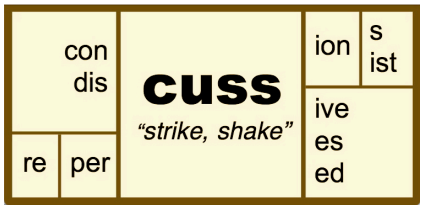
A Rich Discussion To Shake-Up Orthographic Understanding

A participant in an on-line SWI course shares joyous tales of how struggling students are responding her new orthographic understanding

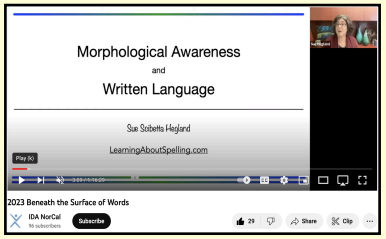
The word “discussion” has a bound base <cuss> that caries an orthographic denotation of “strike, shake.” We can see a number of morphological relatives with this base in the matrix at right from Real Spelling.



Matrix from 70 Matrices section of Real Spelling Tool Box 2.

If you look up the etymology of any word reflected by this matrix, you will find your way back to the Latin root *quat(ere), quass(us)* for “to strike, shake.” This is the sense and meaning the infinitive *quat(ere)* and its past participle *quass(us)* had in Latin. It is from this etymology that we find the “orthographic denotation” of any present day word that derives from this Latin root.[1] Some of the sense and meaning “shake, strike,” no matter how faint, will be present in any word that derives from that root. This “shaking and striking” is obvious for a word like “percussion.” But this orthographic denotation is more metaphorical for “discussion.” But once we trace the orthographic denotation “shake and hit” from an etymological reference, we can perceive that semantic connection with the idea of “batting around ideas” that happens in a discussion. When we have a rich discussion, we may be lucky enough to shake up our previous thinking, and gain a new understanding!

Orthographic Denotation: An essential concept for a deep understanding English orthography



See Sue Hegland’s recent IDA talk on “Morphological Awareness and Written Language” for a rich and accessible introduction the orthographic understanding studied in SWI.

I particularly appreciate the emphasis and clarity she brings to this concept of an “orthographic denotation.”

The investigation share on the following pages has nothing to do with the word “discussion.” I simply wanted to bring out this sense and meaning to consider as you read the following orthographic discussion. Perhaps this batting around of orthographic hypotheses will shake up your thinking about English spelling, and how we can use explicit instruction, guided by scientific inquiry, of how our orthography system works.

[1] Etymology shows us the bound base <cuss> is unrelated to the free base <cuss> which is from an Old English root, and is related to “curse.”

Lisa is a teacher quite new to SWI. She was in my "Working with the Tools of SWI" course. Lisa shared an inspiring stories describing the rich learning she and her students were experiencing after our first session.

After the second session I received another inspiring message from Lisa. I'm formatting her mail and my response (with some editing for clarity) to help others gain from the learning and instruction Lisa brought to her classroom with minimal training in SWI. Her course with me was in January of her first year of encountering SWI. The only other training she had was a course with the excellent Rebecca Loveless in the fall.

As I share the trail of our discussion, I get to highlight many rich orthographic concepts addressed in our course, and that can inform educators' understanding and literacy instruction.

Thanks Lisa,

Hi Peter!

Thank you again for the great class! I'm excited to dig deeper with my students this week. You asked for a reminder to send everyone the story about the student who learned their letter sounds from learning with morphemes.

See that story here. Also see this story with this same student when we investigated the word <durable> that I think you'll find very apt for your work too.

[And now HERE is a recent video with this same student who is now thriving in literacy.]

This story might shed light on my principal's question about SWI. She is interested in how well special education students would do with SWI. I told her my experience with my 4 special education students.

Two days ago one raised his hand during the building of the <format> matrix, shouting with excitement, 'I know another one! I know another one!' His excitement was over an example I gave them to glue into their word inquiry notebooks. It's the word "previewing," written on lego like blocks, over the labels: prefix, base, suffix. His excitement was over the word "previewing"! He couldn't read it yet, but knew <pre-> was the prefix and <-ing> the suffix, and the other word, whatever it was, a base. Since we were working with "format," I told him we could create a matrix for his word discovery during his reading group, which followed right after. And we did! This low reading group, first grade readers, worked with me to create a matrix for the base <view>! A word they probably wouldn't access on their own. They had an understanding of the suffix from previous word studies, and just needed a quick reminder of the meaning of the prefix.

So great! You have helped these students have the experience of at least two crucial messages about spelling.

- The spelling system has order they didn't know before.
- They can independently recognize this order by investigating the structures of words.

In your early attempts at drawing children's attention to morphological structure, note that students are discovering structures that are not even the ones you were emphasizing. But you were able to capitalize on this important moment for this learner. This is a key aspect of not being tied to a strict lesson sequence if a child's line

of thinking goes somewhere valuable that you were not anticipating.

You also show that when children start noticing prefixes and suffixes in and SWI class, they use that as a means to start considering the base.

The beautiful work came from the base, the <ew> digraph. Which I now take to be a digraph. They went crazy looking for the <ew> digraph in their texts! They asked to add the digraph under the long /u/ section on our wall!

Nice! Think about how much more interest these students have for studying this word because it was a student's observation about a prefix in "preview" that turned the attention of his class to this word. In turn, that focus drew attention to a new grapheme-phoneme correspondence they were eager to learn. That kind of inherent attention is priceless for struggling students with phonological deficits who have to work harder to bind grapheme-phoneme correspondences. It takes cognitive effort to make these connections. This kind of attention is exactly what they need to succeed.

Once you notice a structure you can't help but notice it elsewhere.

The hypothesis of a digraph in <view> is particularly interesting. We can see clear evidence <ew> as a digraph in the word "few" representing the same phoneme we perceive in <view>. So this is a good hypothesis. We can look at possible grapheme-phoneme correspondences this table. (See top of the next column.) Note this is a hypothesis, not a conclusion!

Word	few	view
graphemes	<f> <ew>	<v> <i> <ew>
	↕ ↕	↕ ↕ ↕
phonemes	/f/ /ju/	/v/ **?** /ju/

Consider the IPA for "few" and "view" in my Oxford:

"few" / fju / "view" / vju /

We can see that the IPA symbol for the phoneme the <ew> digraph is representing is this / ju /. In "few" there is no question which letters are used to represent the / ju / phoneme, as the < f > clearly represents the / f /.

However, in "view," if we conclude that the <v> spells /v/ and the <ew> spells /ju/, then we are left with an <i> grapheme that is not associated with a pronunciation. This is a good time to notice the final of three bullet points on question 4 of my "4 Questions of SWI."

4 Questions for *Understanding* a Spelling

Spelling is driven by the interrelationship of morphology, etymology, and phonology.

1. **What is the sense and meaning of your word?**
2. **How is it constructed?**
   - *Identify any bases or affixes with a word sum.*
3. **What related words can you find?**
   - ***Morphological Relatives:*** *Words that share a historical* ***root*** *and a* ***base.***
   - ***Etymological Relatives:*** *Words that share a historical* ***root*** *(but not necessarily a* ***base****).*
4. **How are the graphemes functioning in your word?**
   - Check that they function for words across the morphological family.
   - Study how etymology accounts for the graphemes in your word.
   - Note any phonological and non-phonological functions of the graphemes in your word.

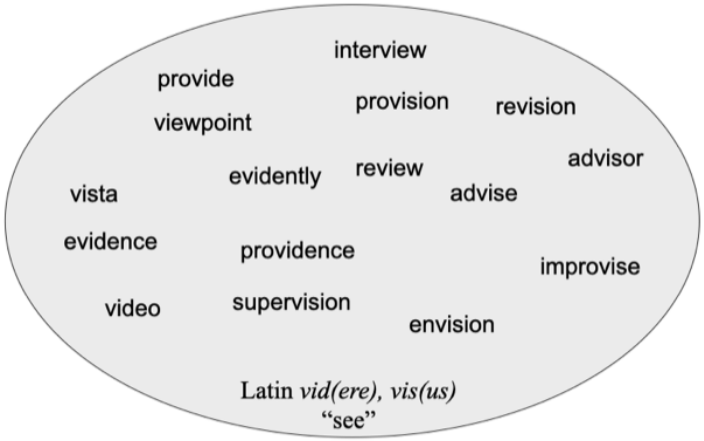
"4 Questions of SWI" Revised June, 2022
Peter Bowers, WordWorks Literacy Centre
(earlier versions were from 2006 to 2019)

That point reads reads, “Note any phonological and non-phonological functions of the graphemes in your word.” A key lesson of this investigation is that graphemes can have non-phonological functions. We can proceed with our investigation about this < i > without being hindered by the false assumption that there should be a pronunciation associated with every grapheme.

Now notice that before we can come to conclusions about question #4, we should investigate questions 2 & 3. This order of the 4 questions is not a signal that grapheme-phoneme correspondences are somehow “less important.” Instead it is a signal that if we do not understand a grapheme-phoneme correspondence in a word, we need to remember that morphology and etymology are critical drivers of grapheme-choice. If we want to understand why there is an < i > in the word “view” even though it is not associated with any pronunciation - the only place we can possibly find an understanding will be with reference to morphology and/or etymology.

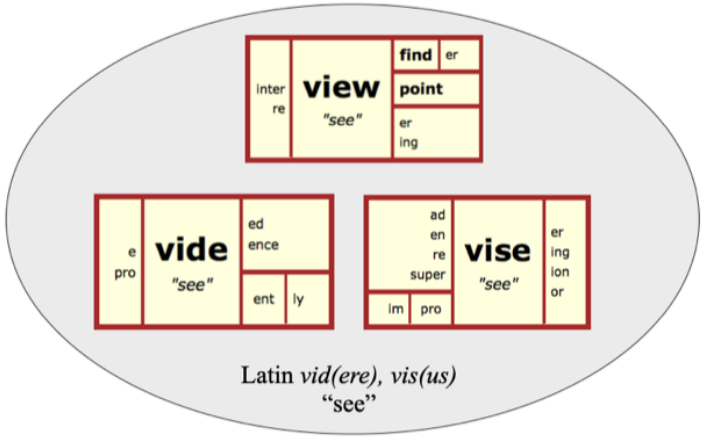
See a screen shot of a lesson I use to look at words in the etymological family of “view” [next column]. I found all of the words in this oval by searching the Latin root videre in Etymonline. I found that root when was studying the word “evidence” in that class lesson. [See a similar lesson here.] I’ve marked the oval with the Latin root *vid(ere)*, *vis(us)* and the meaning of this Latin verb “to see.”

Scan all these words in the same etymological family as <view>. There is something you will find in every one of these English spellings and in the spelling of the Latin root *vid(ere), vis(us)*.



Do you see it?

You may have noticed the grapheme I am hinting at. But before giving that away, why don’t we see some of the morphological families to be found within the etymological relatives above. Below I’ve taken words from the etymological relatives in the oval and analyzed them with word sums to find the bases <view>, <vide> and <vise>.



I could put words like ‘video’ and ‘vista’ in the oval outside of these matrices since they derive from the same root.

Do you see the common orthographic structure in all these words?

It is the < i > grapheme.

All of these spellings have this grapheme. In most of those words, this grapheme is representing a phoneme we typically associate with it.

But when we say the word “view” in English, or any of the other English words that build on this base, we never pronounce a phoneme in association with the < i > grapheme. So how might we be able to explain this < i > in < view >?

A key concept teachers need to understand to be able to explain the grapheme-phoneme correspondences in countless words is that graphemes do more than represent phonology. One of the many non-phonological functions of graphemes is to mark etymological associations between words. We see this graphemic role in spellings like < two > with its < w > marking a connection to words like “twice,” “twenty,” “twin” and others. Note there is no <wo> digraph. We see this in the spelling <people>. There is no <eo> digraph for the ‘long e’ phoneme. Instead, this < o > grapheme is in this word to mark a connection to etymological relatives like “popular” and “population.” That background knowledge, helps us consider this < i > grapheme in “view.” This word derived from a Latin root that had an < i >. We see that grapheme in most if not all of the words that derive from it. So my current hypothesis is that < i > in this word is not there to represent any phoneme. Instead, like the < w > in “two” and the < o > in “people” it could be there simply as a function of the etymology of this word.

I went down this whole rabbit hole because you noticed a possible <ew> digraph in <view>, but I do not know if you had considered the consequences of that astute observation in terms of the < i > grapheme.

I was blinded to this possibility for years, because I took the final <w> of “view” to be a single-letter grapheme following an <ie> digraph. In retrospect, I had not looked at that assumption very carefully. It was noticing the clear grapheme-phoneme analysis of “few” that helped me see this possibility.

Back to your mail...

The next day they still remembered how to read the word previewing and the words they added to the wall! We also generated other suffixes for <view>. I'd guess 3/4 of those students will retain this learning with practice. Getting back to my principal's question, I don't know that it will be retained by the one special ed student because she has severe short term memory challenges, along with a very low IQ. She can read words within texts, but not in isolation. She is also an EL. I cannot flush out completely if its a memory issue or an EL issue, when she has difficulty understanding what words mean. She tries to create the matrices with us, but she is not keeping up during whole class word work.

This is a fair question. However, I would say that this child - more than most - needs multiple supports to their learning of these words. In my view, having a low IQ and poor working memory does not mean that she will be better at linking abstract “letter-sound” correspondences if

we avoid scaffolding that learning with meaning-based connections. In fact I think the opposite is the case. The more individual barriers one has to building “sight words” (Orthographic Mapping), the more scaffolding with meaningful cues the better.

I'm also embarrassed to say that I've never heard <or> and <ar> called digraphs... I need to get grounded in digraphs and trigraphs now hahaha. I learned the term trigraph from a video of a first grade teacher's inquiry, I think I found on your site. [See that video here.] *The students were highlighting digraphs and trigraphs. Funny, because in all of my training I only knew ch, sh, th, wh, ph, and another I can't remember right now, to be digraphs!*

No need to be embarrassed. You can only work with what you have been offered. What I love to see is how much you are learning about how grapheme-phonemes work by studying SWI.

Thank you! I really did mean just to remind you to send everybody the story about the student who learned letter sounds through morphological study hahaha. Oh, and to request information about your school PDs.

Lisa

Afterword

I am so excited when I receive emails like this during my on-line SWI courses. It is great to see teachers and students diving in with this kind of learning so quickly. Being able to share those correspondences with the class results in richer learning for the group.

When possible, with permission, I love to share these rich orthographic discussions publicly to shake up the understanding of the wider SWI community.

On page 3 of this document archiving SWI Newsletters and “special publications” you can see two more such articles. I’ll be adding Lisa’s story soon under this heading:

Stories of transformational learning through SWI from teachers/tutors in their first attempt at an SWI lesson after as little as the first session of one of my on-line courses

Click HERE for this story: A frustrated 9-year old dyslexic finally gets traction with English spelling when his tutor changes gears to great effect an they go on the hunt for suffixes

Click HERE for this story: A 7-year old dyslexic and his tutor new to SWI are determined to make sense of English spelling