

Identifying and Treating Child Language Disorders **WITHIN** a Child's Dialect in Dialectally Diverse Communities

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LSU

Department of
Communication Sciences
& Disorders



SUPPORTING STUDIES OF
DEVELOPMENT, DISORDERS,
DIALECTS, & DISPARITIES

LSU

Department of Linguistics



2020

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National Institutes of Health (NIDCD): R03DC3609, NIDCD R01DC009811

Terminology

Dialects by Category

Mainstream

Nonmainstream

Dialects by Name

General American English (GAE)

African American English (AAE)

Southern White English – rural (SWE)

Cajun/Creole English (CE)

Spanish-Influenced English (SE)

AAE with Gullah/Geechee Influence (AAE-Gullah/Geechee)

Dialects by Place

Baton Rouge, New Orleans, Pierre Part, River Parishes

Philadelphia, Pittsburgh (Pittsburghese), Rural Pennsylvania (Pennsylvtucky)



Terminology

Schools: Speech and Language Impaired

Research:

Specific Language Impairment

Developmental Language Disorder

Primary Language Impairment

Today's Talk:

Language Impaired (LI)

Typically Developing (TD)

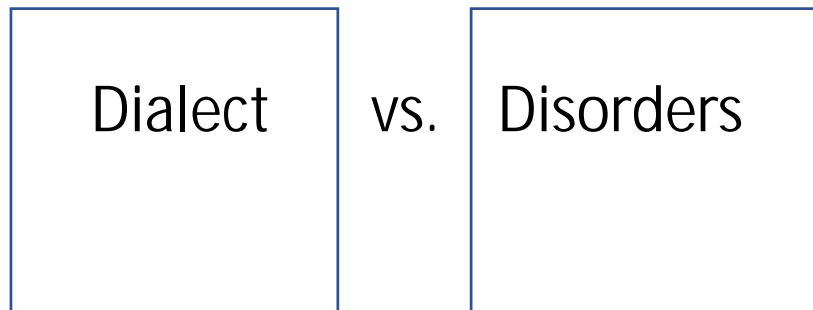


ASHA (1983)

No dialectal variety of English is a disorder or a pathological form of speech or language

Assessment: Distinguish dialect from disorder

Treatment: Treat only "true errors" not dialect differences

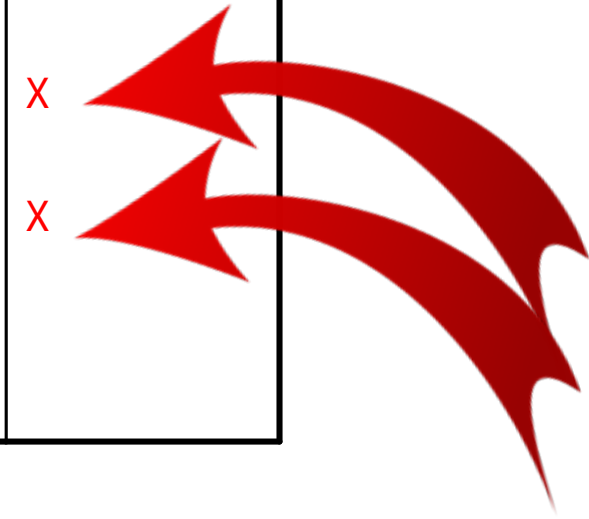


2-Box Model



Dialect vs. Disorder

Child's Productions		Dialect	Disorder
Zero copula be	He happy	X	
Zero third person	He walk	X	
Zero plural s	Two shoe	X	
Multiple negation	I don't want none	X	
Pronoun appositive	My sister, she	X	
Zero articles	I see shoe		X
Zero Infinitive to	I want go shopping	X	
Zero preposition to	I took Pam the store		X
Dialect specific past tense	drunk/drank	X	
Dialect specific words	fixin, sposta, hafta	X	



Test and treat productions that cannot be tied to a child's dialect

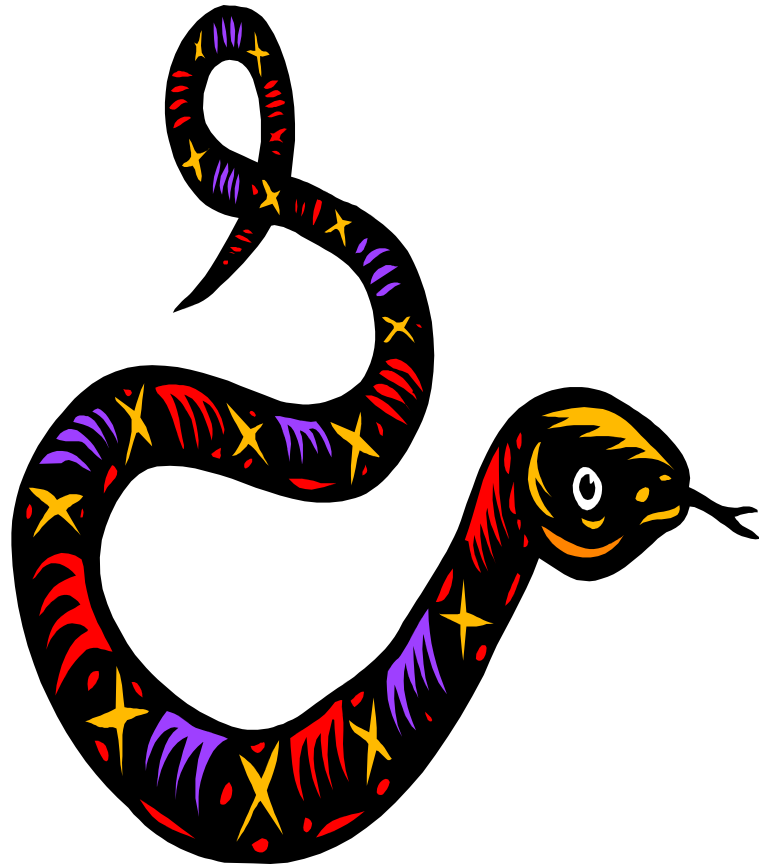
Other Quotes

Test results **are invalid** if the test taker comes from a background other than that of the test's normative sample (ASHA, 1983).

Methods used for collecting language data and the ways in which we approach their scoring and analysis **should not** be rooted in the majority culture (Craig, 1996).

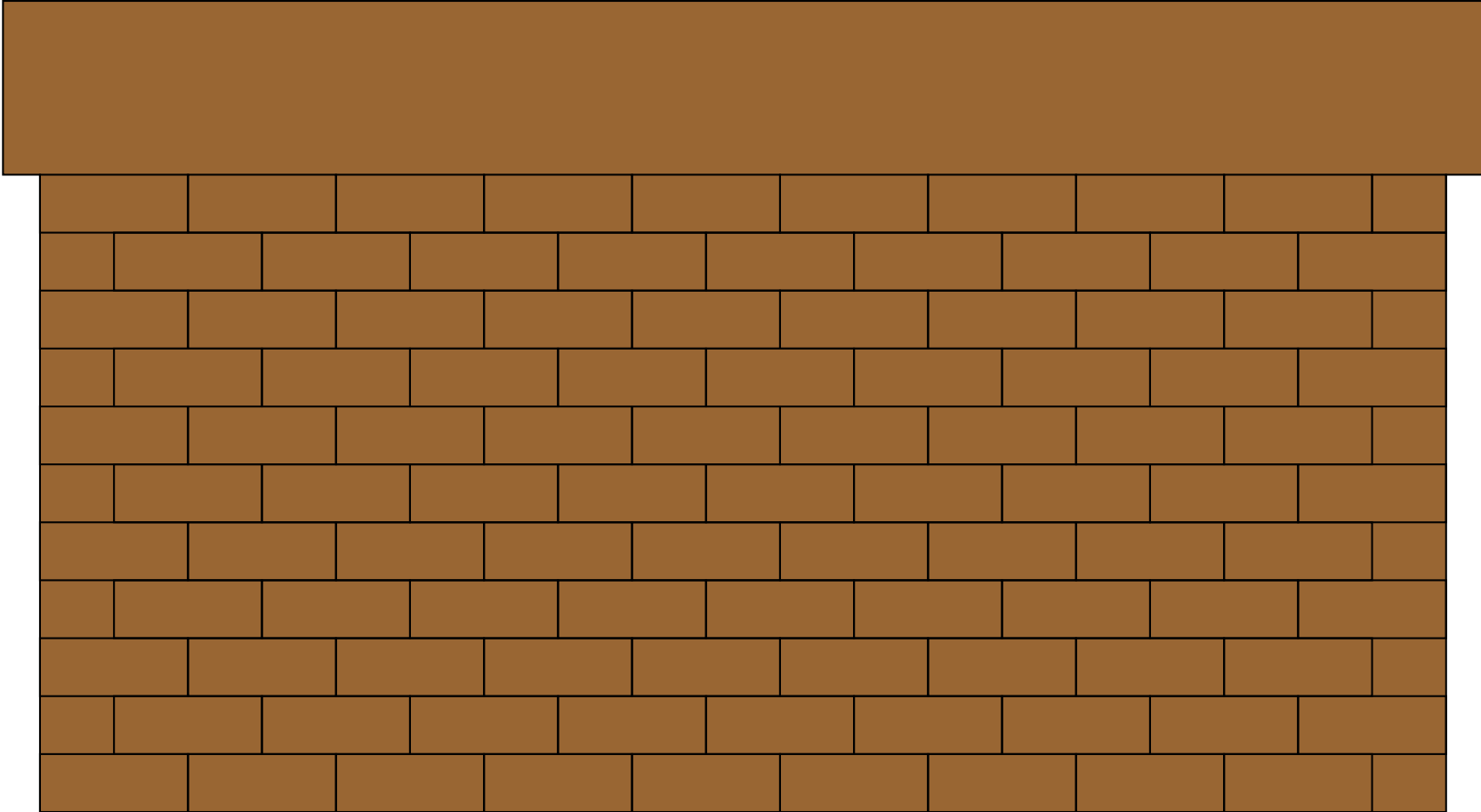
Scoring systems that do not provide equal treatment to alternative language expressions **lack validity** (Vaughn-Cooke, 1983; Nelson, 1991).

Snake Metaphor



Red against Yellow can kill a fellow; Red touching Black, safe for Jack

Wall Metaphor



New Framework: Diagnostic Conundrum

Nonmainstream dialects can appear identical to symptoms of childhood language impairments.

	Dialect Terms	SLP Deficit Terms
Tavis Ø a boy.	zero copula be	Omission
Tavis Ø walking.	Zero auxiliary be	Omission
Tavis drinkØ milk everyday.	Zero third regular	Omission
Tavis finishØ fishing.	Zero past tense	Omission
Tavis, Ø you want ice cream?	Zero do	Omission

Solution: Think about forms as one of two types

Contrastive

Forms that vary
across Dialects

Conundrum

Past Tense
Verbal -S
Copular BE
Auxiliary BE
Auxiliary DO

Noncontrastive

Forms that DO NOT vary
across Dialects

No Conundrum

Articles
Conjunctions
Demonstratives
Locatives
Negatives
Prepositions
Present progressive
Pronouns

Solution: Test and treat forms that avoid the conundrum

Contrastive

Forms that vary
across Dialects
Conundrum

Past Tense
Verbal -S
Copular BE
Auxiliary BE
Auxiliary DO

Noncontrastive

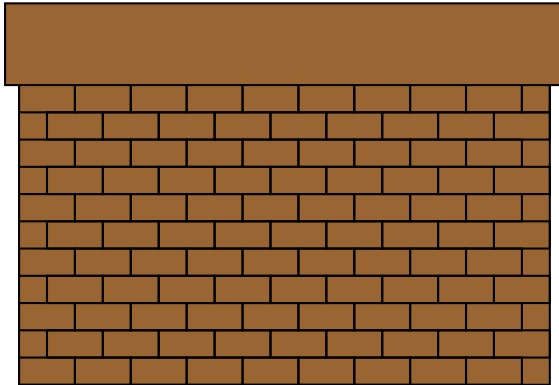
Forms that DO NOT vary
across Dialects
No Conundrum

Articles
Conjunctions
Demonstratives
Locatives
Negatives
Prepositions
Present progressive
Pronouns

DELV Screener & Norm-Referenced Test

Contrastive

Forms that vary
across Dialects

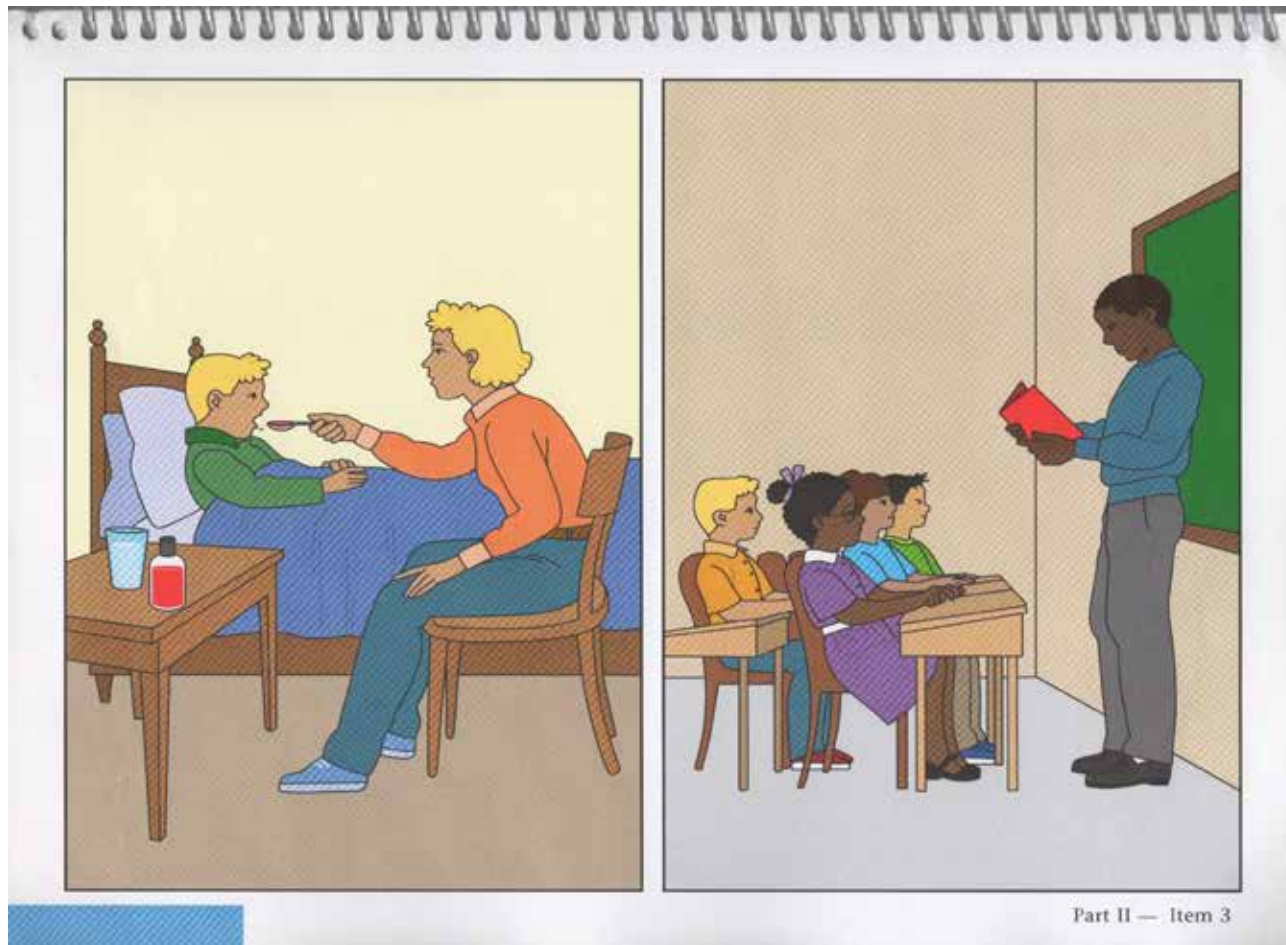


Noncontrastive

Forms that DO NOT vary
across Dialects

Articles
Conjunctions
Demonstratives
Locatives
Negatives
Prepositions
Present progressive
Pronouns





Today this boy is at school. But yesterday he could not get out of bed, and his mother gave him some medicine. Why?

Correct

Was
He was sick.
He wasn't feeling good

Incorrect

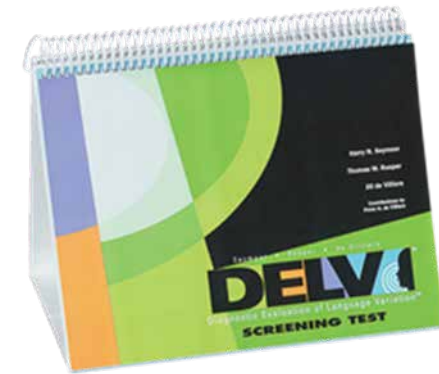
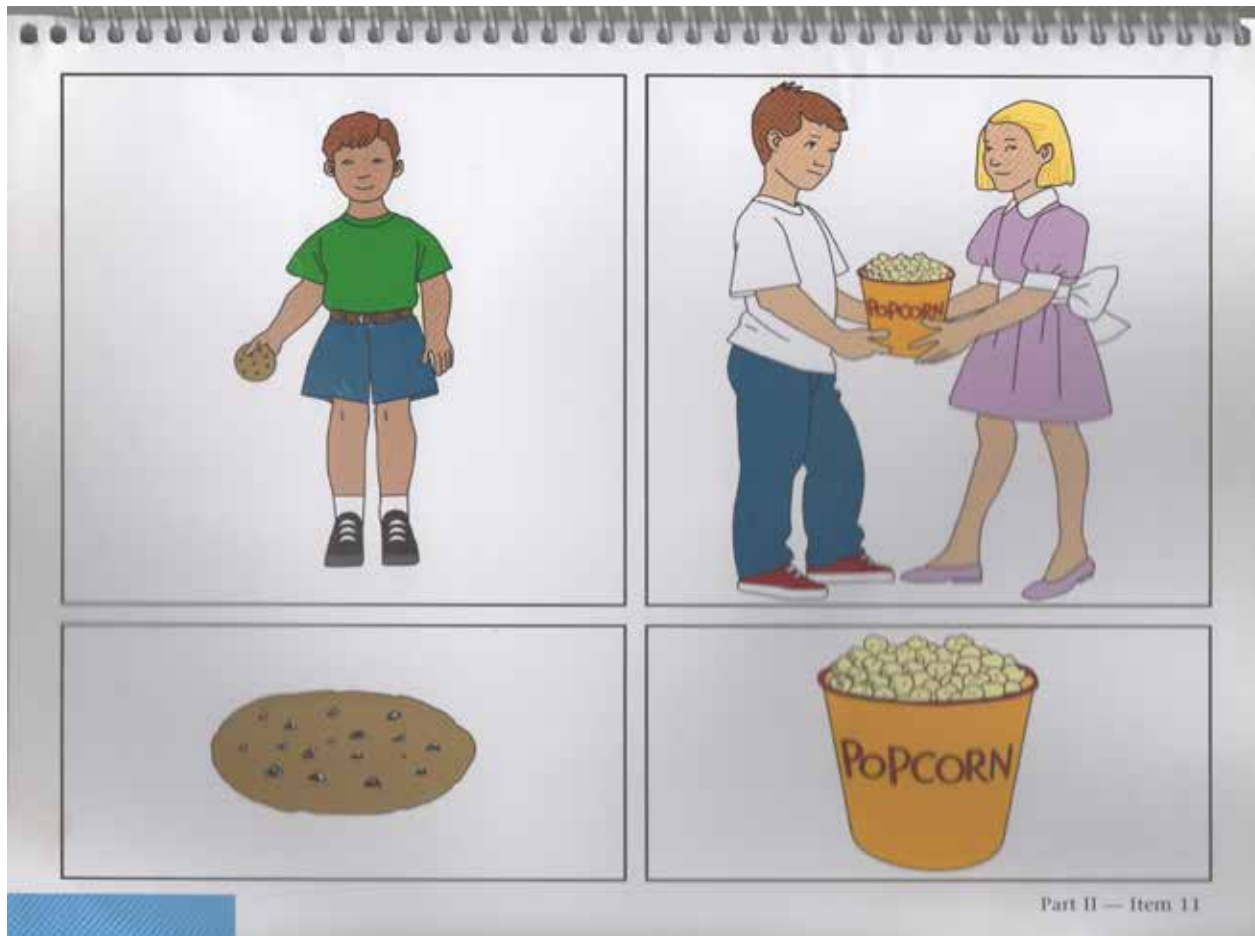
Omits was/uses is
He sick.
He's sick.

Incorrect

something else
To make him feel better.

Incorrect

NR
NR



He has a cookie. They have popcorn. The cookie is his. The popcorn is

Correct

Theirs

Hers/his

His and hers

Incorrect

thems/shes/hims/both

DELV Screener & Norm-Referenced Test

Contrastive

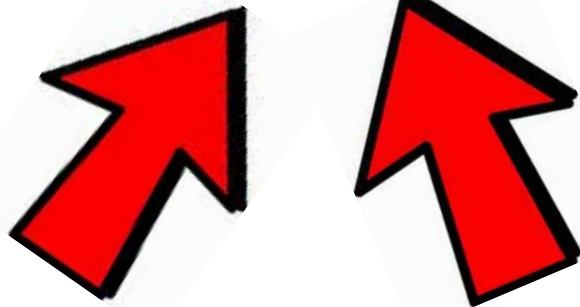
Structures that vary
across Dialects

Past Tense
Verbal -S
Copular BE
Auxiliary BE
Auxiliary DO

Noncontrastive

Structures that DO NOT vary
across Dialects

Articles
Conjunctions
Demonstratives
Locatives
Negatives
Prepositions
Present progressive
Pronouns

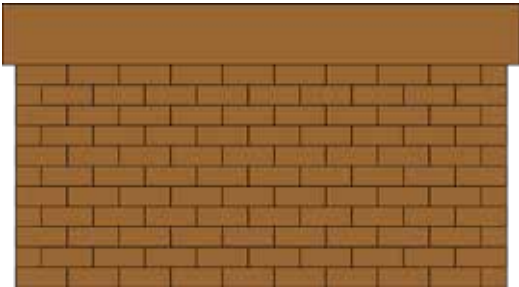


Professional Outcome



Snake metaphor

Avoid nonmainstream dialects.



Wall metaphor

Work around nonmainstream dialects.

Both frameworks do not allow you to test or treat the child's entire language system!

We no longer use the 2-box model of our field.

Dialect
Contrastive

vs.

Disorder
Noncontrastive

We no longer use the 2-box model of our field.

Dialect
Contrastive

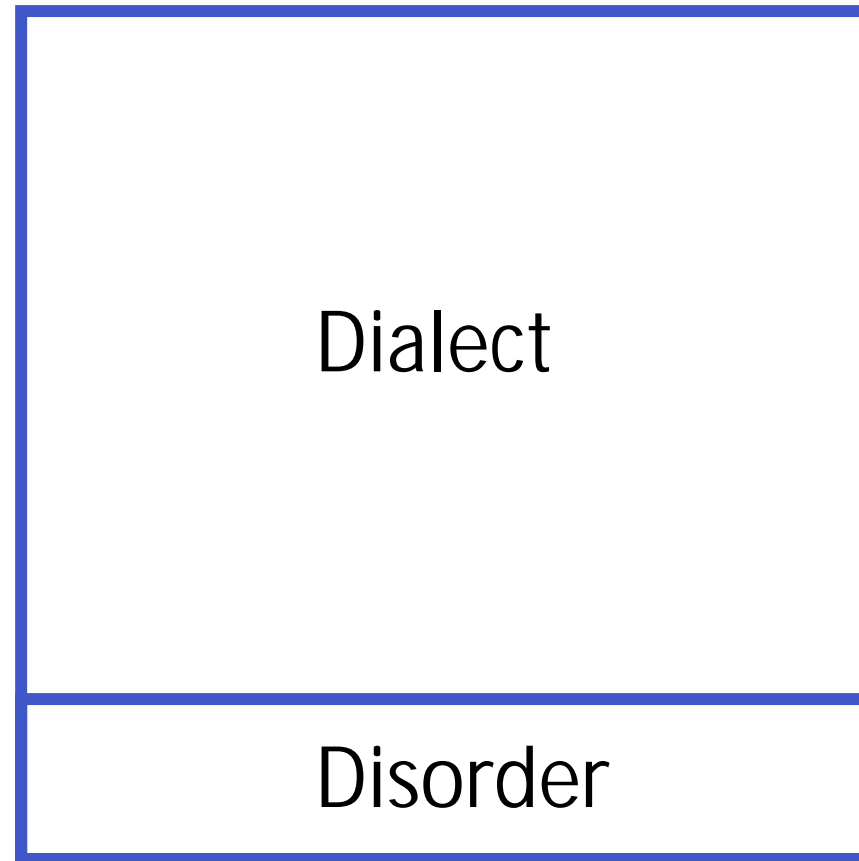
vs.

Disorder
Noncontrastive



What? Seriously?
Not sure about this.
I'm a member of ASHA
Feeling uncomfortable!

Single Box Model Disorder **WITHIN** Dialect



Cross-Linguistic Framework

GAE



AAE



SWE



Bilingual



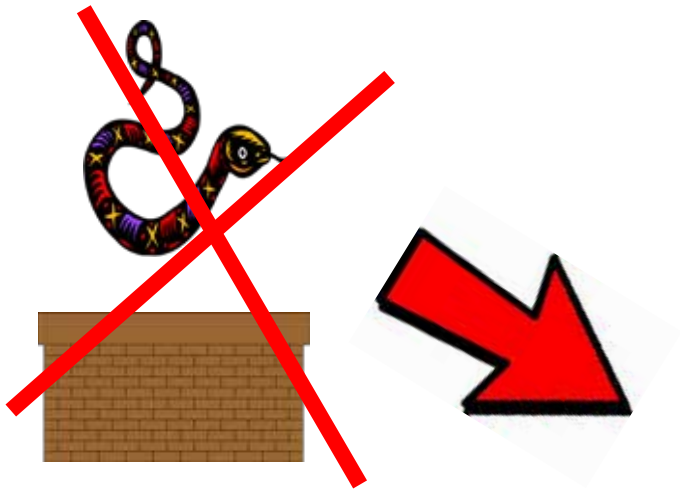
Trilingual



Typically
Developing

Language Impaired

~10%



Disorders Within Dialects

This framework allows you to test and treat the child's entire language system.

All Dialects are Instruments of Expression

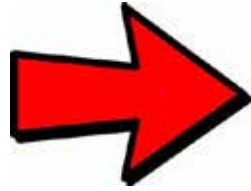


Dialect vs. Disorder
Diagnostic Conundrum



Disorder within Dialects

How does dialect variation
differ from LI?



How does LI manifest in various
nonmainstream dialects of English?

How do same dialect-speaking
children with and without LI differ
from each other?

Over-Identification

73 African American children, aged 4-5 years, Head Start/Public PreK

Diagnostic Evaluation of Language Variation: Screening Test: Fail = 52%

Fluharty Preschool Speech and Language Screening Test-2: Fail = 56 – 75%

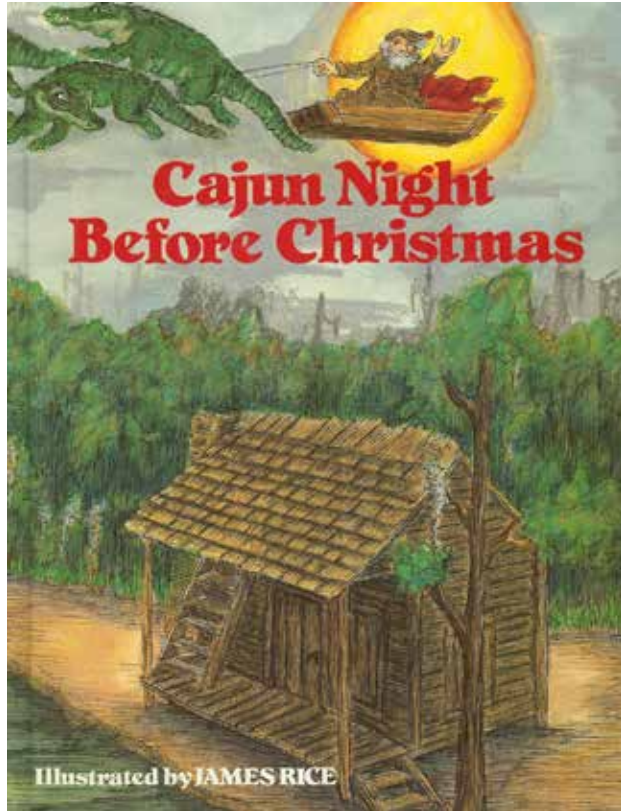
Washington and Craig Experimental Screener: Fail = 48%

Under-Identification / Limited Access

Birth to 5 years; 9,600 children. Rate of SLP services per parent report at 24, 48, 60 mo. African American **45 – 60% less likely** to receive services. Hispanic also less likely but other language accounted for differences.

K – 8th grade; 20,100 children. SLP services in schools. African American **57% less likely** to receive services. Hispanic **33% less likely**.

How do we learn about our children's dialects?

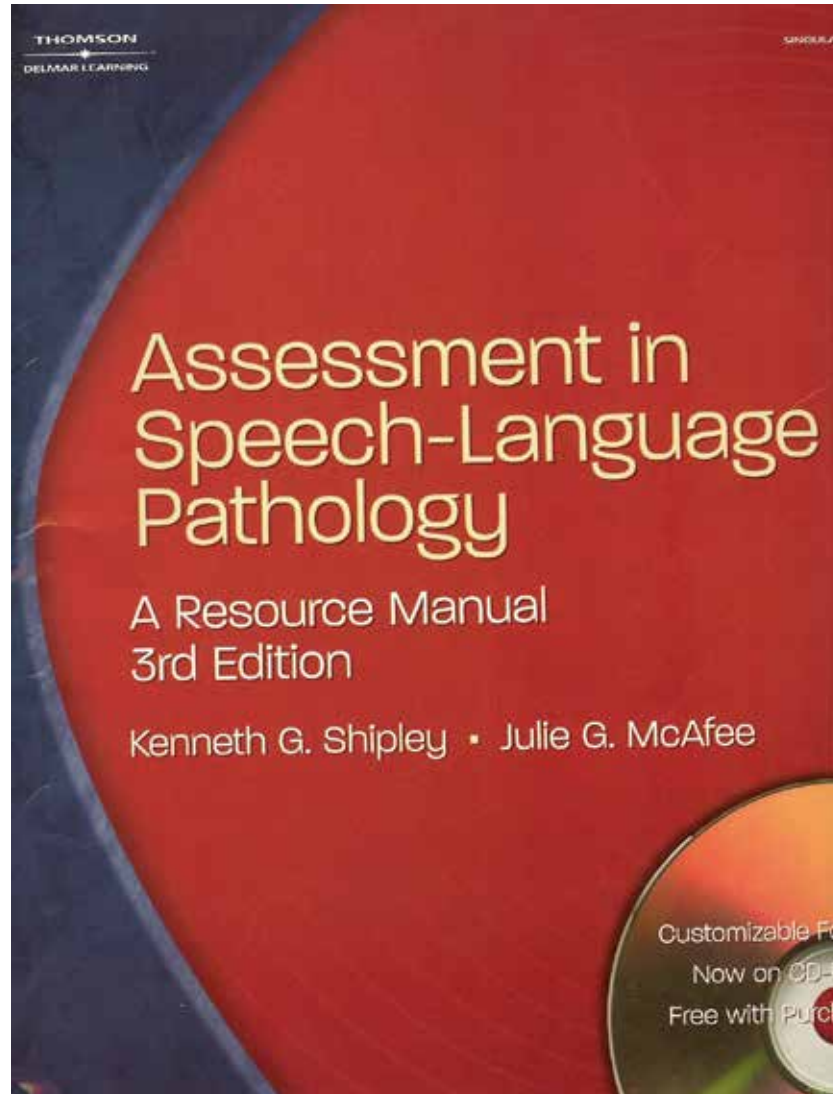


Cute, fun to read

Great for celebrating dialects

Not accurate for clinical practice

Clinical Resources with Dialect Lists (circa 2000)



African American English

Table 2-3 Characteristics of African American English Morphology and Syntax

AAL Feature/Characteristic	Mainstream American English	Sample AAE Utterance
Omission of noun possessive	That's the woman's car. It's John's pencil.	That the woman car. It John pencil.
Omission of noun plural	He has 2 boxes of apples. She gives me 5 cents.	He got 2 box of apple . She give me 5 cent .
Omission of third person singular present tense marker	She walks to school. The man works in his yard.	She walk to school. The man work in his yard.
Omission of "to be" forms such as "is, are"	She is a nice lady. They are going to a movie.	She a nice lady. They going to a movie.
Present tense "is" may be used regardless of person/number.	They are having fun. You are a smart man.	They is having fun. You is a smart man.
Utterances with "to be" may not show person number agreement with past and present forms.	You are playing ball. They are having a picnic.	You is playing ball. They is having a picnic.
Present tense forms of auxiliary "have" are omitted.	I have been here for 2 hours. He has done it again.	I been here for 2 hours. He done it again.
Past tense endings may be omitted.	He lived in California. She cracked the nut.	He live in California. She crack the nut.
Past "was" may be used regardless of number and person.	They were shopping. You were helping me.	They was shopping. You was helping me.

Spanish-Influenced English

Table 2-10 Language Differences Commonly Observed Among Spanish Speakers

Language Characteristics	Sample English Utterances
1. Adjective comes after noun.	The house green.
2. 's is often omitted in plurals and possessives.	The girl book is . . . Juan hat is red.
3. Past tense <i>-ed</i> is often omitted.	We walk yesterday.
4. Double negatives are required.	I don't have no more.
5. Superiority is demonstrated by using <i>mas</i> .	This cake is more big.
6. The adverb often follows the verb.	He drives very fast his motorcycle.

Source: From *Multicultural Students with Special Language Needs* 2nd ed. (p. 84), by C. Roseberry-McKibbin, 2002, Oceanside, CA: Academic Communication Associates. Reprinted with permission.

English Influenced by Another Language

Table 2-15 Syntactic and Morphologic Differences Commonly Observed Among Asian Speakers

Language Characteristics	Sample English Utterances
Omission of plurals	Here are 2 piece of toast. I got 5 finger on each hand.
Omission of copula	He going home now. They eating.
Omission of possessive	I have Phuong pencil. Mom food is cold.
Omission of past tense morpheme	We cook dinner yesterday. Last night she walk home.
Past tense double marking	He didn't went by himself.
Double negative	They don't have no books.
Subject-verb-object relationship differences/omissions	I messed up it. He like.
Misordering of interrogatives	You are going now?
Misuse or omission of prepositions	She is in home. He goes to school 8:00.
Misuse of pronouns	She husband is coming. She said her wife is here.
Omission and/or overgeneralization of articles	Boy is sick. He went the home.
Incorrect use of comparatives	This book is gooder than that book.
Omission of conjunctions	You ____ I going to the beach.
Omission, lack of inflection on auxiliary "do"	She ____ not take it. He do not have enough.
Omission, lack of inflection on forms of "have"	She have no money. We ____ been the store.

Source: From *Multicultural Students with Special Language Needs* 2nd ed. (p. 108), by C. Roseberry-McKibbin, 2002, Oceanside, CA: Academic Communication Associates. Reprinted with permission.

Limitations of Dialect Lists

They only describe a few salient, high stigmatized forms. The dialects listed are far more complicated than described.

They lack contextual information.

They lack frequency information.

They lack information about how children with and without LI differ on the forms within the dialect list.



Collect
Data!

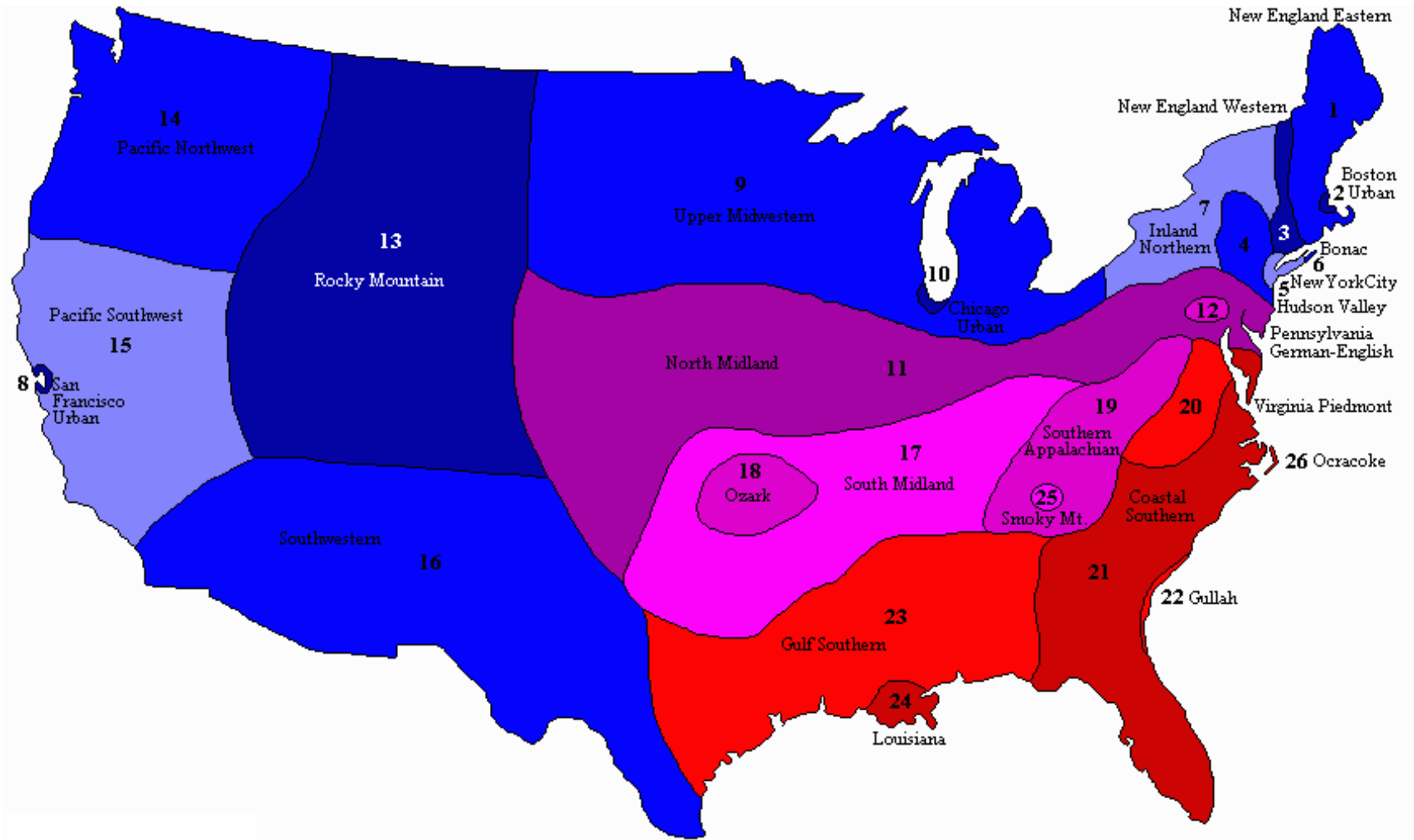
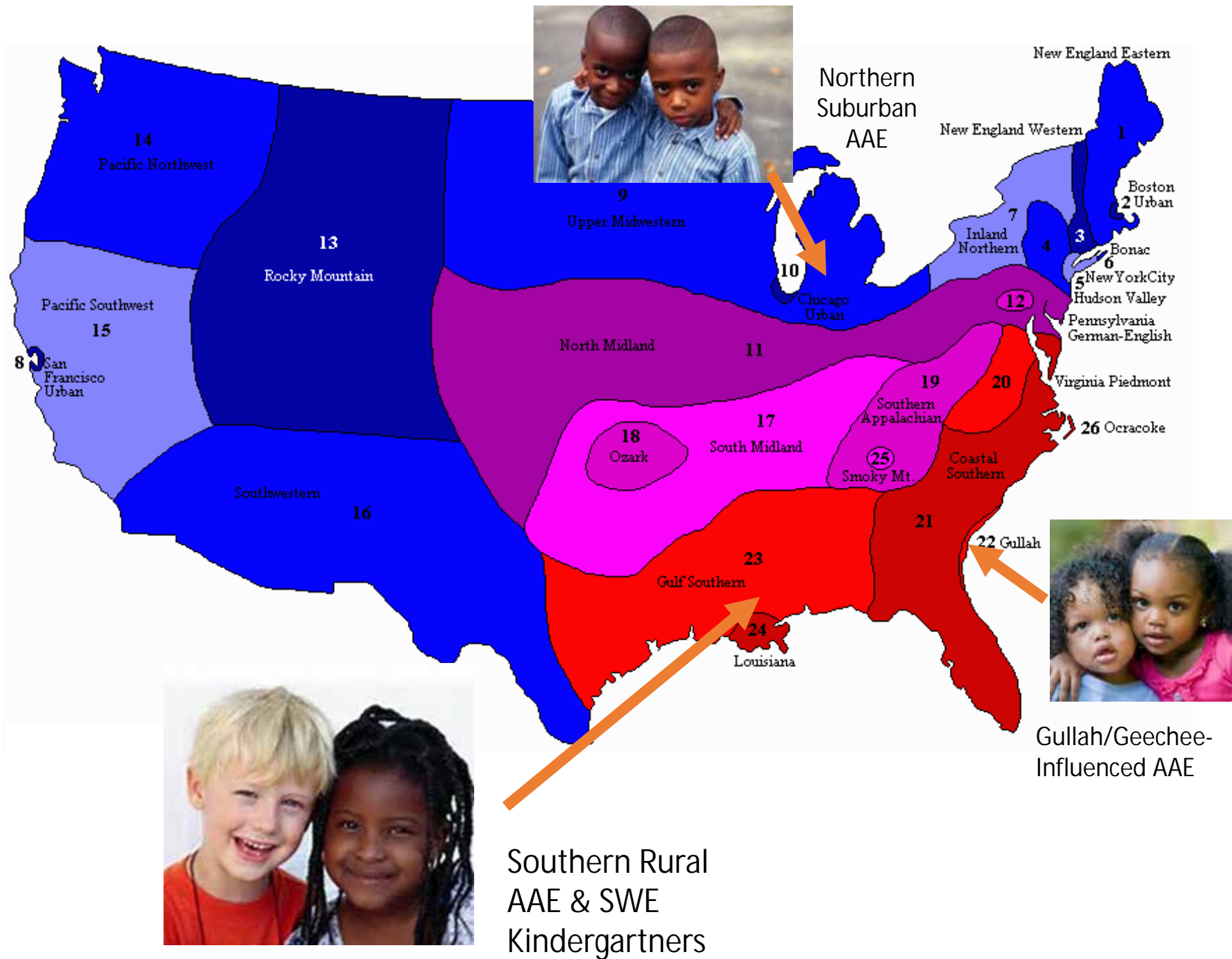


Illustration of American English Dialect Map (Robert Delany, 2000)
<http://robertspage.com/dialects.html>



Louisiana and the Acadiana Triangle



1700s: 3,500 French-speaking
Acadie from Nova Scotia

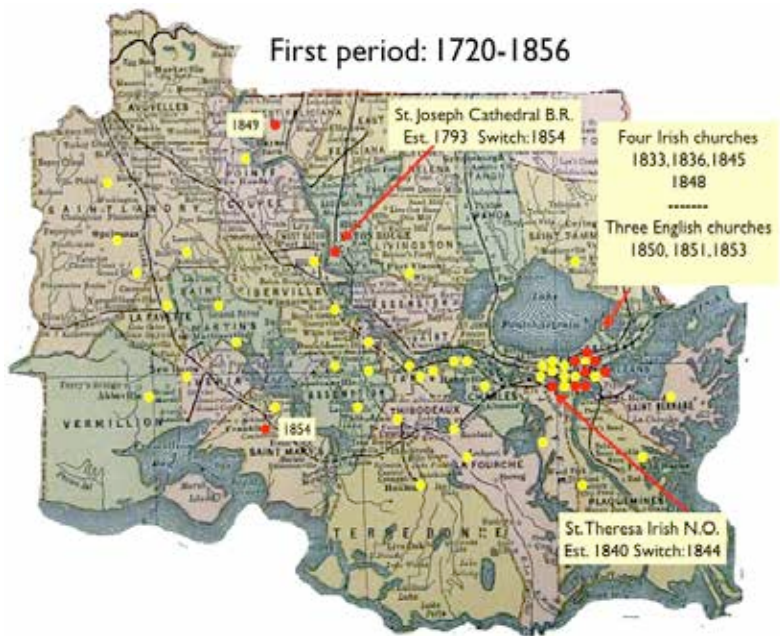
1800s: Influx of French, Spanish,
Irish, Scottish, German, Free
People of Color, African, Native
American.

1900s: Major civil/racial changes
with shifts in identity (white vs.
black)

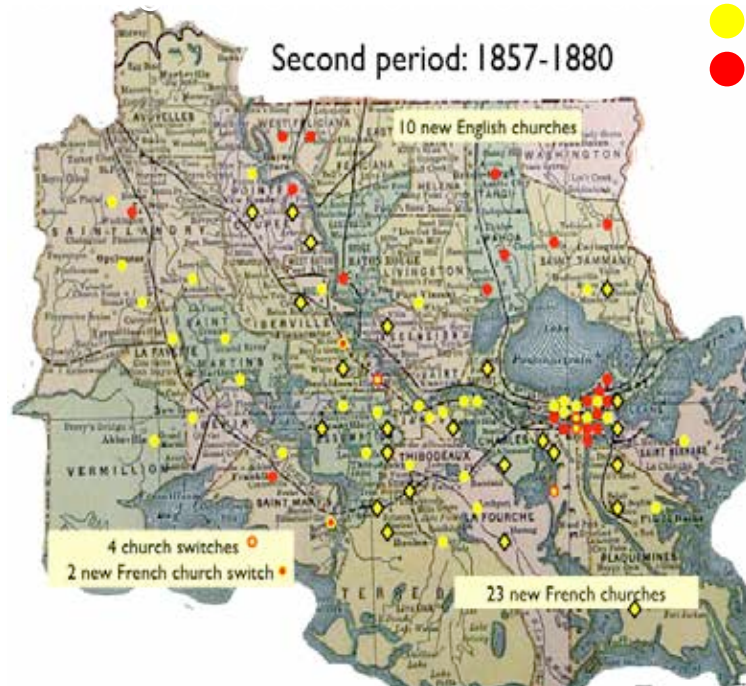


● French
● English

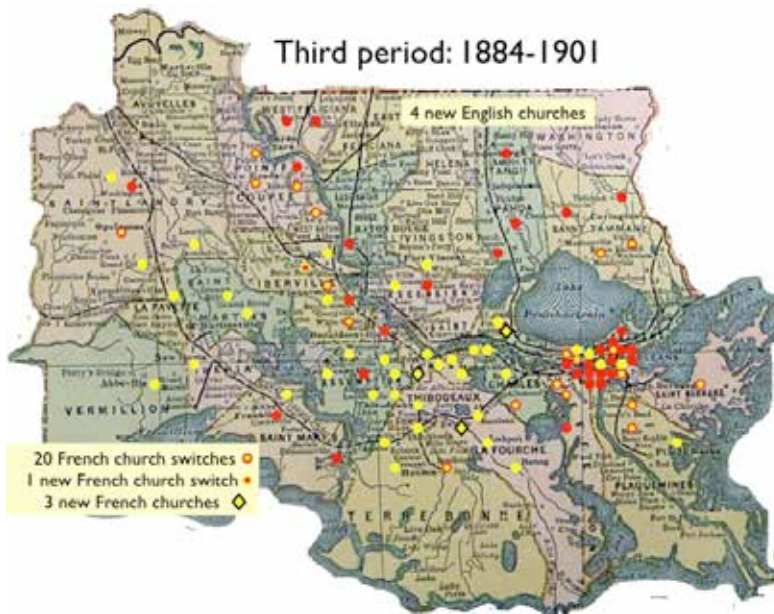
First period: 1720-1856



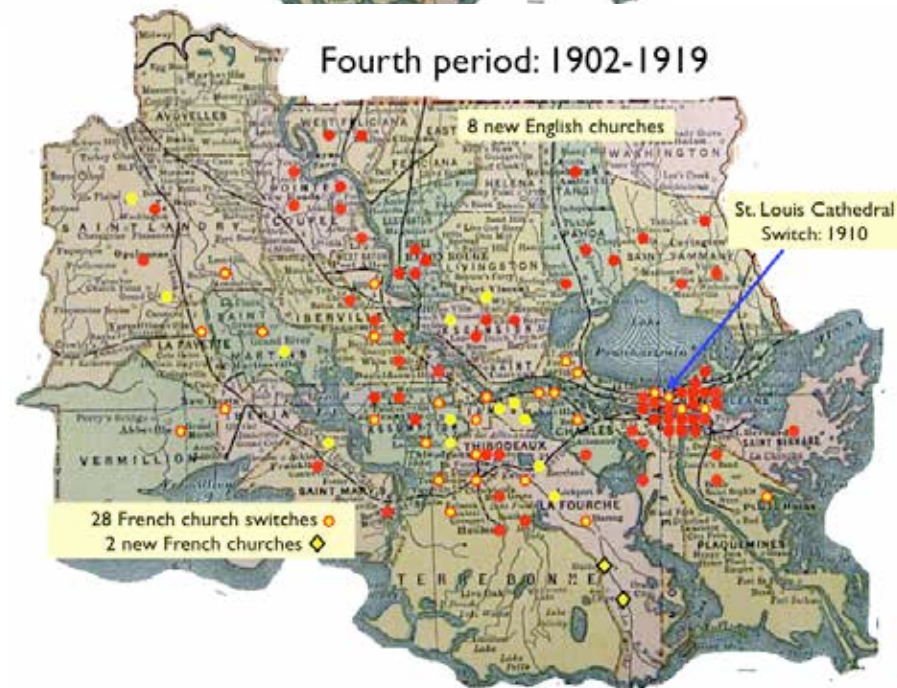
Second period: 1857-1880



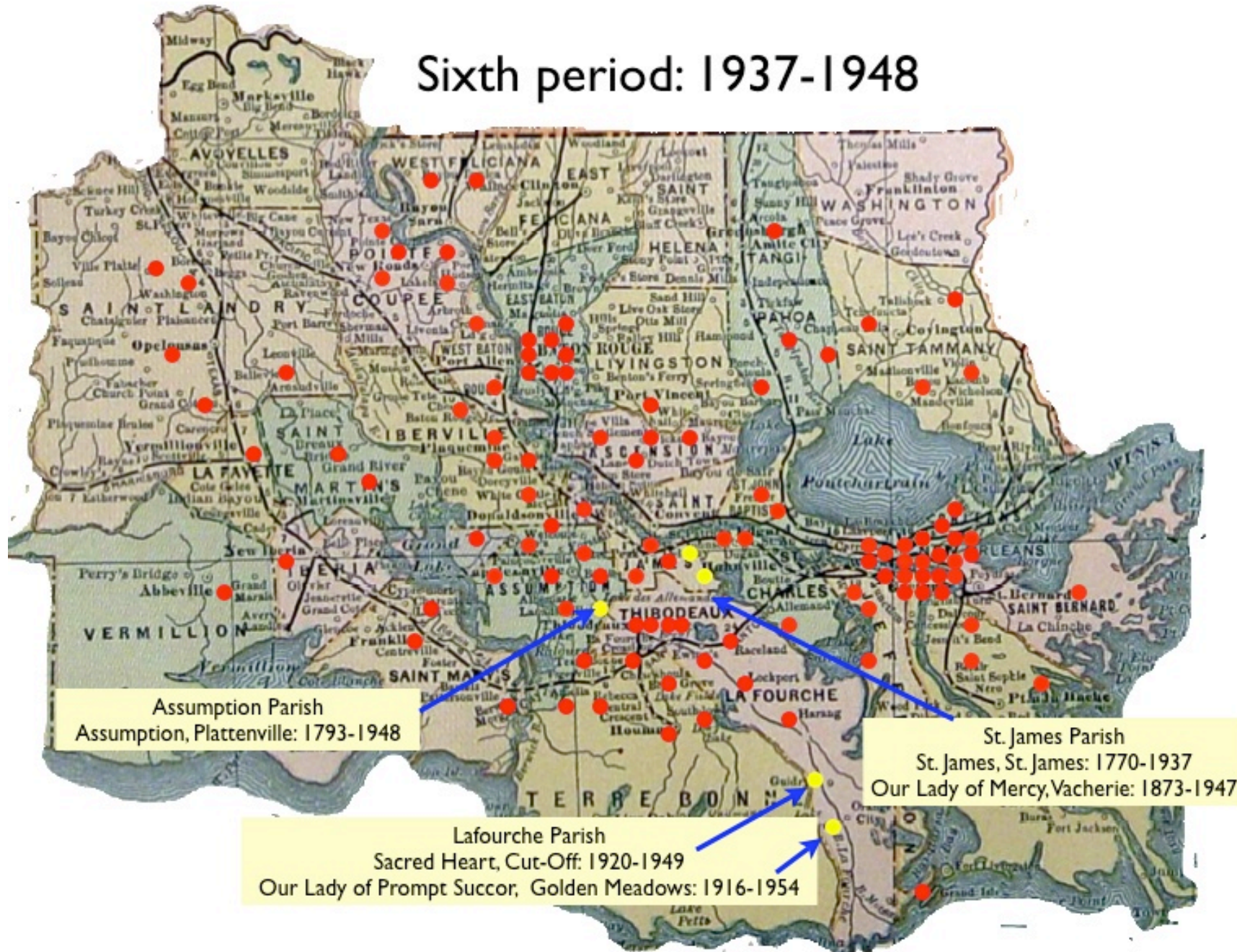
Third period: 1884-1901

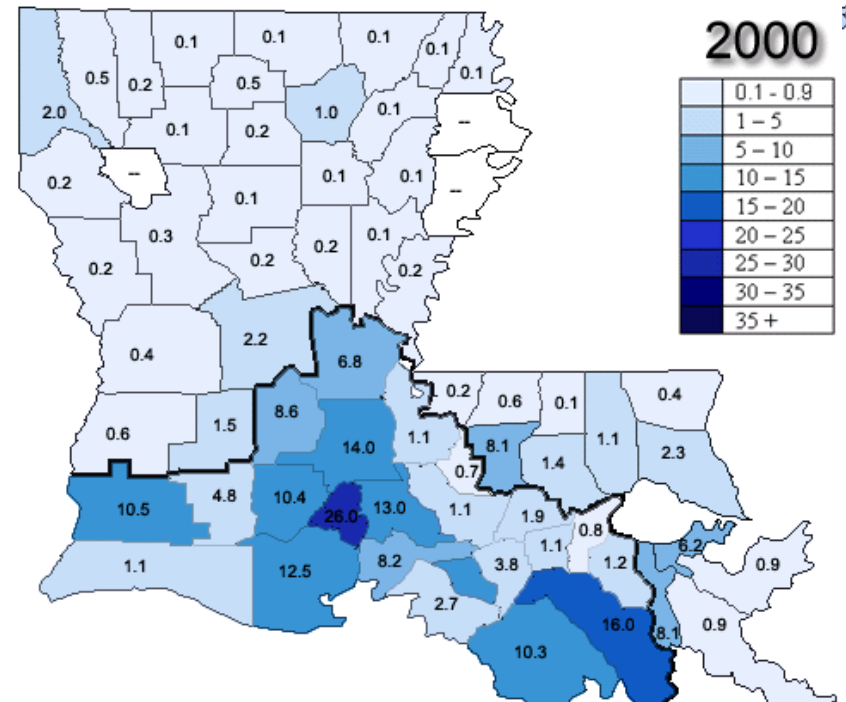
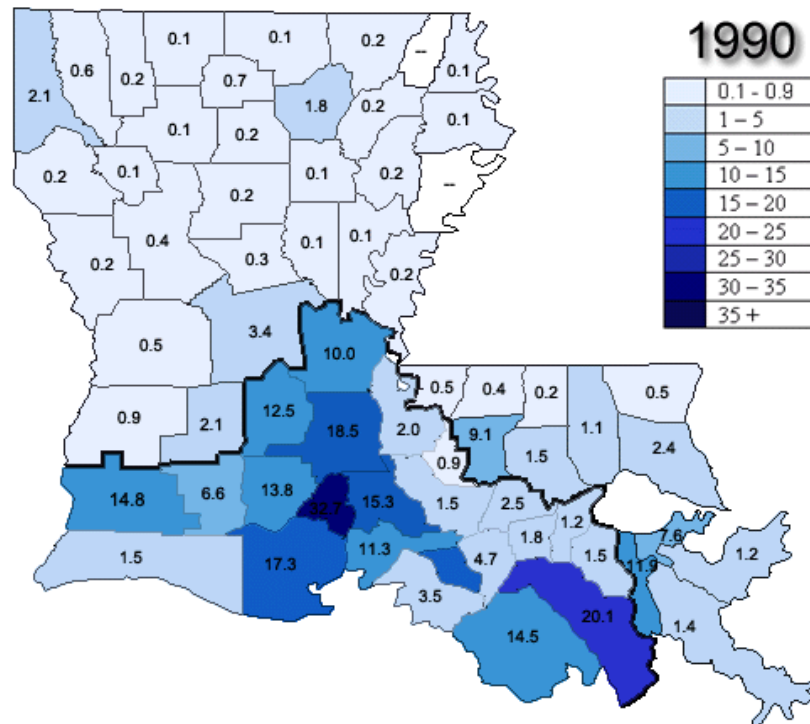
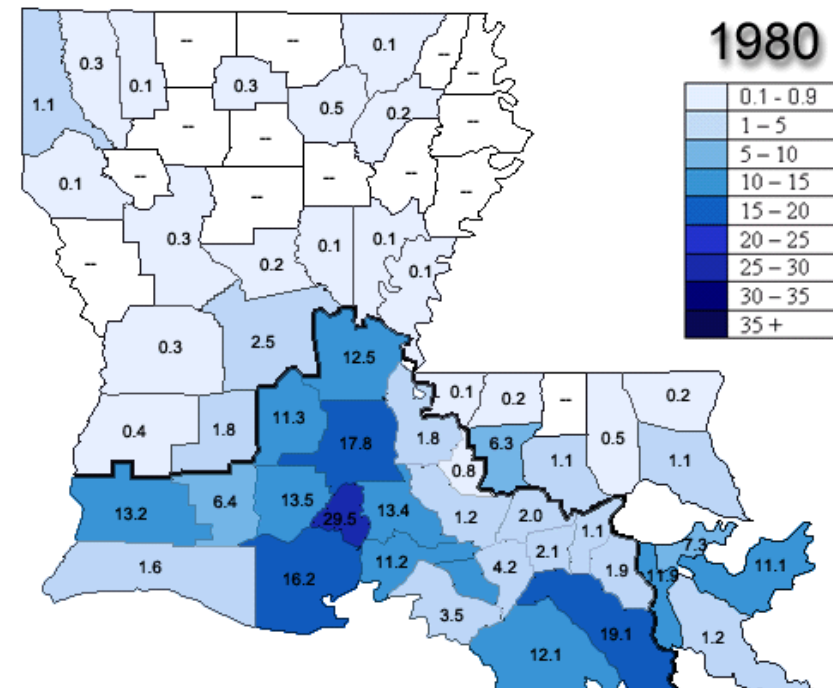
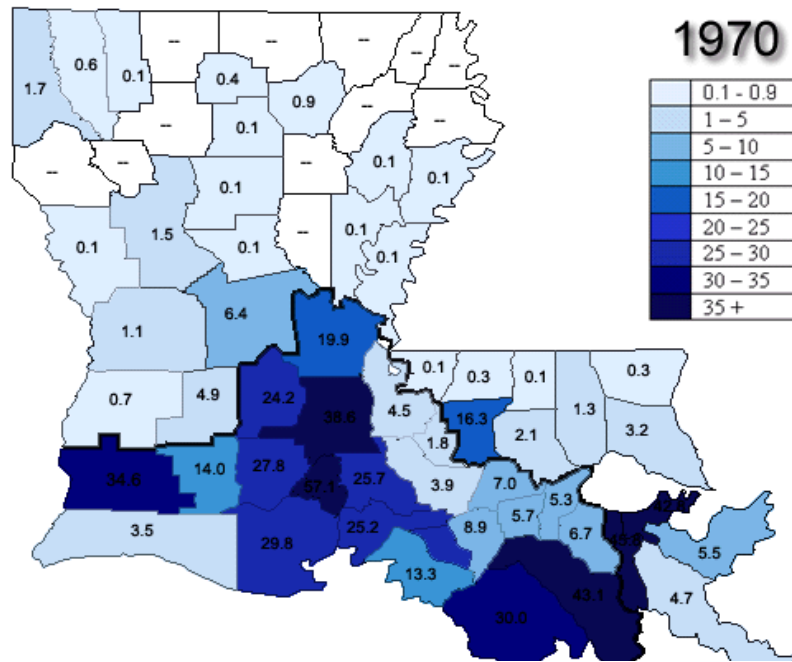


Fourth period: 1902-1919

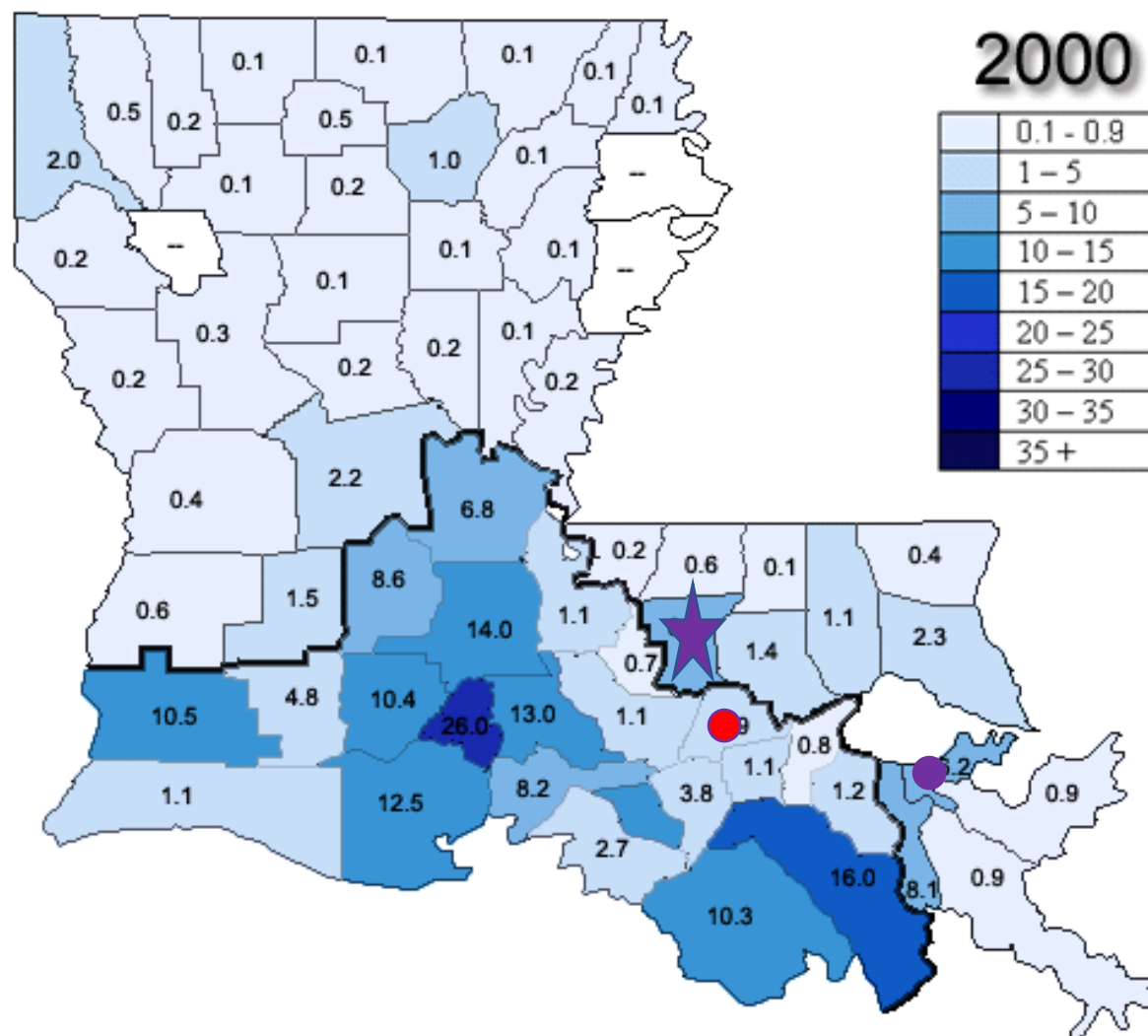


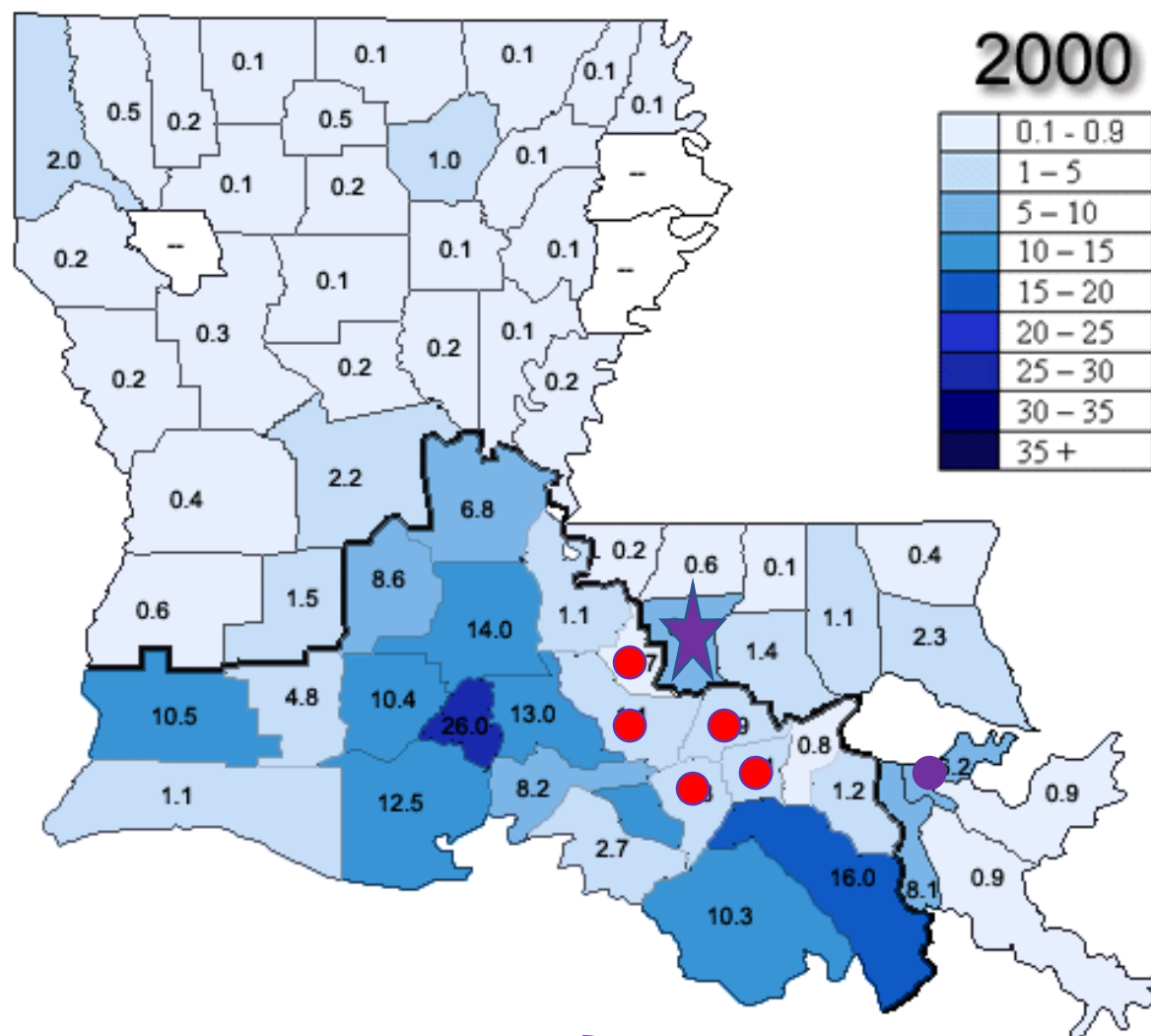
Sixth period: 1937-1948





2000





African American English (AAE)
Southern White English (SWE)

No morphology and minimal features of
Cajun/Creole phonology detected.

Nonmainstream Forms: AAE and SWE

(N = 93; N = 252)

zero BE

be₂

i'ma for i'm going to

SV agreement with BE

zero auxiliary DO

zero auxiliary have

zero regular verbal -s

zero irregular verbal -s

SV agreement with don't

zero regular past

zero irregular past

preterite had

over-regularization

participle as past

ain't

multiple negation

indefinite article

zero present progressive

zero plural

zero possessive

zero infinitive to

for to/to

zero of

what or zero relative

been and BIN

done+verb

fixing+verb

undifferentiated pronoun

reflexive

demonstrative

dative

y'all varieties

appositive

existential it and they

Wh- noninversion

Results: Nonmainstream Dialects Share Many of the Same Forms

zero BE

be₂

i'ma for i'm going to

SV agreement with BE

zero auxiliary DO

zero auxiliary have

zero regular verbal -s

zero irregular verbal -s

SV agreement with don't

zero regular past

zero irregular past

preterite had

over-regularization

participle as past

ain't

multiple negation

indefinite article

zero present progressive

zero plural

zero possessive

zero infinitive to

for to/to

zero of

what or zero relative

been and BIN

done+verb

fixing+verb

undifferentiated pronoun

reflexive

demonstrative

dative

y'all varieties

appositive

existential it and they

Wh- noninversion



AAE



SWE

AAE	SWE
<p data-bbox="677 425 1009 476">Zero be (100%)</p> <p data-bbox="565 501 1121 552">Zero regular third (100%)</p> <p data-bbox="588 576 1098 628">Zero regular past (90%)</p> <p data-bbox="580 652 1105 704">S-V agree with be (85%)</p> <p data-bbox="575 728 1110 779">Multiple negation (82%)</p> <p data-bbox="547 803 1138 855">S-V agree with don't (78%)</p> <p data-bbox="570 879 1116 931">Zero irregular past (75%)</p> <p data-bbox="690 955 996 1006">Zero do (70%)</p> <p data-bbox="570 1031 1116 1082">Zero irregular third (70%)</p> <p data-bbox="606 1106 1080 1158">Zero possessive (68%)</p>	<p data-bbox="1549 425 1854 476">Zero be (89%)</p> <p data-bbox="1437 501 1967 552">Multiple negation (72%)</p> <p data-bbox="1437 576 1967 628">Zero regular third (70%)</p> <p data-bbox="1549 652 1854 704">Zero do (66%)</p> <p data-bbox="1406 728 1997 779">S-V agree with don't (60%)</p> <p data-bbox="1437 803 1967 855">S-V agree with be (58%)</p> <p data-bbox="1518 879 1885 931">Appositive (57%)</p> <p data-bbox="1355 955 2048 1006">Overregularization of past (55%)</p> <p data-bbox="1429 1031 1977 1082">Zero irregular past (51%)</p> <p data-bbox="1416 1106 1989 1158">Alternative pronoun (51%)</p>

10 most frequently produced forms; percent of children in parentheses

Other AAE Studies

2- & 3-year-olds Horton-Ikard WI	3- & 4-year-olds Jackson & Roberts NC	4- & 5-year-olds Washington & Craig MI
Zero be S-V agree be, don't Zero regular past Zero irregular past Zero regular third Zero irregular third Alternative pronoun	Zero be S-V agree be, don't Zero regular past Zero irregular past Zero regular third Zero irregular third Alternative pronoun Multiple negation	Zero be S-V agree be, don't Zero regular past Zero irregular past Zero regular third Zero irregular third Alternative pronoun Multiple negation

Same forms are frequently produced in other nonmainstream dialects of AAE

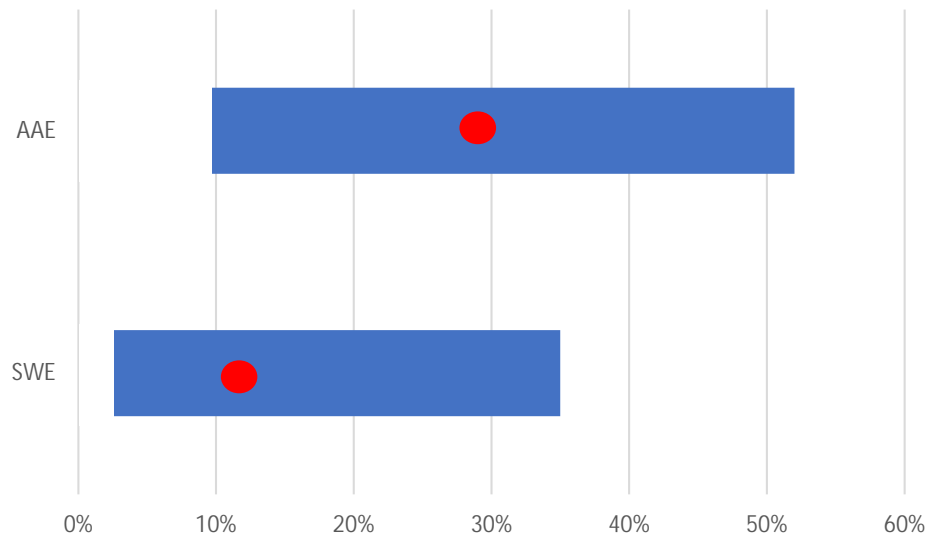
Although nonmainstream dialects share many of the same forms, they differ in three ways:

1. Rate of use
2. Constraints on use
3. Function of use

1. Dialects Differ in Rate of Nonmainstream Forms

Percent of Utterances with a Nonmainstream Form

	AAE	SWE
Mean	29%	12%
Range	10 - 52%	3 - 35%



97% accuracy in classifying AAE and SWE speakers by just using percent at which each of the 35 forms were produced by the children.

2. Dialects Differ in their Constraints on Form Use

An Example with Forms of BE

Person, Number, & Tense: *am, is, are, was, were*

Contractibility: Contractible (*Jan's two*) vs. Uncontractible (*Chris is two*)

Grammatical Function: Copula (*Jaya is tall*) vs. Auxiliary (*Jaya is running*)

Constraints Encourage / Discourage Overt Forms

Person Number Tense	first person > third person > second past > present I'm happy > He's happy > You're happy She was happy > She is happy
Contractibility	uncontractible > contractible Jess is happy > Tom's happy
Grammatical Function	copula > auxiliary She is happy > She is walking

A study of 62 Children, aged 4-6 years: Percent of Overt Forms

	SWE	AAE
Person/Number/Tense		
Am	96	94
Is	95	59
Are	77	27
Was/Were	99	96
Contractibility		
Contractible	93	57
Uncontractible	94	77
Grammatical Function		
Copula	96	70
Auxiliary	87	53

RED indicates that the constraint was significant for the dialect.

AAE = 3 constraints
SWE = 2 constraints

Another study of 38 children, aged 4-6 years

	SWE	AAE	AAE with Gullah/Geechee
Person/Number/Tense			
Am	96	94	69
Is	95	59	76
Are	77	27	48
Was/were	99	96	88
Contractibility			
Contractible	93	57	68
Uncontractible	94	77	88
Grammatical Function			
Copula	96	70	82
Auxiliary	87	53	73

AAE with
Gullah/Geechee
influence is affected by
the same constraints as
AAE but not in the
same way

3. Dialects Differ in the Functions Served by a Form

Example: Preterite Had (camouflaged form)

My mama said she was about to go to Bible study, and on the way back, her car **had stopped**. Then she **had called** the house because somebody let her use the phone. Then she **had called** the house and I said, "Hello. Who's this?" Then my mama said, "It's your mama. Let me talk to your daddy." Then she **had told** my daddy to come with us and bring a big rope so they could pull the car home. So, we got a new car.

Past Perfect(relative tense)

I **had bought** some jambalaya by the time the crawfish came.

Preterite (simple-absolute tense)

I **bought** some jambalaya

Rickford & Rafal (1996)

9 AAE-speakers (11-13 years) narratives

52 cases Preterite Had

96% simple, absolute past rather than relative

100% were produced in a personal narrative

94% were in the complicating action clause

A Study of 93 Children: Use of Preterite Had

	SWE	AAE	AAE #52
Had + verb+ed Had walked	0%	9%	28%
Verb+ed Walked	83%	73%	57%
Verb unmarked Walk	1%	6%	3%

When do AAE-speaking children produce preterite Had?

90%
occurred
in a
narrative

Abstract	4%
Orientation	2%
Complicating action	84%
Result	2%
Evaluation	4%
Coda	4%

Use tied to Narrative Development

1	Descriptive sequence Heaps; clauses in any order.
2	Action sequence Clauses in chronological order, but not causative in nature.
3	Reactive sequence preschool Clauses ordered chronologically and causatively.
4	Abbreviated episode 6 years Story states character intentions but not a clear plan.
5	Incomplete episode, complete episode, multiple episode 7-8 years Episode = initiating event, explicit character intentions, consequences.

AAE-speaking children with stronger narrative skills produced more Preterite Had forms.

	# stories	Utts per story	Level of stories	# of Had+Ved
4-yr-olds	6	4.33	1.33	7
6-yr-olds	13	10.16	2.31	52
#52	7	11.72	4.29	29
#64	2	11.00	4.00	6
#63	2	13.5	4.00	5

Other Camouflaged Forms Across AAE Dialects

Be

Be He wants to be a comedian.

Be₂ He be funny. (*all the time, often, but maybe not now*)

Be₃ He be Saturday Night Live. (*he is the iconic symbol of the show; found in rap/poetry*)

Been

Been He has been to the store.

bin He Ø been to the store.

BIN_{comp} He BIN called her. (a long time ago)

BIN_{state} He BIN running. (a long time)

BIN_{hab} He BIN calling her. (from time to time)

BEEN I just now BEEN washing it. (*functions as was/were; produced in Gullah & AAE with Gullah/Geechee influence*)

Recap:

Dialects share a number of mainstream and nonmainstream forms.

Dialects differ in:

- Rate of use

- Constraints on use

- Function of use



What about Disorder within Dialects of English?

Language Impairment (LI)

Typically developing, same dialect-speaking controls (TD)

AAE LI	SWE LI
AAE TD	SWE TD

35 Nonmainstream Forms

zero BE

be₂

i'ma for i'm going to

SV agreement with BE

zero auxiliary DO

zero auxiliary have

zero regular verbal -s

zero irregular verbal -s

SV agreement with don't

zero regular past

zero irregular past

preterite had

over-regularization

participle as past

ain't

multiple negation

indefinite article

zero present progressive

zero plural

zero possessive

zero infinitive to

for to/to

zero of

what or zero relative

been and BIN

done+verb

fixing+verb

undifferentiated pronoun

reflexive

demonstrative

dative

y'all varieties

appositive

existential it and they

Wh- noninversion

Number of zero BE / Number of utterances produced by child

Number of _____ / Number of utterances produced by child

Enter all percentages into a discriminant function (formula)

LI vs. TD within AAE and SWE (n = 62)

Accuracy of classifying LI and TD children
using all 35 structures:

90%

Sensitivity (Se): Percentage of LI children classified as LI

Se = .87

Specificity (Sp): Percentage of TD children classified as TD

Sp = .94

omission of auxiliary do
zero irregular past
zero be
wh- noninversion

3X more in LI
3X more in LI
2X more in LI
2X more in LI

LI vs. TD within AAE and SWE

AAE

zero irregular past
Wh-noninversion
zero irregular third

Diagnostic Accuracy = 82%

Se = .75

Sp = .92

SWE

zero irregular past
auxiliary do omission
zero irregular third
omission of infinitive to
S-V agreement with don't

Diagnostic Accuracy = 91%

Se = .87

Sp = .95

What are the Se and Sp of common language tests?

Clinical Evaluation of Language Fundamentals (CELF)P: 2

Se = .85

Sp = .82

Preschool Language Scales (PLS) - 5

Se = .83

Sp = .80

Test of Language Development (TOLD) Primary - 4

Se = .74

Sp = .87

Nonmainstream Patterns
AAE/SWE

Se = .87

Sp = .94

AAE

Se = .75

Sp = .92

SWE

Se = .87

Sp = .95

5 Other Studies: Percent of Overt Marking LI vs. TD

Target structure: Past Tense

Number of overt forms / number of overt forms and zero forms

He walkØ

He walkØ

He jump/ed rope

He play/ed football

He mow/ed a lawn

He swallow/ed a pill

She kick/ed/ed it

She typed

6 overt / (6 overt + 2 zero = 8) = 75%

5 Other Studies: Rates of Overt Marking LI vs. TD

	LI	TD
AAE Regular Past Tense Sadie play/ <u>ed</u> .	50%	91%
AAE BE Auxiliaries - am, is, are Ida <u>is</u> reading.	25%	47%
SWE but not AAE Verbal -S He walk/ <u>3s</u>	64%	89%
AAE and SWE Subject Relatives The girl <u>who</u> was typing is named Raven.	59%	86%
AAE, SWE, and SWE with Cajun Influence Infinitive TO The boy wanted <u>to</u> go.	83%	90%

5 Other Language Sample Studies: Rates of Overt Marking: LI vs. TD

	LI	TD
AAE Regular Past Tense Sadie play/ <u>ed</u> .	50%	91%
AAE BE Auxiliaries - am, is, are Ida <u>is</u> reading.	25%	47%
SWE but not AAE Verbal -S He walk/ <u>3s</u>	64%	89%
AAE and SWE Subject Relatives The girl <u>who</u> was typing is named Raven.	59%	86%
AAE, SWE and SWE with Cajun English Infinitive TO The boy wanted <u>to</u> go.	83%	90%

Summary



A disorder within dialects framework allows you to:

1. Test and treat a child's entire language system.
2. Learn about similarities and differences between nonmainstream dialects.

Nonmainstream dialects share many forms but differ in:

frequency of use

contexts of use

functions of use

3. Discover how children with LI differ from their TD peers in their dialects.

In both AAE and SWE (and GAE and likely other dialects), children with LI struggle to produce overt forms of verb morphology at the same percentages as their TD peers. They are less productive with their grammars.