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

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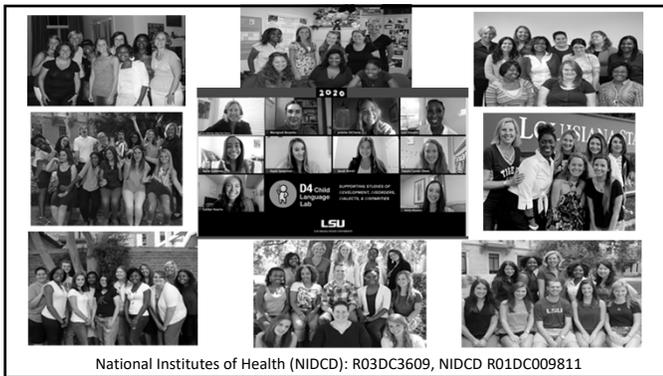Louisiana State University
PaTTAN, February 18, 2021
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D4 Child Language Lab

SUPPORTING STUDIES OF
DEVELOPMENT, DISORDERS,
DIALECTS, & DISPARITIES

LSU
Department of
Communication Sciences
& Disorders

LSU
Department of Linguistics

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 (Pennsyltucky)

Oetting, 2020; https://leader.pubs.asha.org/do/10.1044/leader.FMP.25112020.12/full/

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

| Dialect | vs. | Disorders |

2-Box Model

https://www.asha.org/policy/ps1983-00115/

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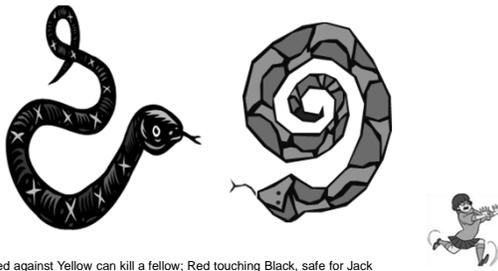
Red against Yellow can kill a fellow; Red touching Black, safe for Jack

Wall Metaphor
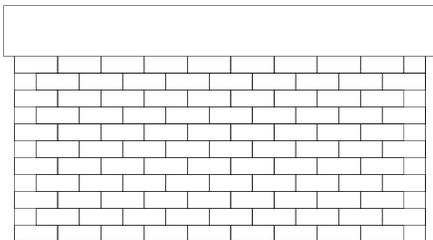
New Framework: Diagnostic Conundrum

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

Seymour et al., 1998; https://pubs.asha.org/doi/abs/10.1044/0161-1461.2902.96

Solution: Think about forms as one of two types

Contrastive	Noncontrastive
Forms that vary across Dialects	Forms that DO NOT vary across Dialects
Conundrum	No Conundrum
Past Tense	Articles
Verbal -S	Conjunctions
Copular BE	Demonstratives
Auxiliary BE	Locatives
Auxiliary DO	Negatives
	Prepositions
	Present progressive
	Pronouns

https://pubs.asha.org/doi/abs/10.1044/0161-1461.2902.96

Solution: Test and treat forms that avoid the conundrum

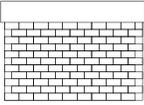| Contrastive	**Noncontrastive**
Forms that vary across Dialects	**Forms that DO NOT vary across Dialects**
Conundrum	**No Conundrum**
Past Tense	**Articles**
Verbal -S	**Conjunctions**
Copular BE	**Demonstratives**
Auxiliary BE	**Locatives**
Auxiliary DO	**Negatives**
	Prepositions
	Present progressive
	Pronouns

https://pubs.asha.org/doi/abs/10.1044/0161-1461.2902.96

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

https://www.ventrislearning.com/delv/

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

Correct	Incorrect	Incorrect	Incorrect
Was	Omits was/uses is	something else	NR
He was sick.	He sick.	To make him feel better.	NR
He wasn't feeling good	He's sick.		

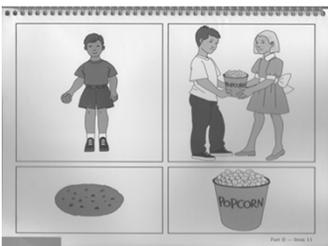https://www.ventrislearning.com/delv/

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

Correct	Incorrect
Theirs	thems/shes/hims/both
Hers/his	
His and hers	

https://www.ventrislearning.com/delv/

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

DELV
SCREENING TEST

https://www.ventrislearning.com/delv/

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 |

Oetting, Gregory, & Rivière, 2016; Oetting, 2018; Oetting et al., 2019; 2020

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

Dialect

Disorder

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%

Wynn & Oetting, under review; see also work by Cathy Qi

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.

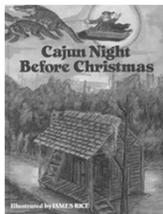These studies control for SES and many other variables; Morgan et al. (2015; 2016)

How do we learn about our children's dialects?

Cute, fun to read

Great for celebrating dialects

Not accurate for clinical practice

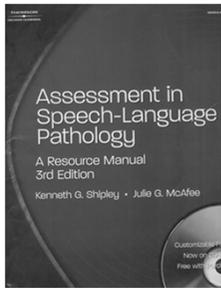## Clinical Resources with Dialect Lists (circa 2000)

Assessment in Speech-Language Pathology
A Resource Manual
3rd Edition
Kenneth G. Shipley • Julie G. McAfee

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 -ed is often omitted.	We walk yesterday.
4. Double negatives are required.	I don't have no more.
5. Superiority is demonstrated by using mas.	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

Northern Suburban AAE

Gullah/Geechee-Influenced AAE

Southern Rural AAE & SWE Kindergartners
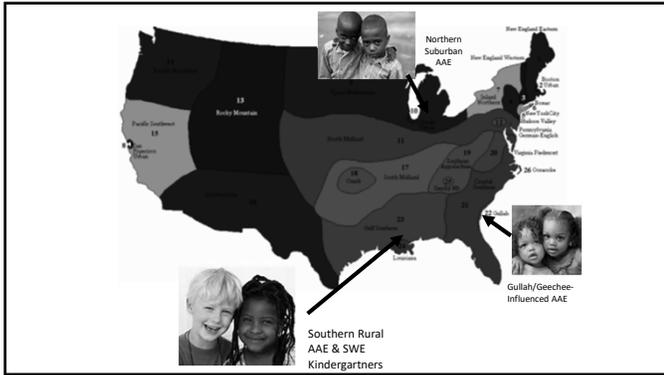
Louisiana and the Acadiana Triangle

700s: 3,500 French-speaking cadie from Nova Scotia

800s: Influx of French, Spanish, sh, Scottish, German, Free eople of Color, African, Native merican.

900s: Major civil/racial changes ith shifts in identity (white vs. ack)

Switch from French to English using Church Records

○ French
○ English

First period: 1720-1856 · Second period: 1857-1880 · Third period: 1884-1901 · Fourth period: 1902-1919

Sixth period: 1937-1948

1970 · 1980 · 1990 · 2000

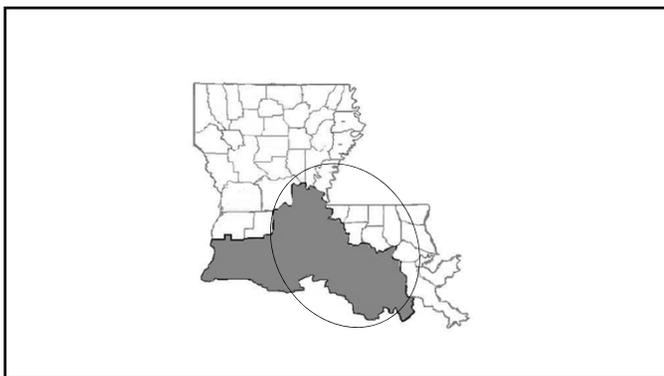African American English (AAE)
Southern White English (SWE)

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

Oetting & Garrity, 2006
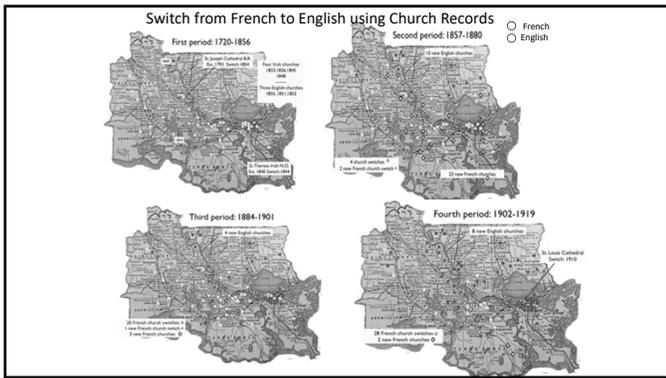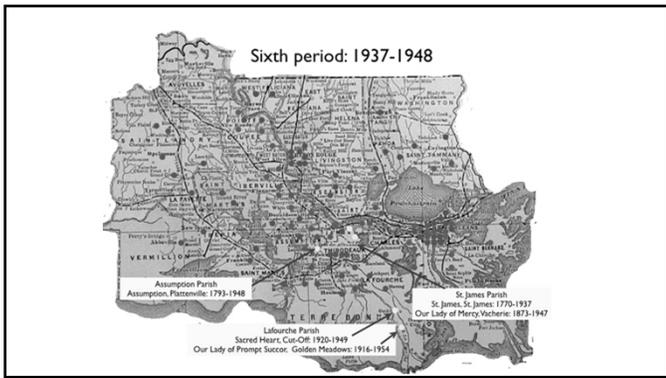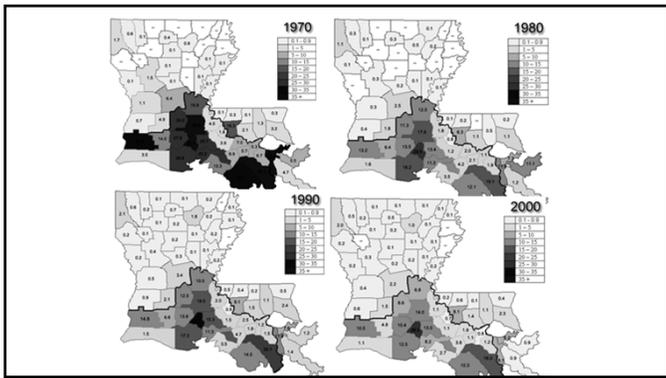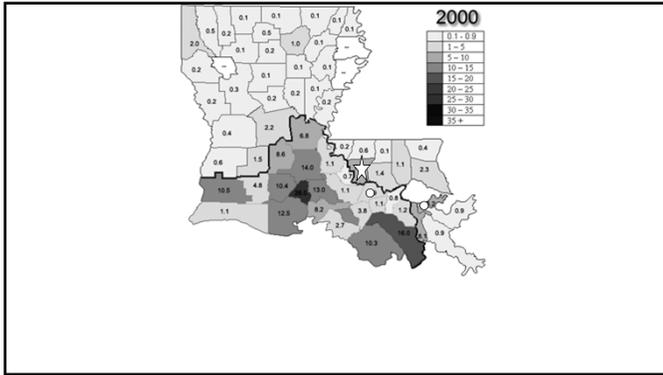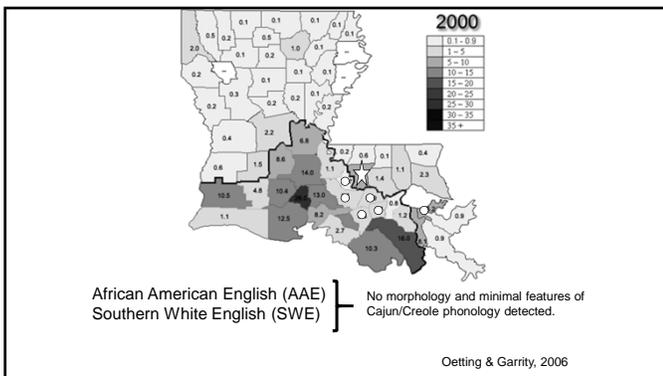
Nonmainstream Forms: AAE and SWE
(N = 93; N = 252)

zero BE	over-regularization	been and BIN
be$_2$	participle as past	done+verb
i'ma for i'm going to	ain't	fixing+verb
SV agreement with BE	multiple negation	undifferentiated pronoun
zero auxiliary DO	indefinite article	reflexive
zero auxiliary have	zero present progressive	demonstrative
zero regular verbal -s	zero plural	dative
zero irregular verbal -s	zero possessive	y'all varieties
SV agreement with don't	zero infinitive to	appositive
zero regular past	for to/to	existential it and they
zero irregular past	zero of	Wh- noninversion
preterite had	what or zero relative	

Oetting & McDonald, 2001; Oetting & Pruitt, 2005; Oetting et al., 2016, 2019, 2021

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
Zero be (100%)	**Zero be (89%)**
Zero regular third (100%)	**Multiple negation (72%)**
Zero regular past (90%)	**Zero regular third (70%)**
S-V agree with be (85%)	**Zero do (66%)**
Multiple negation (82%)	**S-V agree with don't (60%)**
S-V agree with don't (78%)	**S-V agree with be (58%)**
Zero irregular past (75%)	Appositive (57%)
Zero do (70%)	Overregularization of past (55%)
Zero irregular third (70%)	**Zero irregular past (51%)**
Zero possessive (68%)	Alternative pronoun (51%)

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	Zero be	Zero be
S-V agree be, don't	S-V agree be, don't	S-V agree be, don't
Zero regular past	Zero regular past	Zero regular past
Zero irregular past	Zero irregular past	Zero irregular past
Zero regular third	Zero regular third	Zero regular third
Zero irregular third	Zero irregular third	Zero irregular third
Alternative pronoun	Alternative pronoun	Alternative pronoun
	Multiple negation	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

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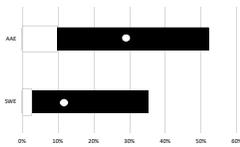
97% accuracy in classifying AAE and SWE speakers by just using percent at which each of the 35 forms were produced by the children.

Oetting & McDonald, 2001

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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

Roy, Oetting, & Moland, 2013

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

Berry & Oetting, 2017

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%

Ross, Oetting, & Stapleton, 2004

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.

Stein & Glenn's (1979) Story Structure Levels

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 <u>be</u> a comedian.

Be_2 He <u>be</u> funny. (*all the time, often, but maybe not now*)

Be_3 He <u>be</u> 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	over-regularization	been and BIN
be₂	participle as past	done+verb
i'ma for i'm going to	ain't	fixing+verb
SV agreement with BE	multiple negation	undifferentiated pronoun
zero auxiliary DO	indefinite article	reflexive
zero auxiliary have	zero present progressive	demonstrative
zero regular verbal -s	zero plural	dative
zero irregular verbal -s	zero possessive	y'all varieties
SV agreement with don't	zero infinitive to	appositive
zero regular past	for to/to	existential it and they
zero irregular past	zero of	Wh- noninversion
preterite had	what or zero relative	

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 — **3X more in LI**
zero irregular past — **3X more in LI**
zero be — **2X more in LI**
wh- noninversion — **2X more in LI**

Oetting & McDonald, 2001

LI vs. TD within AAE and SWE

AAE
zero irregular past
Wh-noninversion
zero irregular third

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

Diagnostic Accuracy = 82%
Se = .75
Sp = .92

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

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

Cleveland & Oetting, 2013; Seymour et al., 1998; Garrity & Oetting, 2010; Oetting & Newkirk, 2008; Rivière et al., 2018

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

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

Cleveland & Oetting, 2013; Seymour et al., 1998; Garrity & Oetting, 2010; Oetting & Newkirk, 2008; Rivière et al., 2018

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.