoku children speak it. Isn't that something of an accomplishment? But no one else I mentioned it to seemed the slightest bit impressed. It was just taken for granted; **people in general think that the ability children display is inborn.** At my excitement, half of my listeners were startled, and others just thought me absurd. Nevertheless, my discovery actually had great significance; it made me realize that any child is able to display highly superior abilities **if only the correct methods are used in training...Since [Japanese children] all speak Japanese so easily and fluently, there must be a secret; and this must be training.** Indeed, all children everywhere in the world are brought up by a perfect educational method: their mother tongue. Why not apply this method to other faculties? I felt I had made a tremendous discovery....

[Shinichi Suzuki. 1983. *Nurtured by Love*, second edition, Warner Bros. Publications, p2, p. 1. Emphasis added.]

(2) Elements of Suzuki training

- a. "Repetition: Ability equals knowledge plus 10,000 time," said Dr. Suzuki. Understanding what I'm supposed to do or sound like is not enough. I must be able to consistently produce that sound or motion in order for it to be called a skill. The only way to get consistency is to repeat, gradually approximating the ideal one has in mind...
- b. "Praise: All learning and all attempts at learning need to be praised, but that praise needs to be sincere and specific if it is to have any meaning for the student. It is part of creating a nurturing environment, and a way for teachers and parents to mark progress. "Wow, you didn't do that yesterday, but today you got that nailed. It's really good."
- c. "Review: Just as a child doesn't stop saying one word to learn another, the children review previous pieces in the repertoire...It's much the same as learning vocabulary." [Patricia D'Ercole. 1999. "The Suzuki Philosophy: a Conversion Experience", American Suzuki Journal, 28: 28-30]

Language is complex. Yet all kids learn their native language. How?

- 1. they start very young;
- 2. their parents practice with them regularly;
- 3. the children imitate what they hear, and work hard at it.

Playing the violin is less complex. Why can't all kids learn to play the violin?

- 1. They must start very young;
- 2. Their parents must practice with them regularly;
- 3. They must listen to recorded performances of the pieces they are playing, matching what they produce to the recorded performances.

(3) Suzuki "Talent Education Movement" facts and figures

Membership, Suzuki Associaton of the Americas: 10,553 (current)
Estimated number of Suzuki teachers worldwide: 8,300 (1995)
Estimated number of Suzuki students worldwide: 230,000 (1995)
[source: Jenny Cayton, Suzuki Assoc. of the Americas]

(4) The Suzuki perspective on acquiring language:

How do children come to know language?

Repetition, review, training, incentives. Consequence: slow, effortful, but visible progress.

Is language special?

No.

2. Linguistics

 Language acquisition is partly data-driven, but also relies on explicit support from innate knowledge and abilities.

The support offered by the innate aspects of language explain the ease and rapidity with which many data-driven aspects of language are acquired.

• An image problem:

The existence of the data-driven part is obvious, because the vocabulary, pronunciations and word order of different languages differ.

The existence of the innate part is less obvious, because you have to work harder to discover it. That's why it's easy to miss (especially if you want to miss it).

The innate part ("Universal Grammar") manifests itself in several ways:

- a. **Arguments from acquisition:** behavior of individual speakers that fails to reflect linguistic data that the speaker has heard.
 - 1. knowledge for which no data provided evidence ("**Poverty of the Stimulus**");
 - 2. lack of knowledge in the face of abundant evidence that should support this knowledge ("**Abundance of the Stimulus**").
- Arguments from universals: there is an invariant core of structural properties, common to all languages.

An argument from "Poverty of the Stimulus":

We know things about our language that are not learned from the data we heard.

Example: the "that-trace" effect.

(5) Rule for forming wh-questions: ç

Move an interrogative phrase to the left periphery of the question clause.

(6) Which book did Mary buy __?

(7) Constraint #1: *That*-trace filter

A clause from which an interrogative subject has been moved may not start with the subordinating conjunction (complementizer) *that*.

(8) Moving an interrogative object..

- a. Which book does Mary think [John bought __]?
- b. Which book does Mary think [that John bought __]?

(9) Moving an interrogative subject.

- a. Which customer did Mary say [__ bought this book]?
- b. but:

*Which customer did Mary say [that bought this book]?

(10) Constraint #2 (Russian only): Short-distance constraint

In Russian, rule (5) may not move an interrogative phrase out of a subordinate clause.

Consequence #1: The Russian counterparts to *all* the sentences in (8) and (9) are felt to be awkward, impossible — un-Russian.

Natural speech does not contain examples of this sort.

But: Russian sentences that violate the short-distance constraint *and* the *that*-trace filter are uniformly felt to be worse than sentence that violate only the short-distance constraint.

(11) a. Russian version of (8b)

*Kakuju knigu Maša dumaet, čto Vanja kupil __? what book (obj) Masha thinks that Vanya bought 'What book does Masha think that Vanya bought?'

b. Russian version of (9b)

**Kto Maša dumaet, čto __ kupil ètu knigu? who (subj) Masha think that bought this book 'Who does Masha think (that) bought this book?'

Significance:

- Russian children don't hear sentences like (9b) —
- but they also don't hear sentences like (8b) either.
- Where does Russian speakers' knowledge of the *that*-trace constraint come from?

Pesetsky, David. 1982. Complementizer-trace phenomena and the Nominative Island Condition. *The Linguistic Review* 1:297-344.

An argument from "Abundance of the Stimulus":

Russian "genitive of negation": If a noun phrase has an indefinite, non-specific meaning and is a direct object, it is marked with "genitive case" (a special form) in a negative sentence.

Children as young as 3 know this, and can use the genitive case in most instances with the facility of an adult.

Experiment (Moscow day care centers)

(12) Example: Non-specific direct object of a transitive verb with negation

Experimenter: [using a toy cat and paper with drawings of houses and bicycles on it] (English translation:)

This is a story about a cat. The cat decides he wants to paint. So he paints one house-oh, it's difficult! And then he paints another house--it's difficult! He says, "Now, I'm tired. I can't paint any more," and he goes home.

Puppet:

Ja znaju čto slučilos'. Kot pokrasil dva doma I know what happened. Cat-NomSg painted-MascSg two-acc house-GenSg

i ne pokrasil ni...

and not painted-MascSg not...

'I know what happened. The cat colored two houses and didn't color...'

Predicted child response:

odnogo velosipeda a single-m-gen bicycle-GenSg 'a single bicycle.'

(13) **Results (summary)**

a. Story biased towards non-specific object: 73% genitive response

b. Story biased towards specific object: 4% genitive response

Exception:

Verbs that have direct objects but no subjects (**unaccusative verbs**) showed significantly fewer genitive responses than normal transitive verbs.

Significant point #1:

This group includes several "bleached verbs" that lexically *require* genitive case, regardless of the meaning of their object.

(14) **Results: younger group**

a. Regular unaccusative verbs: 40% genitive responseb. Bleached verbs: 31% genitive response

(15) Results: older group

a. Regular unaccusative verbs: 50% genitive response b. Bleached verbs: 62% genitive response

Significant point #2:

The bleached verbs in this group are outstandingly common. The most common member of the group is *net* (*nyet*):

<u>Notable exception:</u> Perhaps the most common word in the language. Children have a specific difficulty with constructions that involve an object noun-phrase but no subject.

One construction of this type is the construction with the existential verb *nyet*, that means "isn't there", "doesn't exist" or "we haven't got any".

(16) The Newsstand

Customer: "Nedelju" i "Sport" // I "Futbol" esli est'

'Week and Sport. And Football if you have it.'

<u>Vendor:</u> "<u>Futbola</u>" net "We don't have <u>Footbal</u>l."

<u>Customer:</u> "Sport" pozhalujsta. 'Sport, please.' Vendor: To zhe. 'Same thing.'

Customer: "Moskovskoj pravdy" net? A?

'Don't you have Moscow Pravda? Huh?'

<u>Vendor:</u> Net 'We don't have it.' Customer: "Pravdu" dajte! 'Gimme *Pravda*.'

<u>Customer:</u> "Sel'skoj" ne bylo? 'You didn't have <u>Agricultural Gazette</u>?'

Vendor: Ne bylo. 'Didn't have it.'

(17) Not an artifact of our experiment: evidence natural speech

"[I]n negative sentences with *net*, the nominative is at the very beginning used in place of thegenitive case: *net pinók* [not-is stump-NomSg] 2;9, 17 *u nás nét dén'gi* [at us not-is money-NomSg] 2;8,16; *u bábuški Máni nét svin'ja* [at grandma Manja not-is pig-nom] 2;9,17; *niktó nétu* [nobody-NomSg not-is] 2;9,25. This structure for negative expressions (*net* + nominative case) is made possible by the corresponding affirmative expressions like: *vot penëk* [here (is) stump-NomSg]; *u nas est' den'gi* [lit. 'at us is money-NomPl', i.e. 'We have money']." (Gvozdëv, p. 146)

Significance:

• These results comport with arguments by Borer and Wexler that young children have a specific difficulty with constructions that involve an underlying direct object but no underlying subject.

- In this instance, the support provided by biology for one aspect of language acquisition seems to mature late.
- The failure of children to fully acquire an outstanding frequent linguistic pattern while
 acquiring a related pattern of some considerable sophistication points to the crucial
 enabling role of the innate component of language. Without it, even a common pattern
 goes unlearned.

Babyonyshev, Maria, Ronald Fein, Jennifer Ganger, David Pesetsky and Kenneth Wexler. 1998 The maturation of grammatical principles: evidence from Russian unaccusatives. Unpublished ms., MIT.

Borer, Hagit, and Ken Wexler. 1987. The Maturation of Syntax. In Thomas Roeper and Edwin Williams (eds)., *Parameter Setting* 23-172.. D. Reidel Publishing Company.

Gvozdëv, A.N. 1961. Voprosy izuchenija detskoj reči [Questions in the Study of Children's Speech], Izdatel'stvo Akademii Pedagogičeskix Nauk RSFSR, Moscow.

Arguments from linguistic universals

The ordering of adverbs, related particles and suffixes when sorted by meaning, is invariant across languages:

(18) a. English adverbs

He was **once usually** willing to help *He was **usually once** willing to help

b. <u>Dagaare (West Africa) tense particles</u> - Bodomo 1993,39

O da man nmiere ma (S)he **PAST HABITUAL** beat-PROG me

'(S)he was usually beating me'

c. <u>Canela-Crahô (Brazil) tense particles</u> - Popjies and Popjies 1986, 182

'I always used to do that'

d. <u>Aleut (North America) tense suffixes</u> - Bergsland 1994,337ff

chisi-lga-qali-qa-x..

distribute-PASS-INCEPT-HABITUAL-PAST-sg

'it was distributed..'

Khalkha Mongolian tense suffixes (Asia) - Svantesson 1991,191ff

bi: [...] moGoi-g cωlωd-dδg bai-sδn

I snake-ACC throw-HABITUAL be-PAST

'I used to throw it at the snake'

Turkish tense suffixes - Kornfilt 1997,356

Hasan piyano çal-ar-di

Hasan the piano play-HABITUAL-PAST

'Hasa used to play the piano'

(19) The Cinque Hierarchy

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[frankly Mood<sub>sentence type</sub>
 [luckily Mood<sub>evaluative</sub>
 [allegedly Mood<sub>evidential</sub>
  [probably\ \mathrm{Mod}_{epistemic}]
   [once T(Past)
   [then T(Future)
    [perhaps Mood<sub>irrealis</sub>
     [necessarily Mod<sub>necessity</sub>
      [possibly Modpossibility
       [usually Asp<sub>habitual</sub>
        [finally Asp<sub>delayed</sub>
         [tendentially \ Asp_{predispositional}
         [again \ {\rm Asp}_{repetitive(I)}
          [often \ Asp_{frequentative(I)}
           [willingly Modvolition
            [quickly \ \mathsf{Asp}_{celerative(I)}
            [already T(Anterior)
              [no longer Asp<sub>terminative</sub>
              [still Asp<sub>continuative</sub>
               [always Asp<sub>continuous</sub>
                [just Asp<sub>retrospective</sub>
                 [soon Asp<sub>proximative</sub>
                  [briefly Asp<sub>durative</sub>
                   [(?)~{\rm Asp}_{generic/progressive}
                    [almost \ {\rm Asp}_{prospective}
                    [suddenly Asp<sub>inceptive</sub>
                     [obligatorily Modobligation
                      [in vain Asp<sub>frustrative</sub>
                      [(?) Asp<sub>conative</sub>
                       [completely Asp_{SgCompletive(I)}]
                         [tutto \ {\rm Asp}_{PlCompletive}
                          [well Voice
                          [earlyAsp<sub>celerative(II)</sub>
                           [? Asp<sub>inceptive(II)</sub>
                            [again Asp<sub>repetitive(II)</sub>
                            [often Asp<sub>frequentative(II)</sub>
                             Verb
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Significance:

All languages share the same somewhat hidden skeleton. Why do they share this skeleton?

Cinque, Guglielmo. 1999. Adverbs and Functional Heads. Oxford: OUP.

Arguments from depth of explanation:

The explanation for linguistic facts is not always evident on the surface. So why are they facts?

- (20) Standard English does not show verb-fronting when the subject is questioned...
 - a. What did Mary buy __?
 - b. *Who did __ buy it? [unless *did* is stressed]
- (21) ...not even fronting of the main verb.
 - a. Who recently bought it?
 - b. *Who bought recently it?
- (22) A similar fact in subordinate clauses: the that-trace filter.
 - a. What do you think that Mary bought __?
 - b. *Who do you think that __ bought it?

A proposed analysis: The clause-introducer *that* is a form of Tense that fronts just like an auxiliary verb in certan syntactic circumstances. (Pesetsky and Torrego 2000).

In fact, Belfast English (N.Ireland) shows actual tensed-verb fronting following this pattern:

- (23) Belfast English
 - a. What did Mary claim [did they steal __?]
 - b. I wonder what did John think would he get ?
 - c. Who did John say [did Mary claim [had John feared [would Bill attack __]?
 - d. *Who did John say [did __ go to school]?

[bad unless do is stressed]

Significance: Underlying language is a hidden system. How did it get there?

3. Language is special

The principals uncovered in linguists' investigation of human language typically do not resemble anything known from the study of other areas of cognition.

(24) The Suzuki perspective on acquiring language:

How do children come to know language?

Repetition, review, training. Incentive: praise improvements and approximations. Consequence: slow, effortful, but visible progress.

Is language special?

No.

(25) **Behaviorism:**

"In teaching the young child to talk, the formal specifications upon which reinforcement is contingent are at first greatly relaxed. Any response which vaguely resembles the standard behavior of the community is reinforced. When these begin to appear frequently, a closer approximation is insisted upon. In this manner very complex verbal forms may be reached." [B.F. Skinner (1957) *Verbal Behavior*, pp. 30-31]

(26) But...but...but behaviorism is *bad*, right?

"It is simply not true that children can learn language only through 'meticulous care' on the part of adults who shape their verbal repertoire through careful differential reinforcement, though it may be that such care is often the custom in academic families. It is a common observation that a young child of immigrant parents may learn a second language in the streets, from other children, with amazing rapidity, and that his speech may be completely fluent and correct to the last allophone, while the subtleties that become second nature to the child may elude his parents despite high motivation and continued practice." [N. Chomsky, 1957 review of Skinner *Verbal Behavior*]

(27) Then how come:

"...when Pablo Casals heard a Suzuki recital in Tokyo, he rushed to the stage shouting 'bravo', and hugged the children...Suzuki has done more than revolutionize violin teaching...Oberlin Professor Clifford Cook says: 'What Suzuki has done for young children earns him a place among the benefactors of mankind, along with Schweitzer, Casals, and Tom Dooley."

[Newsweek, quoted as jacket blurb on Shinichi Suzuki, Nurtured by Love]

If Suzuki was so dead wrong, what are these kids doing playing the violin?

Answer:

- Sometimes, ignorance is bliss.
- Suzuki quite harmlessly imposed on language his common-sense knowledge about how children learn to play the violin.
- The real contribution of his "mother-tongue" revelation was the idea of starting children on music lessons at a very young age, with high expectations.
- As so often in skill instruction, high expectations yield high achievement.

Suzuki's was lucky enough to be 100% wrong about language. Others who were less wrong have been less lucky.

4. Whole Language

"Whole language teaching is also based on scientific knowledge and theories about language." (K. Goodman, What's Whole in Whole Language, 26)

(28) The Suzuki perspective on acquiring language:

How do children come to know language?

Repetition, review, training, incentives.

Consequence: slow, effortful, but visible progress.

Is language special?

No. [Children can learn to play the violin the same way.]

(29) A linguist's perspective on acquiring language:

How do children come to know language?

Immersion in a environment in which language is used. Consequence: rapid, effortless progress.

Is language special?

Yes.

30) The Whole Language perspective on acquiring language:

How do children come to know language?

Immersion in a environment in which language is used. Consequence: rapid, effortless progress.

Is language special?

No. [Children can learn to read and write the same way they learn to talk.]

Learning to read and learning to write are a lot like learning to talk."

[Edelsky, Altwerger and Flores, Whole Language: What's the Difference?, 1991]

"There is evidence which indicates literacy can develop in the same "natural" way as spoken language when the conditions for learning are comparable".

[Judith Newman Whole Language: Theory in Use, 1985, p 60

"We now know that learning to read and learning to write are a lot like learning to talk." [National Council of Teachers of English brochure]

"Just as they learn the patterns of oral language, so most children will unconsciously learn common phonics patterns..."

[Constance Weaver, Reading Process and Practice 1994]

"Written language shares all the characteristics of oral language except that it's visual rather than aural." [Ken Goodman *On Reading*, 1996]

"Underpinning my beliefs is my understanding of the necessary conditions for language learning...Some major understandings include:

- Literacy acquisition is a natural process.
- The conditions for becoming oral language users are the same as for becoming readers and writers..."

[Regie Routman, Invitations: Changing as Teachers and Learners K-12, 1994]

I Learn to Read and Write the Way I Learn to Talk

[book title]

"...We would think it funny if parents hovered over their newborn's crib, chanting the sounds of language one at a time. Parents are not trying to teach language, but rather trying to communicate with their child. They do not teach children individual sounds, but instead, use and share language naturally as a part of everyday experiences. They respect and accept their baby's babblings as talk. Although different from that of grown-ups, the child's language is celebrated and accepted without criticism. It is through constant interaction with family and friends--through using language and hearing others use it in everyday situations--that children learn to talk. *Our research has indicated that the same is true of learning to read and write*. It is through constant interaction with family and friends. teachers and classmates--through using reading and writing and observing others reading and writing in everyday situations--that children can learn to read and write."

[National Council of Teachers of English, *Elementary School Practices*]

Is learning to read more like learning to talk or more like learning to play the violin? The best evidence [insert disclaimer here!]:

a. The use of writing systems is parasitic on speech. Work of Charles Perfetti (http://www.pitt.edu/~perfetti/perfettilab.htm) argues that users of alphabetic and non-alphabetic writing systems alike route comprehension of written texts through the phonology of their language. For example, tongue-twisters take longer to read than non-tongue twisters for both English and Chinese readers. This research argues that written language is not just another form of language.

<u>Significance</u>: It *might* turn out that there is a UG for written language (just as it might have turned out that there is a UG for violin playing), but there is no reason to assume this. Written language is a code that represents the spoken language, but is not an instance of language itself.

b. A precondition for the successful learning of an alphabetic writing system is *phonological awareness*. Sometimes described as the ability to bring to conscious awareness the phonological units (segments/phonemes) encoded by the alphabet, it at least involves the ability to link these units (consciously or not) to written symbols. Apparently, children differ greatly in their degree of natural phonological awareness, but remediation is often possible for children whose phonological awareness is low. [Adams, M.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: The MIT Press, 1990. See also: Gough, Philip, L.C. Ehri and R. Treiman, eds. *Reading Acquisition*. Hillsdale, NJ: Lawrence Erlbaum Assoc.]

<u>Significance:</u> Learning to read an alphabetic writing system has a precondition related to language that is not universal across the species, and often requires intervention to cultivate.

c. The overall picture of learning to read is very little like learning to speak. There are a many instances of failure to acquire despite plentiful evidence, but few or no instances of acquisition in the absence of evidence.

Common sense:

Alphabetic writing provides a code for phonological units of speech. If children are not born knowing the code, and do not always develop the phonological awareness necessary to construct the mapping between letters and linguistic units, they need some degree of explicit, systematic assistance — often called *phonics*. At the very least, the assistance should be provided until proven unnecessary.

Reminder: the failure of Russian 3-4-year olds to master the genitive case with *net* illustrated the difficulty of detecting linguistic patterns without specific biological support.

5. Whole language: what happened next

"English-Language Arts I-VI is the official policy statement of the Direction Générale de Developement Pédagogique, Ministère de l'Education for the Province of Quebec. It mandates a 'whole language, child-centered, integrated approach'... The Quebec curriculum guide and course of study provides an excellent model for a system-wide whole language program."

[Ken Goodman, What's Whole in Whole Language?, p.64]

"As the information in this table reveals, in seven provinces (British Columbia, Manitoba, New Brunswick, Newfoundland/Labrador, Ontario, Prince Edward Island, Quebec) the only textbooks on the approved lists are those that subscribe to a whole-language philosophy... Unfortunately, in many provinces unless special permission is granted to do otherwise, schools are only permitted to purchase in quantity for classroom use textbooks that appear on the approved lists."

[Marvin L. Simner, "Beginning Reading Instruction: A Position Paper on Beginning Reading Instruction in Canadian Schools", Canadian Psychological Association 1993]

"We've begun seriously to affect legislative policy in states like Michigan and Kentucky as well as all of the provinces of Canada."

[Jerome Harste (1993) "New Questions, Different Inquiries", in Carl B. Smith, ed., Whole Language: The Debate", Edinfo Press, p. 147]

"...Every three years the State Program Quality Review (PQR) team, composed of teachers and administrators from other districts, also reviews our program. During the last review, [...] recommendations were made, including suggestions for improving the reading program. As a result, the following changes have been made:

Teachers have attended workshops emphasizing strategies in the teaching of language arts. Workbooks are being phased out of the reading curriculum.

More literature books have been added to the curriculum.

The whole language approach to the language arts has been implemented. [...] [Soleado Elementary School, Rancho Palos Verdes, California, 1994-95 Principal's Message; /http://www.pclab.com/soleado/ (defunct)]

"[...]In order to implement this philosophy, the Union City Board of Education recently adopted as its primary educational philosophy the "whole language approach." ["Whole Language Philosophy Guides Instruction in New Jersey", Anna Flanagan. *NCTE Chronicle*; http://www.ncte.org/news/chronicle/top/wholelan.html (defunct)]

"But whole language, which sounds so promising when described by its proponents, has proved disastrous when applied to - and by - real people. In the eight years since whole language swept California, fourth-grade reading scores have plummeted, according to the National Assessment of Educational Progress (NAEP). Indeed, California fourth-graders are now such poor readers that only the children in Louisiana and Guam - both hampered by pitifully backward education systems - get worse scores. The still-unfolding reading debacle stems from a tragic misapplication of the state's 1987 framework, in which bureaucrats interpreted whole language as a wholesale replacement for traditional lessons. Hundreds of grade schools banned spelling tests, saying they stifled children. Phonics was prohibited by principals who said it was meaningless to kids, citing such familiar absurdities as: The cat sat on a fat hat."

[Jill Stewart, LA Weekly, April 21, 1996]

6. The Whole Language response to linguistics

"Whole language teaching is also based on scientific knowledge and theories about language." (K. Goodman, What's Whole in Whole Language, 26)

Defensive response to linguistics:

Learning to read only looks different from learning to speak if you look at the wrong aspects of learning to speak — structure and form. If you look at how children learn to "construct meaning", the two processes look alike again.

"Meaning is now accepted as the core of language."

J.Harste (1993) "New Questions, Different Inquiries", in Carl B. Smith, ed., Whole Language: The Debate", Edinfo Press, p.145

Consequence:

Whole-language deemphasizes the role of formal structure in the reading process. Skilled readers, it is claimed, extract meaning from the printed page opportunistically, relying on contextual clues, pictures, guessing as much as actual decoding: "sampling the text". (Goodman, K. 1967. "Reading as a Psycholinguistic Guessing Game. Journal Of the Reading Specialist 6: 126-35.) In the Whole Language literature, this view is called "psycholinguistics" -- or sometimes "psycho-sociolinguistics"!

A variety of research makes it clear that skilled readers do not read this way, though unskilled readers do. (Nicholson, T. 1986. Reading is Not a Guessing Game--The Great Debate Revisited. *Reading Psychology*, 7:197-210)

"In the past, research focused on the components of language -- phonological and grammatical units. As a result, we understood and taught the language processes as separate entities characterized by discrete skills. More recently, language researchers have shifted their focus to study language from the perspective of its primary function -- communication. These studies have helped us to understand that authentic language use and development is social and interactive and that learning is enhanced through the interplay of the language processes. [...]"

"By the time they enter school, most young children have acquired a working knowledge of language, an internalized set of grammatical rules that allows them to communicate. We do not directly teach this internal grammar to children -- they develop it naturally as they interact with their environment. Motivated to communicate by necessity and curiosity, they develop increasingly sophisticated ways to express themselves and make themselves understood. The child who loves cookies is motivated to progress from pointing at cookies, to trying to say the word "cookie," to putting that word into a sentence, 'I want cookie!'...Classroom studies suggest the principles underlying the development of oral language may operate similarly in the development of reading and writing, no matter what the learner's age."

[First draft of Massachusetts Curriculum Framework "Conveying and Constructing Meaning", Massachusetts Dept. of Education, 1995.]

Moral: Ignorance may be bliss, but a little knowledge is a dangerous thing.

7. The battle for language

From: Forty Massachusetts specialists in linguistics and psycholinguistics To : Dr. Robert V. Antonucci

Commissioner of Education, Commonwealth of Massachusetts
Cc: Linda Beardsley, Curriculum Frameworks Coordinator, Dept. of Education

Dr. Michael Sentance, Secretary of Education

His Excellency, William F. Weld, Governor of Massachusetts Date: July 12, 1995

Subject: Standards for Reading Instruction in Massachusetts

"We are researchers in linguistics and psycholinguistics -- and Massachusetts residents. We are writing to raise certain questions about the inclusion of contentious and, in our view, scientifically unfounded views of language in the sections on reading instruction of the draft Curriculum Content Chapter on Language Arts ("Constructing and Conveying Meaning"), recently circulated by the Massachusetts Department of Education. These views are presented as a principal support for the reading curriculum advocated as an instructional "standard" in this document.

The proposed Content Chapter replaces the common-sense view of reading as the decoding of notated speech with a surprising view of reading as directly "constructing meaning". According to the document, "constructing meaning" is a process that can be achieved using many "strategies" (guessing, contextual cues, etc.). In this view, the decoding of written words plays a relatively minor role in reading compared to strategies such as contextual guessing. This treats the alphabetic nature of our writing system as little more than an accident, when in fact it is the most important property of written English -- a linguistic achievement of historic importance.

The authors of the draft Content Chapter claim that research on language supports their views of reading. The document asserts that research on language has moved from the investigation of particular "components of language -- phonological and grammatical units" to the investigation of "its primary function -- communication". These supposed developments in linguistic research are used as arguments for a comparable view of reading. We are entirely unaware of any such shift in research.

We want to alert the educational authorities of Massachusetts to the fact that the view of language research presented in this document is inaccurate, and that the claimed consequences for reading instruction should therefore be subjected to serious re-examination.

The facts are as follows. Language research continues to focus on the components of language, because this focus reflects the "modular" nature of language itself. Written language is a notation for the structures and units of one of these components. Sound methodology in reading instruction must begin with these realities. Anything else will shortchange those students whom these standards are supposed to help.

As linguists, we are concerned that the Commonwealth, through its powers to set standards for schools, should presume to legislate an erroneous view of how human language works, a view that runs counter to most of the major scientific results of more than 100 years of linguistics and psycholinguistics. We are even more concerned that uninformed thinking about language should lie at the heart of a "standards" document for Massachusetts schools."

[signatures]

"Though whole language is taking the brunt of what's gone wrong in reading and writing there is no simple solution. Where whole language plays a role, it has been the misinterpretation, poor application, and inadequate articulation of whole language, rather than its sound principles and practices, that are to blame." [Routman (1997), "Back to the Basics of Whole Language", *The Council Chronicle* [National Council of Teachers of English], vol. 6, 4