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Morphological Awareness: Why It Makes Sense!

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Morphological Awareness: Why it makes sense!

Lisa Archibald, PhD
Western University

Morphological Awareness

- Why?
- What is it?
- How?
 - Assessment
 - Intervention

Let's start with the familiar:

- Phonological awareness & phonics
 - Highly predictive of literacy
 - Instruction & intervention effective

- Is it enough?
 - (even when embedded in a balanced literacy approach: vocabulary/fluency/comprehension)

Sometimes it's not enough

- Letter-sound rules don't (always) work
 - When reading ~16% of single syllable words
 - When reading majority of multimorphemic words
 - When spelling about 50% of words

Sometimes it's not enough

- Empirical evidence:
 - Predictive power (for reading) of PA diminishes in mid-elementary years
 - About 10-15% of poor readers receiving intensive PA intervention continue to struggle with reading
 - Growth in PA is largely done by gr. 3

Why isn't phonics enough?

- 1 letter – 1 sound approach not sufficient
 - More sounds than letters!
- Written language uses arbitrary symbols to represent meaning
 - Maps onto abstract language differently than oral language
 - More than just coding of individual sounds

Written Language is Morphophonemic

- Morpheme rules indirectly connect oral & written language
 - Supplement phonics:
 - box vs. socks
 - Conflict with phonics:
 - filled vs. jumped vs. wanted
 - Signal differences not in phonics:
 - cat's meow vs. cats meow
 - Preserve connections across words:
 - two, twelve, twenty

Morpheme rules
make spelling more
predictable!



Written Language is Morphophonemic

- Morphology + Phonology
- We know intervention addressing phonology is effective
- Reasonable to expect intervention addressing morphology would be too!

Morphological Awareness

- ✓ Why?
- What is it?
- How?
 - Assessment
 - Intervention

Written Morphemes: A Review

Simple words

- E.g., on, bat, magnet
- 1 free morpheme
- Free morpheme: can stand alone & have meaning

Complex words

- E.g., bats, responsibility
- More than 1 morpheme
 - 2 free morphemes
 - 1 free morpheme + (at least) 1 bound morpheme/affix
- Bound morpheme/affix: must be attached to another part of a word (cannot stand alone)

More on Complex words

2 free morphemes



- Breadbasket
- Carwash
- Keyboard

Morpheme + affix(es)



- Bats
- Jumped
- Cutest



- Gardener
- Happily
- Unkind

Inflectional Morphemes



- 8 suffixes with grammatical functions (no change in part of speech)
- First 5 are Brown's morphemes (in oral language by age 4 years)
- All in 20 most common written suffixes

-s	Noun plural	cups <u>s</u>
- ' s	Noun possessive	Jack' <u>s</u>
-s	Verb present tense third person singular	He jumps <u>s</u>
-ing	Verb present participle/gerund	He is jump <u>ing</u>
-ed	Verb simple past tense	He jump <u>ed</u>
-en	Verb past perfect participle	Bitt <u>en</u>
-er	Adjective comparative	Cute <u>r</u>
-est	Adjective comparative	Cute <u>st</u>

Derivational Morphemes



- Change meaning or part of speech
 - e.g., teach vs. teacherer
- Prefixes & suffixes
 - e.g., recast, dishonest, sorrowful, hopeless
- Transparency
 - Transparent/neutral: all sounds & letters from base word in derived form (e.g., farm, farmer)
 - Opaque/non-neutral (mostly suffix effects):
 - Phonological shift: all letters but not sounds in derived form (e.g., magic, magician)
 - Orthographic shift: all sounds but not letters in derived form (e.g., silly, silliness)

Derivational Morphemes



- Linguistic building blocks for creating new words
 - Knowledge of these can ‘unlock meanings’
 - Promotes vocabulary growth
 - Draws on inferencing & reasoning

Derivational Morphemes



- Compared to inflectional morphemes:
 - More of them & lower frequency
 - Knowledge develops later & takes longer
- Encountered in more significant numbers from gr. 4 (in written language)
- 40% of unfamiliar words encountered by gr. 5 students are derived forms
 - Impacts reading comprehension so poor comprehenders start to lag behind around gr. 3-5
 - ‘4th grade slump’ (Goodwin, 2011)

Development of Written Affixes

- Gr. 1-2
 - Transparent & common morphemes only
 - E.g., plural inflection; simple derivatives & compounds
- Gr. 3-4
 - Inflectional endings largely correct
 - Infrequent or opaque compounds may not be mastered
 - Prefix knowledge grows substantially
 - Suffix learning depends on frequency, neutrality
- Gr. 3-6 – vocabulary depth via derivational suffix knowledge increases notably
 - Cognitive ability to make analogies?

Kirby et al., 2012;
Kemp et al., 2017



With a knowledge of derivational forms, it is possible to acquire several words for each word taught.

Composition of a Complex Word

designate

de + sign + ate

prefix



suffix

base

- gives word its principle meaning
- form (usually) doesn't change across derived/inflected forms
- often predicted by phonics rules
- may be based on a Latin/Greek root that gives shared meaning

Note: If base ends & suffix starts with a vowel, remove final vowel in base before adding suffix (e.g., love + ing → loving)

Note: There are 2 bases in a compound (e.g., baseball)

Greek/Latin Roots

- 82% of words on the academic word list (Coxhead, 2000) have Greek/Latin origin
- Abstract meanings, multiple meanings, cross-curricular

– E.g.,

ped (foot)

man (hand)

phon (sound)

flex (bend)

fract (shatter)

bio (life)

spec (see, look)

vert (turn)

graph (writing)

therm (heat)

scrib (write)

geo (earth)

Morphological Awareness

- Ability to consciously consider & manipulate morphemes within words
 - Explicit understanding of relation between base words (roots) & related inflected or derived words
- Even preschool children can demonstrate some MorphAw (Kirby et al., 2012; Lyster, et al., 2016)

Demonstrate Yours

- Which of these words signals 'the last one at last', and why?
 - *finely vs. finally*
- Read these words: *reach vs. react*
 - Which has a vowel team, and how do you know?
- Invent:
 - a compound word
 - a past tense verb
 - a superlative
- Distinguish:
 - *a murdering man vs. a murdered man*
- Spell this word: the /priz/ vs. two /priz/

Morphological Awareness

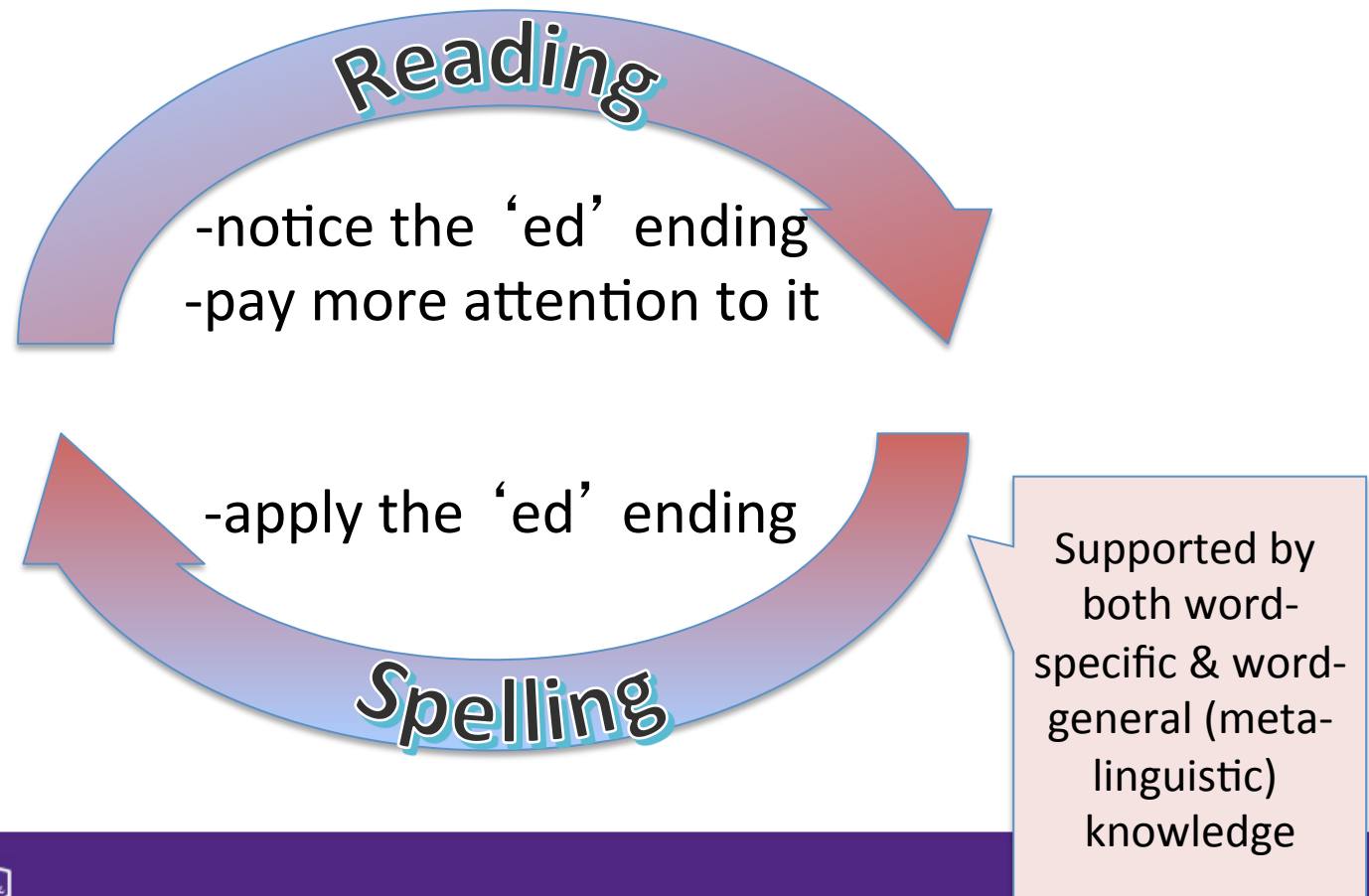
- Supports morphological analysis of writing
 - Development (when not explicitly taught)
 - Learn phoneme-grapheme rules
 - Learn word-specific spelling
 - Infer morphological patterns
 - Use generatively

Developmental Example

- Inferring 'ed' rule
 - First, child's writing is sound-based
 - *hopt for hopped; *rold for rolled; *fitid for fitted
 - Then, child begins to notice 'ed' ending in written language (i.e., while reading)
 - Then, child applies 'ed' to verbs & nonverbs indiscriminately
 - hopped; *sofed for soft
 - Then, child applies 'ed' to verbs only
 - hopped; *sleped for slept
 - Then, 'ed' is applied to regular verbs

Example

- Inferring 'ed' rule



Morphological Awareness

- Not all children (or adults) will infer morphological patterns implicitly
 - Education effect: university students better at applying plural endings to pseudowords (Bourassa et al., 2011)
 - Those who read more are more likely to figure out the rules
- But what if we taught it?
 - More on this to come....

Does MorphAw matter?

- Modest but significant unique predictor of literacy outcomes^{1,3}
- Predicts word attack & word reading even after PA taken into account^{1,9}
 - Proportion of variance predicting reading increases over early grades⁵
- Predicts reading comprehension in middle years even after adjustments for vocabulary, PA, word reading^{7,8}
 - So does syntactic awareness & vocabulary⁴
- Associated with ability to infer meaning of complex words in older children³
- Explains variance in spelling³
- Poor in children with low literacy⁶
- May be a relative strength in poor readers with phonological impairments²

Is MorphAw intervention effective?

- Generally, intervention effects are modest but significant
 - Small groups, short term intervention (but more than 10 hrs⁷)
- MorphAw increases as a result of intervention^{1,2}
- Benefits to
 - Phonological awareness⁷
 - Word reading/attack¹
 - Spelling^{1,6,8}
 - Reading comprehension^{1,8,9,11,12}
 - Vocabulary/word study/infering meaning^{3,4,5,12}
 - Individuals with dyslexia – MorphAw, reading comprehension, spelling²
- Effectiveness may be increased
 - Incorporates writing¹⁰
 - As part of comprehensive instruction^{4,7}
 - With younger students⁴ (e.g., gr. 1-2), or **those with various language disorders**⁷
- How early to start is still an empirical question but positive longitudinal benefits have been reported for preschoolers⁹

Effect sizes based on ‘Type of Learner’ in 2 Meta-Analyses of MA Intervention

Goodwin & Ahn, 2010

Focus: Children with literacy difficulties (16 studies)

- S&L delay 0.77
- ELL 0.62
- Struggling readers 0.46
- Learning disabilities 0.22
- Reading disabilities 0.17

Goodwin & Ahn, 2013

Focus: Unselected samples (27 studies)

- ELL 0.54
- Learning disabilities 0.37
- Poor readers/spellers 0.35
- Typical achievers 0.29

MorphAw Intervention: Key Points

- Effects are modest but positive
- Assessed after impacts of other intervention components have been considered
 - So reported effects might be minimized
- Value added beyond current interventions
 - About 10-15% of poor readers receiving intensive PA intervention continue to struggle with reading

Morphological Awareness

- ✓ Why?
- ✓ What is it?
- How?
 - Assessment
 - Intervention

Assessment

- Norm-referenced
 - Word structure subtests (CELF; TOLD)
 - Mostly inflectional morphemes
- Criterion-referenced
 - Wug test
- Informal tasks
- Observations

Informal Tasks

- Consider:
 - Recognition
 - Classification
 - Blending
 - Segmenting
 - Production
 - Decomposition
 - Decomposition & production

Other considerations:
-compound/inflection/derivation
-transparent/opaque

Collection

- Link to collection
- Link to Morphological Awareness Assessment
 - From teacherspayteachers

MorphAw Intervention

- Strategies to support:
 - Vocabulary
 - Reading comprehension
 - Spelling
- Instructional approaches
- Specific tasks & examples
 - Some resources

MorphAw as a Vocabulary Building Strategy

- Word Detectives!
 - Foster excitement for finding out about words & learning more words
 - Vocabulary!
 - Problem-solving approach
 - Discover clues to word meaning
 - Discover word relatives & friends
 - Discover patterns
 - Spelling is consistent!

MorphAw as a Reading Comprehension Strategy

- Recognize you do not know the word
- Analyze word for recognizable morphemes (roots; affixes)
- Think of a possible meaning based on the parts of word
- Check meaning against context

MorphAw as a Spelling Support Strategy

- Think beyond letter
 - box, socks, bakes
- Think beyond syllable
 - Think across syllables to effect of adding or deleting letters to preserve pronunciation
 - Syllable juncture rules
 - e-drop rule (e.g., love + ing --> loving)
 - doubling (e.g., hop → hopped)
 - C-y ending (e.g., carry → carries vs. boy → boys)

Instructional Approaches

- Activities to increase morphological awareness
- Teaching meanings of affixes & base words
- Fostering morphological problem solving
- Teaching strategy of morphological analysis

Specific MorphAw Tasks: A Comprehensive List

- Explicit affix & root word instruction
- Identifying affixes & root words
 - Listen for words with X as you listen to this story
- Building words with morphemes
 - How does meaning change; ‘Say it another way’ (e.g., to draw right now)
- Compound word instruction
 - ‘I spy’; deletion; invert
- Emphasizing inflectional morphological awareness
 - E.g., murdered man vs. murdering man
- Linking morphemes to grammar
- Teaching morphological patterns & rules
 - Syllable juncture rules; demonstrate contrast**
- Distinguishing between morphemes & pseudomorphemes
- Using context
 - E.g., He killed him, and became known as the murdering man.
- Word family instruction
- Identification of words by analogy
- Instruction in word origins
- Using word sorts to highlight morphological features
 - Prefix/not: Realize, rewind, recapture, ready, reach
- Word mapping
 - Separate morphemes in word & relate to those with similar meanings or word parts

Word Relatives

- Words are related because they share meaning (common root)

– dog/dogs ✓

– dog/hotdog ✗

– eat/eating ✓

– eat/beat ✗

Word friends:
Look or sound
similar but do not
share meaning



- Search for word relatives of different base words
 - Consider cognates! (Goodwin et al., 2012)

Word Building

- Develop strategy of inferring word meaning from individual components of words

Be a Word Detective (Wolter & Green, 2013)

Instructions: You are a word detective. See if you can figure out the following words' meanings by using the clues of the base words and added word endings called suffixes. Find the base word and the suffix in the following words. Underline the base and circle the suffix. Then, read the word aloud and talk about what each part means and how you know. For example, the base word *sing* refers to the act of singing a song. It is combined with the word ending or suffix *-er* which means a person who does the base word. When put together, we get the word *singer*. or someone who sings.

singer

joyful

teacher

drummer

painter

creative

careful

selective

protective

hopeful

wishful

active

Word Building

Build a Word (Wolter & Green, 2013)

Instructions: Create your own word using Greek and Latin roots and affixes. Take a prefix, base word and suffix from the following lists and put them together to make a new word. Explain what *your* word means (e.g., “antimotology” might be the study of why people don’t move or run).

(text in bold)	(text in italics)	(<u>underlined</u> text)
anti- (against)	<i>-ped-</i> (to walk)	<u>-ology</u> (study of)
un- (not)	<i>-act-</i> (to do)	<u>-ion</u> (state of being)
re- (repeat)	<i>-mot-</i> (to move)	<u>-ness</u> (state of being)

Look at those Latin & Greek roots!

Word Sorts

- Develop strategy of identification & active analysis of morphological patterns among words

Sort by Sound (Wolter & Green, 2013)

Instructions: All of the words below are in the past tense. How do you know? Say each word and sort the words into 3 columns based on how the “ed” is pronounced. Even though it can sound different, how is the “ed” always spelled?

acted, tagged, lasted, jumped, called, fixed, passed, landed, canned

/t/	/d/	/ɛd/
_____	_____	_____
_____	_____	_____
_____	_____	_____

Word Sorts

Sort It Out (Wolter & Green, 2013)

Instructions: Sort the following pairs of words into two groups:

Tape/taping	Hop/hopping	Tap/tapping
Hope/hoping	Slop/slopping	Slope/sloping

Group 1

Group 2

_____	_____
_____	_____
_____	_____

* What is the spelling rule for Group 1? What is the rule for Group 2?

Word Sorts

Derivational word sort (Wolter et al., 2015)

Sort the word pairs (on cards) into 3 columns.

Completed sort:

pot-potter

magic-magician

five-fifth

calm-calmly

sign-signal

explode-explosion

tie-untie

act-action

wise-wisdom

break-breakable

music-musician

courage-courageous

What's the pattern?

Word Sorts

- Coaching:
 - Use think alouds as you begin sorting
 - Comment on patterns (e.g., they all end in 's')
 - After, state/write rule explicitly with the students
 - Generate other words with same pattern
- Let's try some!

Program Example 1

Apel & Diehm, 2013

- 8 weeks, 4 days/wk, 25 min/session, small groups; 158 K-gr.2 randomly assigned to intervention/control
- 11 affixes, each for 2 days; review lesson after 2 affixes
- Word detectives (with magnifying glasses)
 - Introduce affix, demonstrate meaning, use in sentence, define, listen for ending
 - Word/picture sorting (presence/absence of affix), say it another way (elicit affix), story (indicate when you hear words with the affix & explain meaning)
 - Scan list of words & circle those containing affix; connect or separate blocks to match if words had an affix; entry in affix book page; brain storm other words
- Review lessons after every 2 affixes
- Significant gains in MorphAw not literacy (d/t short intervention?)

Program Example 2

Kirk & Gillon, 2009

- 11 weeks, 1 individual & 1 grp/wk in 45min. sessions; 8-11 yrs ($n=16$ poor spellers; randomly assigned to control/intervention)
- Targeted orthographic patterns
 - Morphologically simple words where vowel length determines spelling of final sound:
 - magic *e* (e.g., *cake*)
 - -ke & -ck (e.g., *bake/back*)
 - -ch & -tch (e.g., *peach/patch*)
 - -g, -ge, -dge (e.g., *hug, huge, hedge*)
 - Morphologically complex words involving base word modification to add suffix (-er, -est, -ing, -y, -ed, -iest, -ier, -ly, -ish, -en, -ened)
 - Consonant doubling (e.g., *slopping*)
 - *e*-drop (e.g., *sloping*)
 - *y* → *i* (e.g., *funniest*)

Program Example 2

Kirk & Gillon, 2009

- Intervention
 - Word sorts:
 - Picture sorts identifying vowel length (e.g., cap, cape)
 - Word sorts for morphologically simple words
 - Phonological minimal pairs based on vowel length
 - Separate sorts based on orthography (e.g., bake, back)
 - Word sorts for morphologically complex words
 - Transparent sorts (e.g., teach, teacher) then sorts with changes with suffix, then mixed suffixes
 - Use word in sentence or identify part of speech
 - Prompted spelling
 - Morphologically simple & complex lists completed after respective word sorts
 - Initially, with teacher prompts then encouraging self-prompts

Program Example 2

Kirk & Gillon, 2009

- Morphologically simple word spelling prompt

I'd like you to spell the word *trick*. I'll use the word *trick* in a sentence so you can think about what it means: *The magician performed a magic trick*. Now, before you write anything down, I want you to tell me the vowel sound in the word. That's right, the vowel sound is /I/. Is /I/ long or short? You are correct, the vowel sound in *trick* is short. If the vowel is short, how do we spell the final /k/ sound? That's right, you spell the final /k/ sound with the letters *-ck* because short vowels are greedy, they like an extra consonant. Now write the word *trick*.

- Morphologically complex word spelling prompt

I'd like you to spell the word *mopping*. I'll use the word *mopping* in a sentence so that you can think about what it means: *The boy was mopping the floor*. Before you write anything down, I want you to tell me the vowel sound in the base word. That's right, the vowel sound is /ɑ/. Is /ɑ/ long or short? You are correct, the vowel sound in *mop* is short. Now spell the base word. Do you have to make any changes to the base word when you add the suffix? Yes, you do. Because the vowel sound in *mop* is short, you will have to double the final *p* in *mop*. Now finish writing the word *mopping*.

Program Example 2

Kirk & Gillon, 2009

- Results:
 - Significant improvement in spelling & reading accuracy for trained and untrained words
 - Standardized test differences not observed
 - Though that would be expected given the sample size!

Affixes to choose?

Table 1 Eight Frequently Occurring Prefix Families Based on Baumann et al. (2002)

Family	Prefixes	Example words	Frequency*
Not family	dis (not, opposite, reversal) un (not) in (not) im (not) a (not)	disloyalty, dissimilar unappetizing, unfortunate inactive, inadvertent improper, impure amoral, apathy	High
Number family	mono (one) bi (two) semi (half, partly)	monorail, monotone bilingual, biannual semicircle, semiformal	Medium
Below or part family	sub (below, part of) under (below, not enough)	subset, submerge underweight, underdone	Medium
Again and remove family	re (again) de (remove, reverse)	retell, reconsider, redo decode, deductive	High
Before and after family	pre (before) post (after)	preshrunk, preview postgraduate, postwar	Medium
Against family	anti (against, stopping) counter (against, opposite)	antifreeze, antisocial counterattack, countermeasures	Medium
Excess family	over (too many or much) super (more, better, highest) out (better, more than)	overpopulation, overflow superhighway, superheated outrun, outlandish	Medium
Bad family	mis (bad, wrongly) mal (bad)	mistrust, mistreatment malnutrition, maladaptive	Medium

* Frequency of the prefix group based on Carroll et al. (1971) and Zeno et al. (1995).

Table 2 Five Frequently Occurring Suffix Families

Family	Suffixes	Example words	Frequency*
Inflectional: Plural and tenses	s, es (plural) s (singular verb) ed (past tense) ing (present participle)	dogs, foxes runs, dances jumped, danced jumping, dancing, amazing	High
Inflectional: Comparative	er est	bigger, smarter biggest, smartest	Low
Derivational: Adverbs and agents	ly (adverb) er (agentive) or (agentive) ist (agentive)	friendly, completely washer, reporter creator, projector scientist, pianist	Medium
Derivational: Nouns	ion tion ition ness ment ity ic	education, creation addition, subtraction partition, apparition happiness, sickness judgment, announcement uppity, creativity chronic, toxic	Medium
Derivational: Adjectives	ible able al, ial ship ent ant ous y en ful less ish	edible, credible believable, reachable magical, judicial leadership, friendship different, absorbent important, hesitant nervous, ambitious juicy, healthy, salty golden, brighten hopeful, mouthful hopeless, harmless brownish, foolish	Medium

* Frequency of the suffix group based on Carroll et al. (1971) and Zeno et al. (1995).

Other sources:
Prefix & suffix families
<http://studylib.net/doc/6781548/prefix-and-suffix-families>

The 20 most common
•Prefixes
<http://www.darke.k12.oh.us/curriculum/la/prefixes.pdf>

•Suffixes
<http://www.darke.k12.oh.us/curriculum/la/suffixes.pdf>

Structured Word Inquiry

- Comprehensive approach to word inquiry
 - Rich & multifaceted approach considering all linguistic properties of a word
 - Phonological, orthographic, morphological, etymological (semantic history), mental orthographic images
 - Specific attention to encoding & decoding of words
 - Using one's own knowledge of linguistic properties & words
 - Discovering how English spelling represents meaning
 - Increase general linguistic knowledge & knowledge of individual words
 - Teacher-led or student-led inquiry

Some Tenets of SWI

- English spelling represents meaning
- **Spelling makes perfect sense**
- There are no ‘exceptions’ or irregular words
 - Recognizing consistencies in structure & meaning supports generative learning
- Focus on semantic & logical reasoning (may draw on strengths of students with phonological deficits)
- Elaborative questioning within meaningful contexts promotes encoding (memory)
- Also, scientific word investigation
 - Setting and investigating hypotheses about words

Structure of Instruction

1. Present an interesting spelling problem that highlights a core orthographic element, pattern or principle.
2. Present students with sets of words selected to reveal the pattern that is the focus of the lesson. Encourage the development of hypotheses for the class to test.
3. Test hypothesis in order to confirm & describe the exact orthographic pattern.
4. Provide systematic practice of newly learned patterns with a set of words chosen to reinforce the given pattern.
5. Identify spelling questions in preparation for the next investigation.

Sample Inquiries

- Why do you double the <p> in *clapped*?
- Why is there a silent letter in *sign*?
- Why is *one* spelled like that?
- What is the meaning of neurodegeneration?

Bowers & Kirby (2010) SWI Investigations

Found an interesting word?

Investigate with these *4 questions...

1. What does the word mean?

2. How is it built?

- Can you identify bases or affixes with a word sum?

3. What other related words can you think of?

- **Etymological relations:** Use a word origin dictionary (e.g., [Etymonline](#)) to find members of the “extended family” of your word that share the same **root**.
- **Morphological relations:** Try the [WordSearcher](#) to help you find members of the “immediate family” of your word that share a **base element** (fit in the same matrix).

4. What are the sounds that matter?

- What grapheme/phoneme correspondences can you find that fit within your hypothesized morphemes?

Mean?
Built?
Relatives?
Pronunciation?

[http://
wordworkskingston.com/
WordWorks/
Structured Word Inquiry.html](http://wordworkskingston.com/WordWorks/Structured_Word_Inquiry.html)

*Note: While the order of question 1 & 4 is essential, there is no order to questions 2&3.

www.wordworkskingston.com

Why is <one> spelled that way?

1. By itself, without anything else
2. Morphologically simple: 1 base
3. Set of relevant words (grab bag, brain storm, Word Searcher)

- Related meaning?
- Same root?

only
once
none
atone
alone
lonely
onion
lonesome

Mean?
Built?
Relatives?
Pronunciation?

- Begin with hypotheses
- Promote discussion & exploration
- Find evidence to confirm your ideas

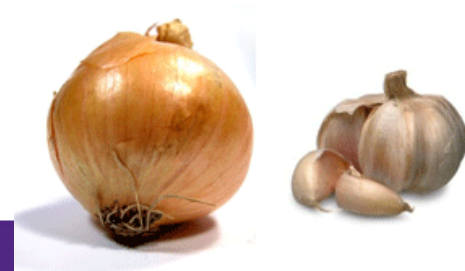
A Discussion of One

- What is the root of <one>
 - Single, by itself
 - From Old English <an>
 - like <a> & <an>!
- Is the ‘n’ in <none> an affix?

only	→ one + ly
none	→ no + one
once	→ one + ce
atone	→ at + one
alone	→ all + one
lonely	→ lone + ly
lonesome	→ lone + some
onion	→ one + ion


- Yes! No + one: what happens when an affix adjoining end is a vowel & adjoins vowel at base word?
- Does <one> & <alone> share a base?
 - What about <one> & <lonely>
- Surely <onion> is not in the family?

<https://youtu.be/OmbuwZK0lr8> (4:18)



Word Sums

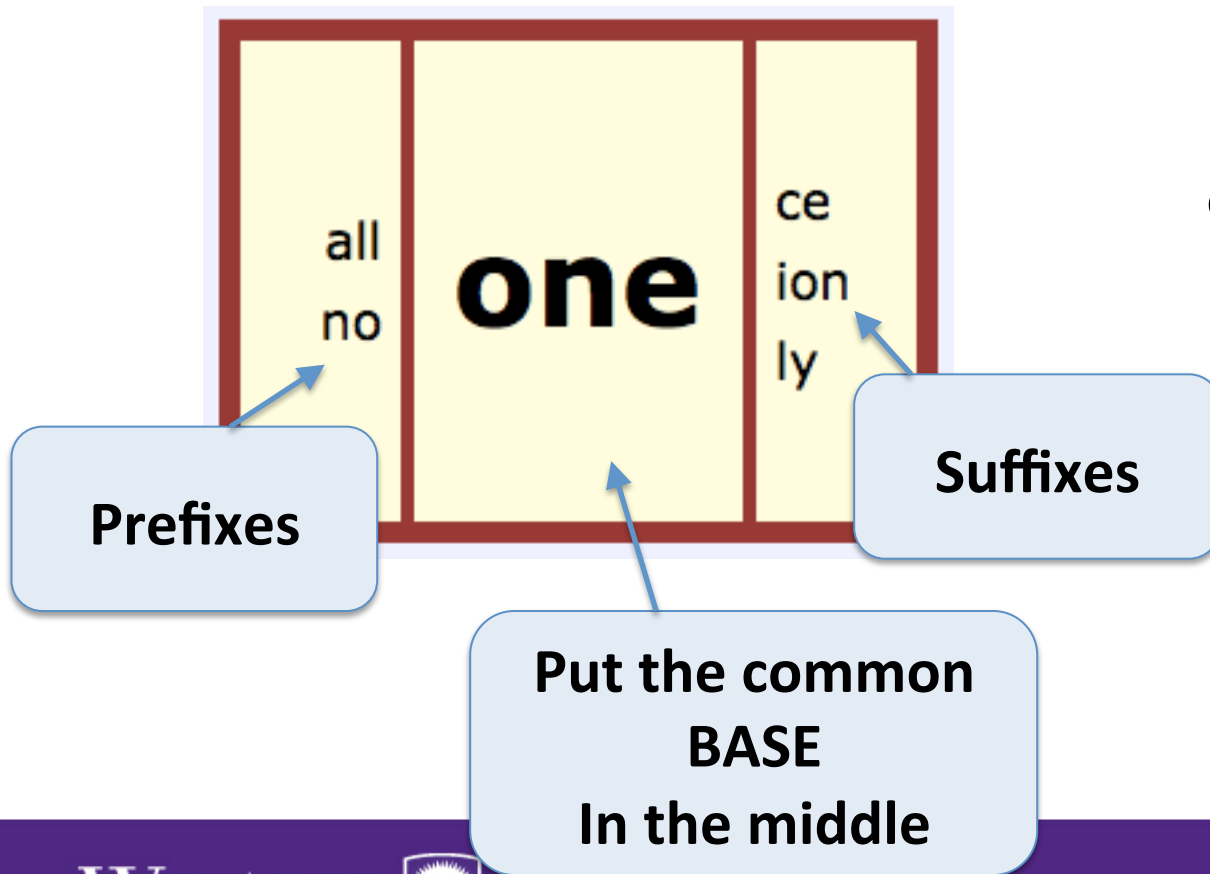
only	→ on e + ly
none	→ n o + one
once	→ on e + ce
atone	→ at + one
alone	→ al l + one
lonely	→ lone + ly
lonesome	→ lone + some
onion	→ on e + ion



Reminiscent of
Empower's
'Peeling off'
strategy

Build Word Matrix

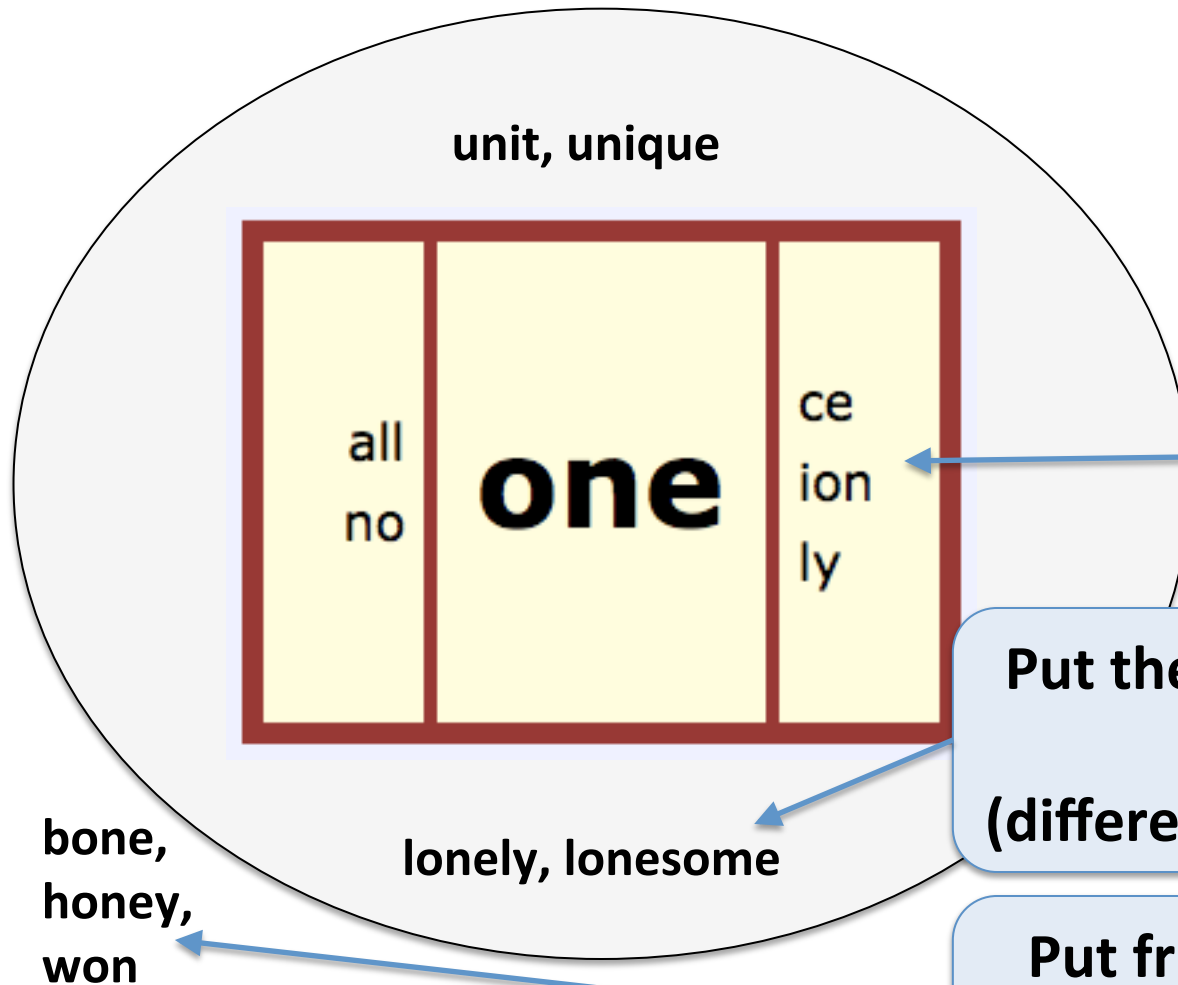
- only → one/ + ly
- none → no/ + one
- once → one/ + ce
- atone → at + one
- alone → all/ + one
- lonely → lone + ly
- lonesome → lone + some
- onion → one/ + ion



This tool will make a matrix from your word sums:
<http://www.neilramsden.co.uk/spelling/matrix/temp/index.html>

The Word Relations

- only → one/ + ly
- none → no/ + one
- once → one/ + ce
- atone → at + one
- alone → all/ + one
- lonely → lone + ly
- lonesome → lone + some
- one → one

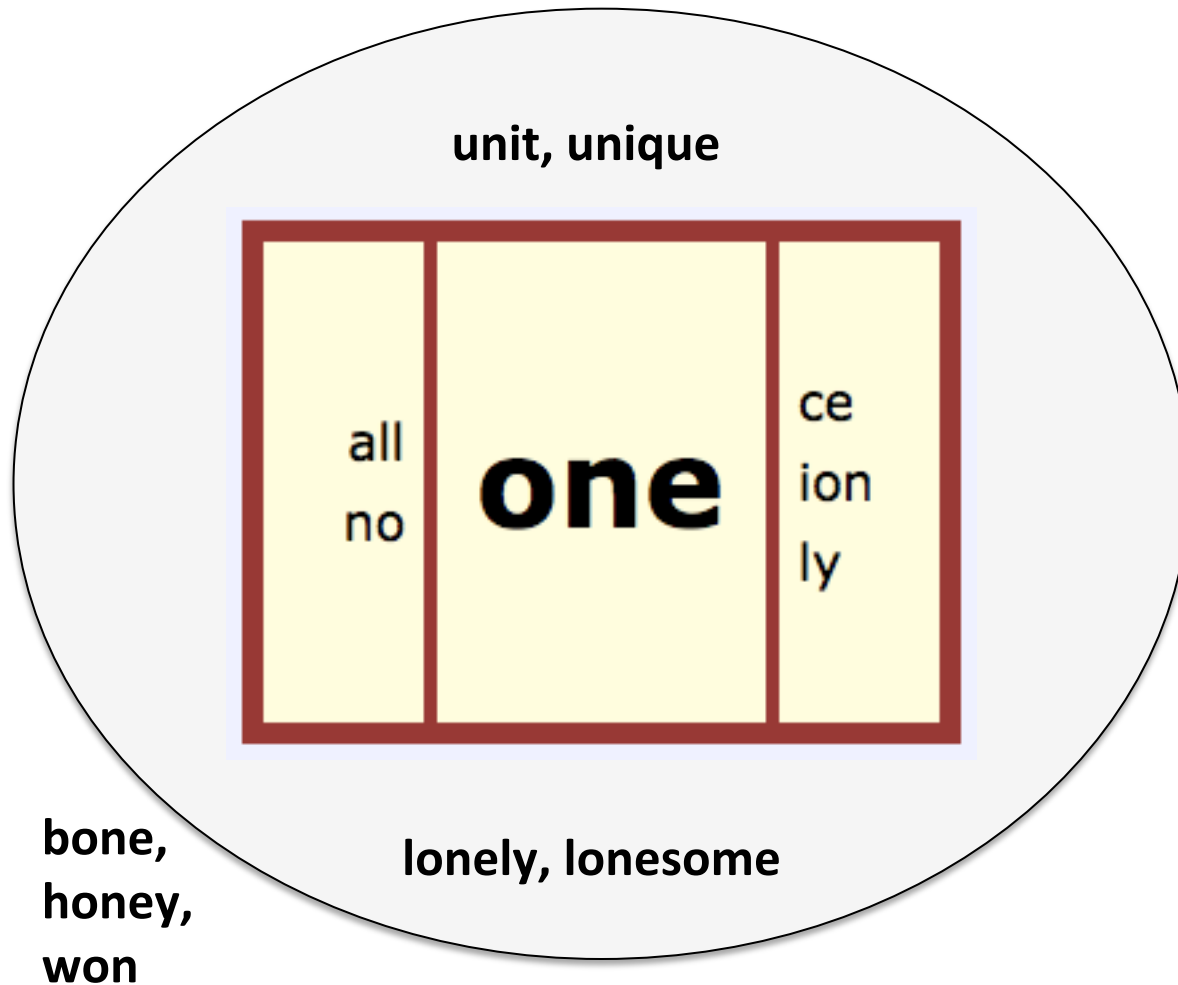


**Morphological
Relatives:
Same base**

**Put the etymological relatives
in the circle
(different base; share meaning)**

**Put friends outside the circle
(overlap in phonology or
orthography but not meaning)**

The Word Relations



only	→ one/ + ly
none	→ no/ + one
once	→ one/ + ce
atone	→ at + one
alone	→ all/ + one
lonely	→ lone + ly
lonesome	→ lone + some
onion	→ one/ + ion

You can read a blog about a teacher doing a SWI of <one> with her students here:

<http://wordsinbogor.blogspot.ca/2014/11/newthe-power-of-one.html?sref=tw>

Here's a student talking about her SWI:

<https://youtu.be/CsfyHdIrtM>

Some more great videos!

- A Grade 2 Structured Word Inquiry Classroom (4:25)
 - <https://youtu.be/zrYYixwnnl4>
 - http://files.realspellers.org/PetesFolder/resources/Natashya's_document_revised.pdf
- SWI @ The Nueva School (14:28)
 - <https://youtu.be/720bQKthBEI>
- Understanding morphological & etymological families (29:22)
 - <https://youtu.be/R233ynnGyGc>
 - Shows use of [etymonline.com](http://www.etymonline.com) & [Word Searcher](#)
- Also see,
 - http://www.wordworkskingston.com/WordWorks/About_WordWorks.html

Morphological Awareness: Why it makes sense

- English written language is morphophonemic
 - Connects meaning and orthography
- Increasing influence as predictor of literacy outcomes
 - Even after adjustments for phonological awareness
 - Some children struggle to read even with intensive phonological awareness intervention
- Assessment materials largely informal
- Interventions involve focus on word structure (word building, sorting, word families)
 - Supports on vocabulary, reading comprehension, spelling

Thank you!



LWM Lab

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Morphological Awareness: Why It Makes Sense!

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Morphological Awareness Resources

Materials

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Blogs/Online Tools/Websites:

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Anderson, L. (2014). The power of one! Beyond the word: An orthographic learning journey.

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Ramsden, N. (2011-2013). Mini Matrix-Maker Home Page.

<http://www.neilramsden.co.uk/spelling/matrix/temp/index.html>

Structured Word Inquiry (Bowers)

http://wordworkskingston.com/WordWorks/Structured_Word_Inquiry.html

http://www.wordworkskingston.com/WordWorks/About_WordWorks.html

Scheiner, R. (2012). Wordflex Touch Dictionary (an app that creates word mind-maps)

Videos

Cooke, G. (2012). Making sense of spelling. <https://youtu.be/OmbuwZK0lr8> (4:18)

SWI of "resistance" by Grade 5 Student, Samantha. <https://youtu.be/CsfyHdIrtM> (3:33)

A Grade 2 Structured Word Inquiry Classroom <https://youtu.be/zrYYixwnnI4> (4:25).

Accompanying handout:

http://files.realspellers.org/PetesFolder/resources/Natashya's_document_revised.pdf

SWI @ The Nueva School: A grade 2 classroom <https://youtu.be/720bQKthBEI> (14:28)

Understanding morphological & etymological families (by Bowers)

<https://youtu.be/R233ynnGyGc> (29:22)



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