

LING 1010



Language and Mind

Prof. Jon Sprouse

03.31.21:

Language Diversity

What is a Language?

Over the course of this semester, we have been learning about the properties that all human languages have. Here are four critical properties:

A human language will have the following properties:

1. It will have its own **phonology**.
2. It will have its own **morphology**.
3. It will have its own **syntax**.
4. It will be acquired using known **mechanisms of language learning**.

This is the beginning of a **scientific definition of language**. This may not be the final definition that linguists settle on, but it is a good first theory for this course. (For example, one could imagine refining what it means to have phonology/morphology/syntax, or one could imagine adding that all language will use language-related brain areas for processing.)

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Much of this class has been devoted to the theory of language — how the mind works. We've only looked at language diversity when it served a purpose for the theory. So today, I want to show you some of the cool things that happen in languages that we didn't get to cover in previous lectures!

Beyond pulmonic consonants

Pulmonic consonants are consonants that are formed simply by expelling air from the lungs (hence the name), and disturbing that air.

Non-pulmonic consonants are consonants that create sound through an additional mechanism: clicks with the tongue, “sucking in” with the larynx, or creating and releasing air pressure in the mouth:

CONSONANTS (NON-PULMONIC)

Clicks		Voiced implosives		Ejectives	
◌◌̰	Bilabial	◌̤	Bilabial	◌'	Examples:
◌̱	Dental	◌̣	Dental/alveolar	p'	Bilabial
◌̽	(Post)alveolar	◌̥	Palatal	t'	Dental/alveolar
◌̼	Palatoalveolar	◌̦	Velar	k'	Velar
◌̻	Alveolar lateral	◌̧	Uvular	s'	Alveolar fricative

<https://www.seeingspeech.ac.uk/ipa-charts/?chart=2>

Beyond phonemes: Tonal Languages

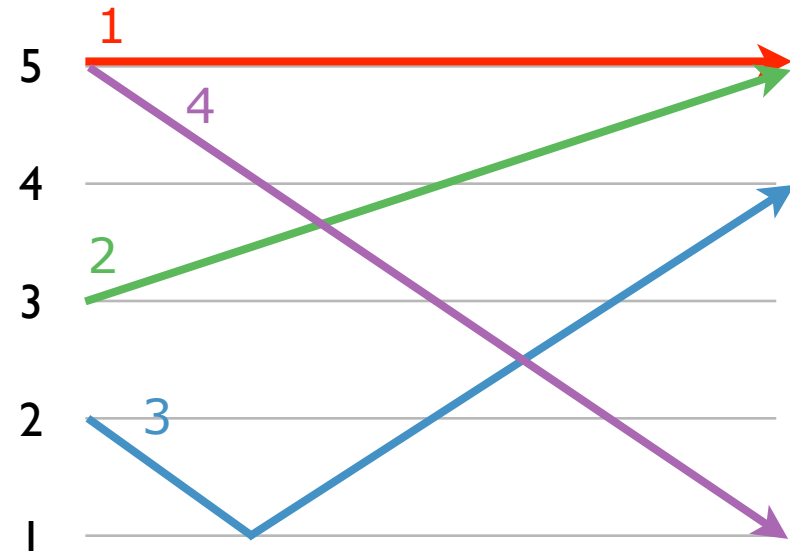
Tonal languages add **tones**, or changes in pitch, to syllables to distinguish them.

The classic example is Mandarin Chinese. In Mandarin, there are 4 tones that can be added to a syllable: a **high tone (1)**, a **rising tone (2)**, a **falling-rising tone (3)**, and a **falling tone (4)**.

If we take the same syllable *da*, and add different tones to it, it changes the meaning of the syllable!

In this case, each of the four *da* syllables is a distinct morpheme!

Mandarin Chinese: 4 tones



da → to hang over

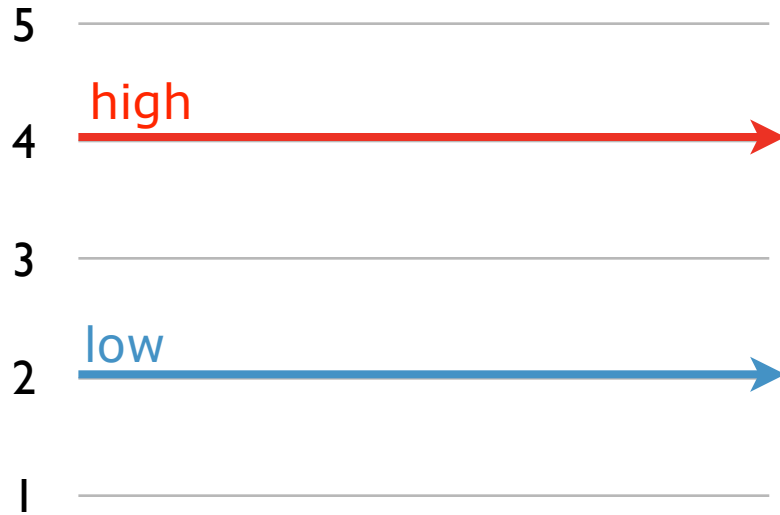
da ↗ to answer

da ↘ to hit

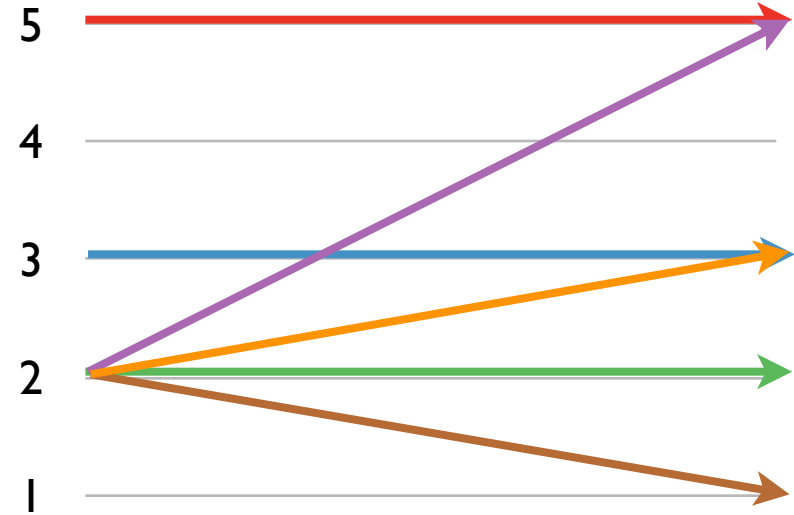
da ↙ big

Beyond phonemes: Tonal Languages

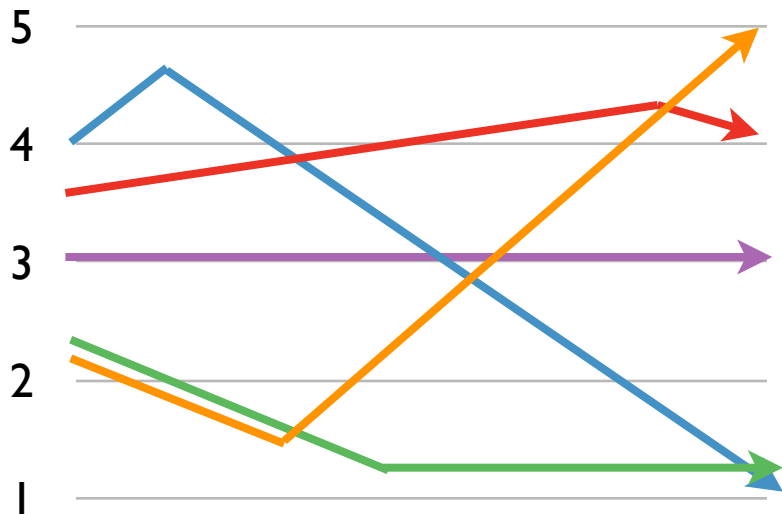
Japanese: 2 tones



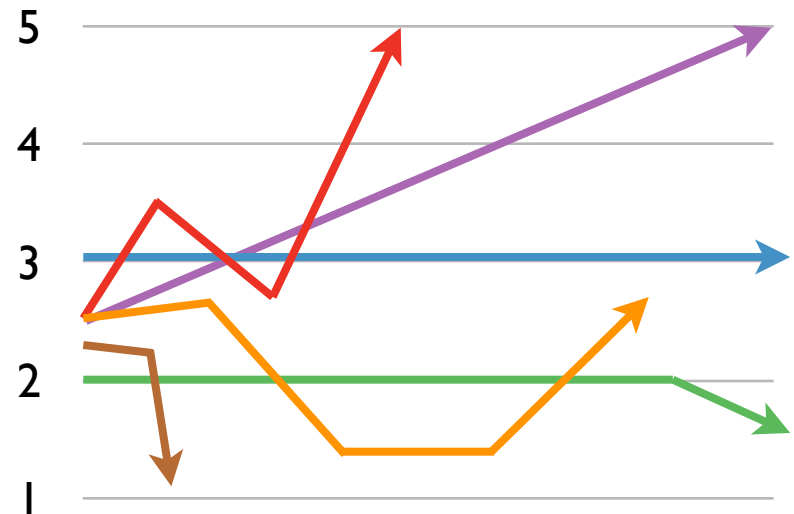
Cantonese Chinese: 6 tones



Thai: 5 tones

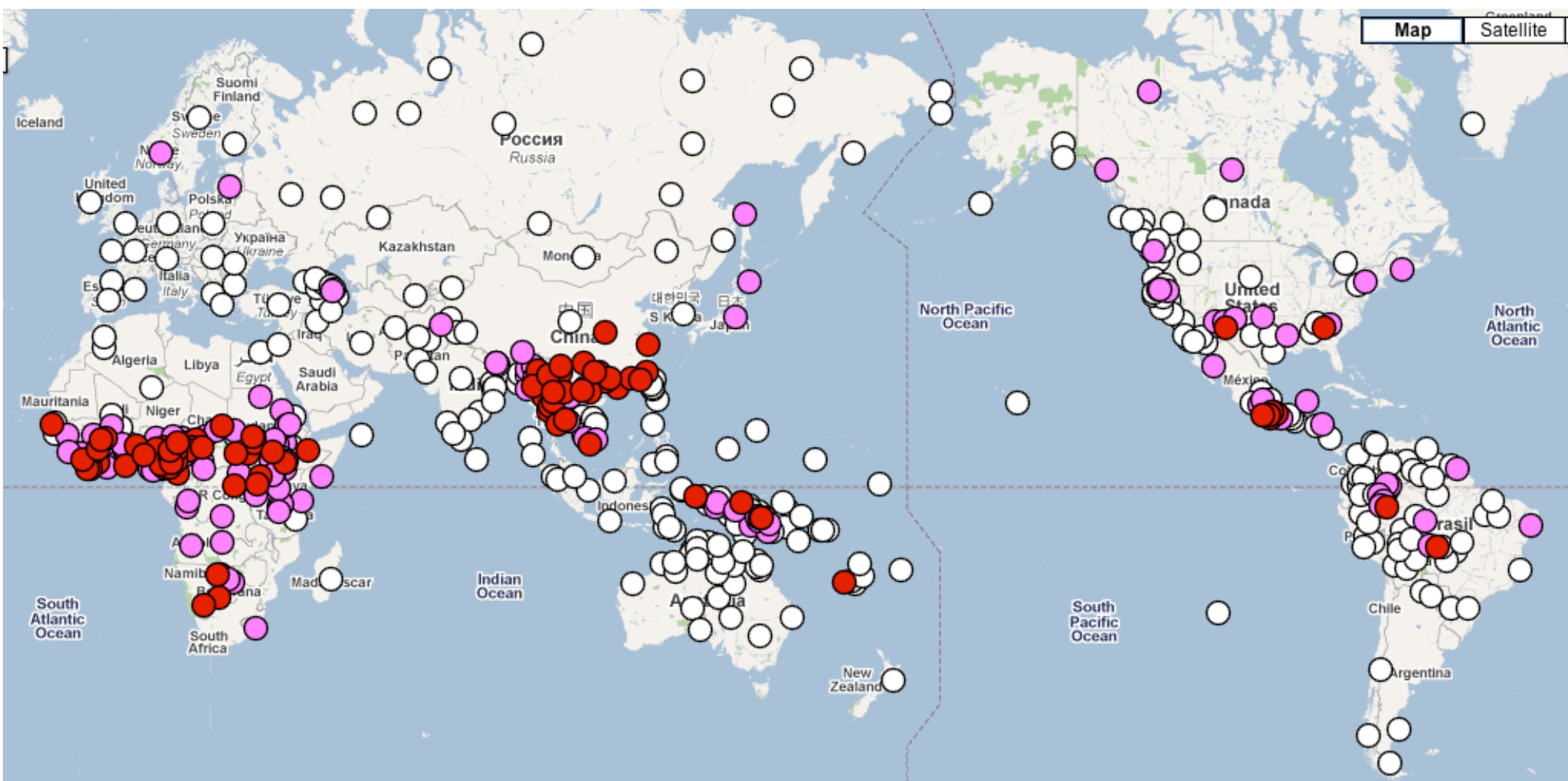


Vietnamese: 6 tones



Tonal languages in the world

At least 42% of the world's languages are tonal (possibly more). This map is from the World Atlas of Language Structure: <http://wals.info/chapter/13>



Morphology

Beyond affixes: Reduplication

When we talked about morphology, we mostly focused on affixation. But there are other strategies that languages can use for morphological composition. One is called **reduplication**: the repetition of all, or part, of a morpheme/word.

Full reduplication is when the entire morpheme/word is repeated:

Sahaptian (Native American)

temul - hail temultemul - sleet

Partial reduplication is when only a part of the word or morpheme is repeated:

Pangasinan (Phillipines)

amigo - friend amimígo - friends

English intensifying reduplication:

Are you shopping? or shopping-shopping?

English shm-reduplication:

apple shmapple, i want candy

Beyond affixes: templatic morphology

Semitic languages, like Arabic and Hebrew, show another strategy for morphology. In these languages, words are formed from three parts: a consonantal root, a vowel tier, and a template that dictates the combination of consonants (C) and vowels (V) - sometimes called a CV skeleton.

Here are two words in Arabic that are morphologically related:

katab
'to write'

kuutib
'to be corresponded with'

They share the same consonantal root 'ktb':

k t b
| | |
C V C V C

k t b
| | |
C V V C V C

'write'

They have different templates (CV skeletons):

| |
a a

'active'

| | |
u i

'passive'

And they have different vowel tiers:

katab

kuutib

We looked at syntax in the Principles and Parameters lectures, so I won't do that here.

For more, you should take
Ling 1030 - Language and Diversity

Languages vs Dialects

What is a Language?

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So... what is a *dialect*?

I am sure you have all had conversations with people where the idea of a **dialect** has come up. Perhaps you speak a different dialect of English than one of your friends, or perhaps you have talked about different dialects of some other language.

We have seen the definition of *language*. It is the four properties on the last slide. But what is the definition of *dialect*?

The colloquial definition:

If you were to ask people on the street to define the difference between a language and dialect, they might say something like this:

Two dialects of the same language are mutually intelligible (speakers of the two dialects can understand each other).

Two different languages are not mutually intelligible (speakers of the two languages cannot understand each other).

This is a very practical definition of language versus dialect - it is about **mutual intelligibility**.

The mutual intelligibility definition does **not** work

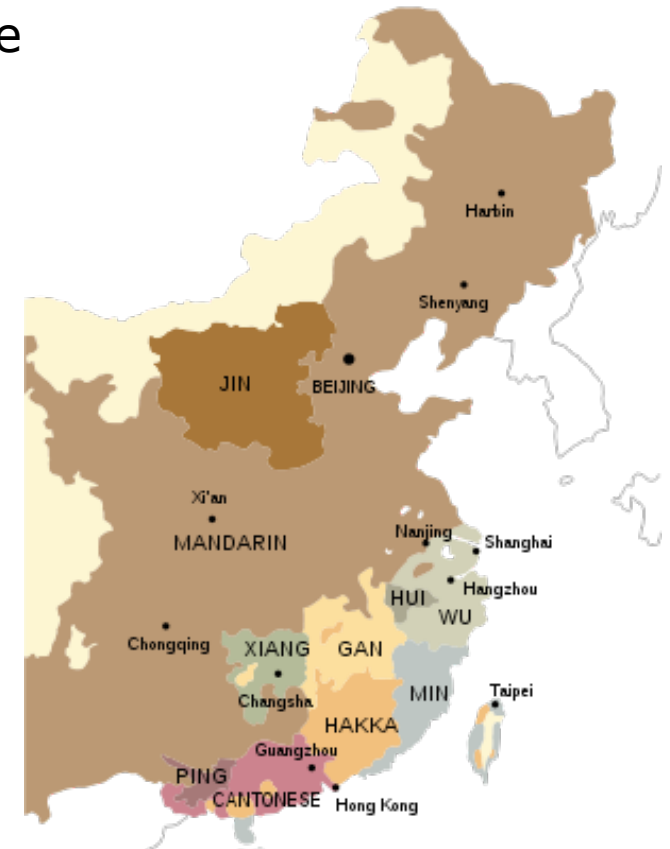
People often talk about “dialects of Chinese”. Let’s take a look at the two “dialects of Chinese” with the most speakers:

Mandarin

wo3 xian1 gei3 ta1 qian2
I first give him money
‘I gave him money first’

Cantonese

ngo3 bei2 cin4 keoi5 sin1
I give money him first
‘I gave him money first’



These two “dialects” are not mutually intelligible. So they don’t fit our colloquial definition of dialect. Why do we call them dialects? **Shouldn’t we call them languages based on the mutual intelligibility definition?**

The mutual intelligibility definition does **not** work

Spain and Portugal share the Iberian Peninsula. Spanish and Portuguese share a history: they are both descendants of Latin. Speakers of these languages often remark that they can understand each other fairly well.

Spanish

Pero, a pesar de esta variedad de posibilidades que la voz posee, sería un muy pobre instrumento de comunicación si no contara más que con ella.

Portuguese

Porém, apesar desta variedade de possibilidades que a voz possui, seria um instrumento de comunicação muito pobre se não se contasse com mais do que ela.



These languages are mutually intelligible, so by that definition, we shouldn't call them distinct languages, we should call them dialects, right?

This shows that the colloquial definition is mostly about sociopolitical identity

What we are really seeing is that the colloquial use of the term isn't really about mutual intelligibility.

The colloquial use of the term dialect is really about sociopolitical identity.

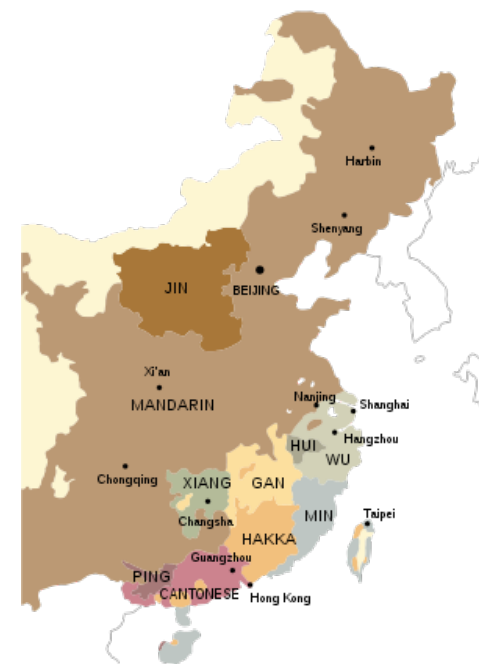
If two “communication systems” are within a single country, we are more likely to call them dialects to make it clear that they are in one sociopolitical unit.

If two “communication systems” are in different countries, we are more likely to call them languages to make it clear that they are in separate sociopolitical units.

“A language is a dialect with an army and a navy”

- Max Weinreich

(famous linguist from the first half of the 20th century)



THE SINITIC LANGUAGES



Re-evaluating dialects as languages

From a scientific point of view, political boundaries don't matter. What matters are the properties that we see. Every "dialect" that we have seen so far **actually fits our definition of language:**

1. It has its own **phonology**.
2. It has its own **morphology**.
3. It has its own **syntax**.
4. It is acquired using known **mechanisms of language learning**.

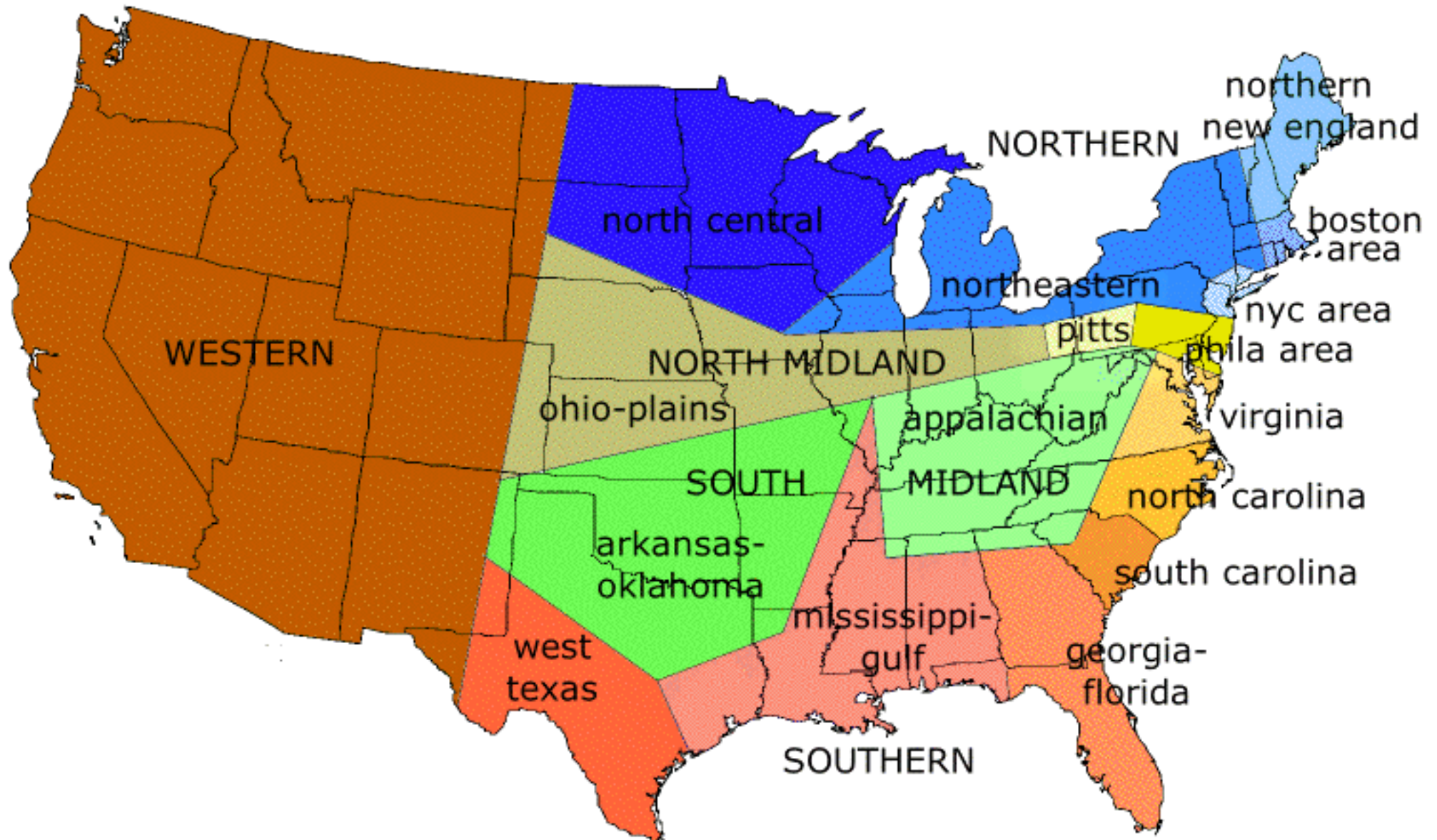
What we colloquially call dialects are, **from a scientific point of view, just other languages!**

And once we realize this, we can study "dialects" just like we would "languages" in order to learn new things about the human mind!

Furthermore, "dialects" then become another example of language diversity... so we can look at language diversity inside of countries, like the US!

Language Diversity within “English” inside
the US!

A map of the major US English ~~dialects~~ ^{languages}



Accents = Different Phonologies

Perhaps the first thing that people notice about different dialects is that the speakers have different accents.

Here are some examples of accents in the US:

Boston: https://kaltura.uconn.edu/media/Perfect+Boston+Accent.mp4/1_3oqcsybt

Appalachian: https://kaltura.uconn.edu/media/Appalachian+English.mp4/1_utf8ixke

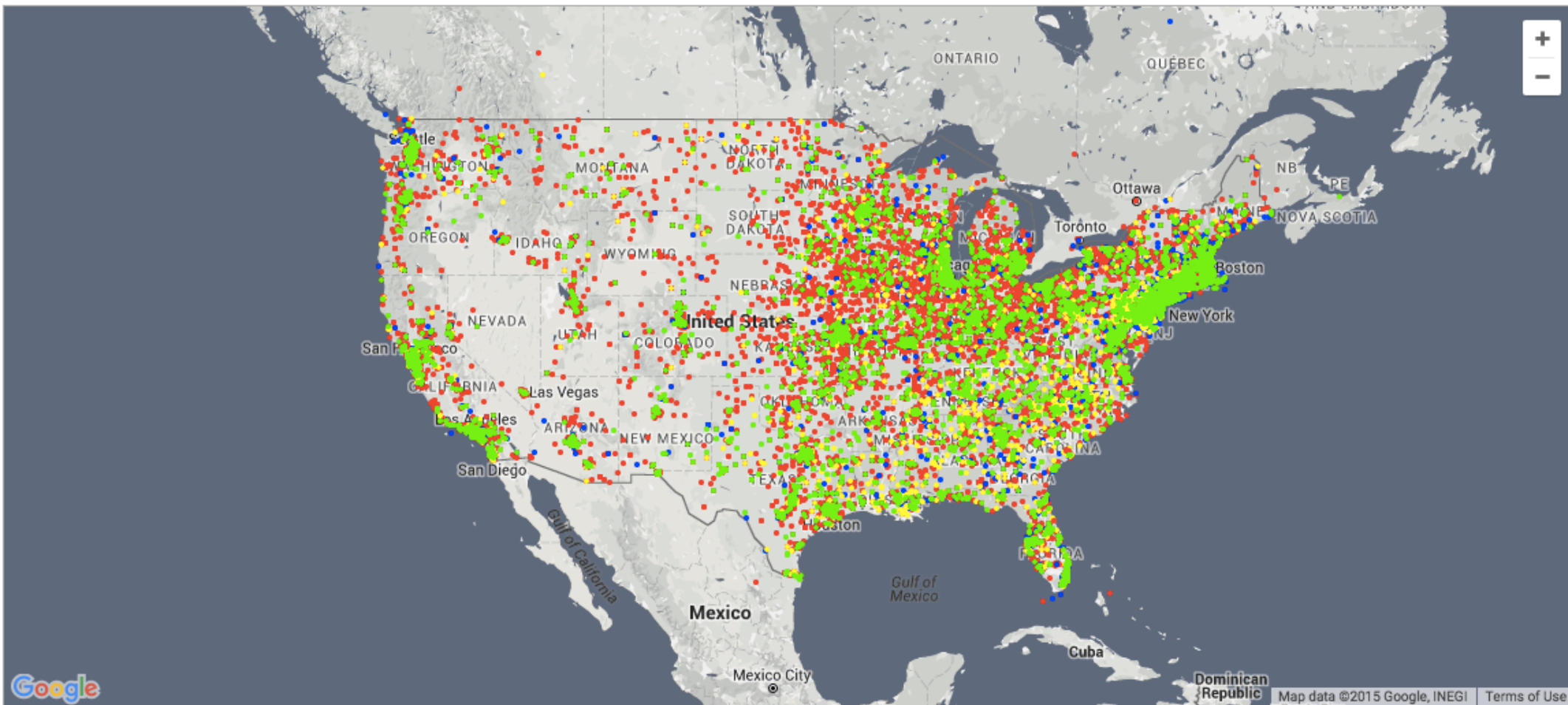
Tangier, VA: https://kaltura.uconn.edu/media/The+odd+accent+of+Tangier+VA+-+American+Tongues+episode+3.mp4/1_ptd34liz

Different accents are just an indicator of a slightly different phonology: slightly different phonemes, and different phonological rules for combining phonemes into morphemes (like the rule in Boston English that deletes the R).

Harvard Dialect Survey

How do you pronounce Mary/merry/marry?

- all 3 are the same (60%)
- Mary and marry are the same; merry is different (15%)
- all 3 are different (13%)
- Mary and merry are the same; marry is different (9%)

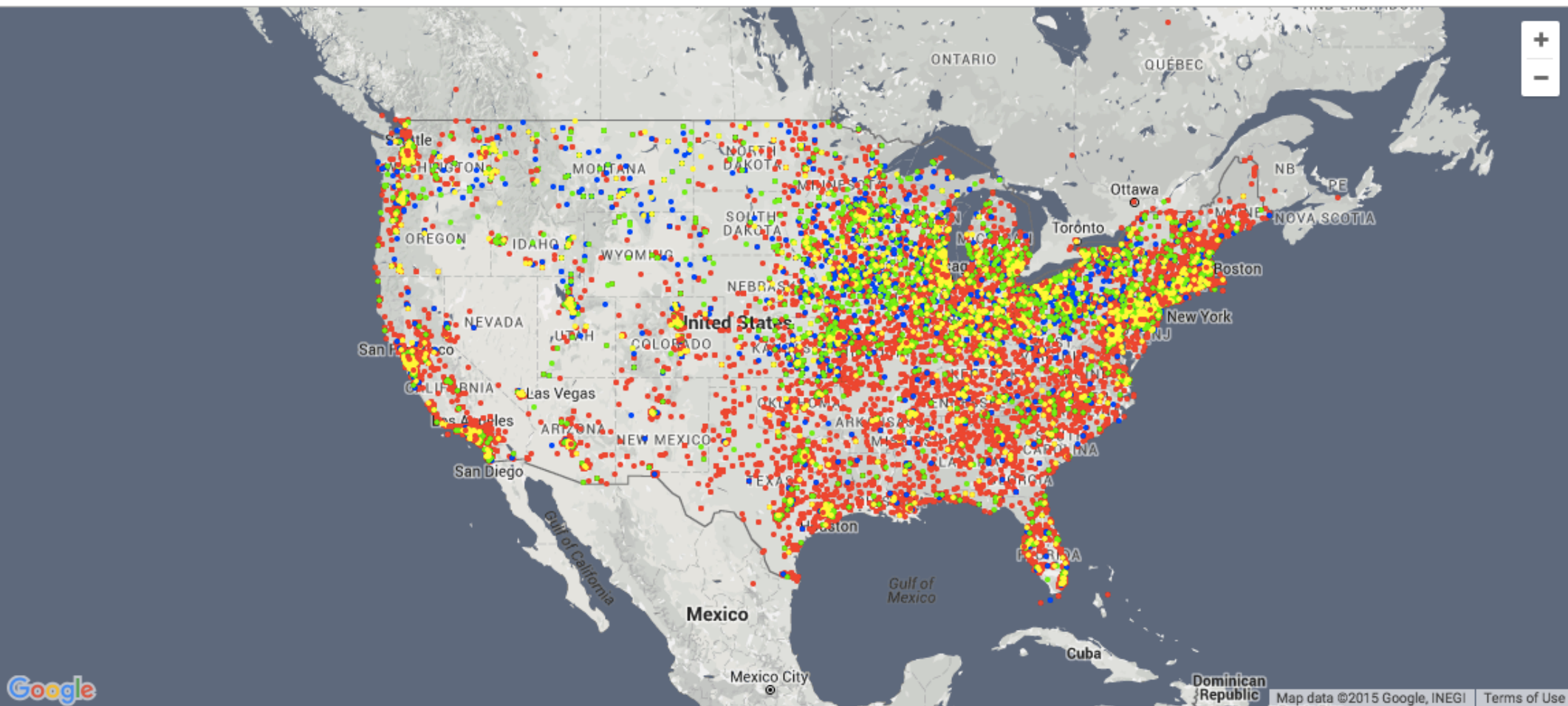


http://www.tekstlab.uio.no/cambridge_survey/maps

Harvard Dialect Survey

creek (a small body of running water)

- [i:] as in "see" (86%) ■ I use both interchangeably (6%) ■ [ɪ] as in "sit" (4%)
■ I use both, but they mean two different things (please state how they differ in the comments box) (2%)

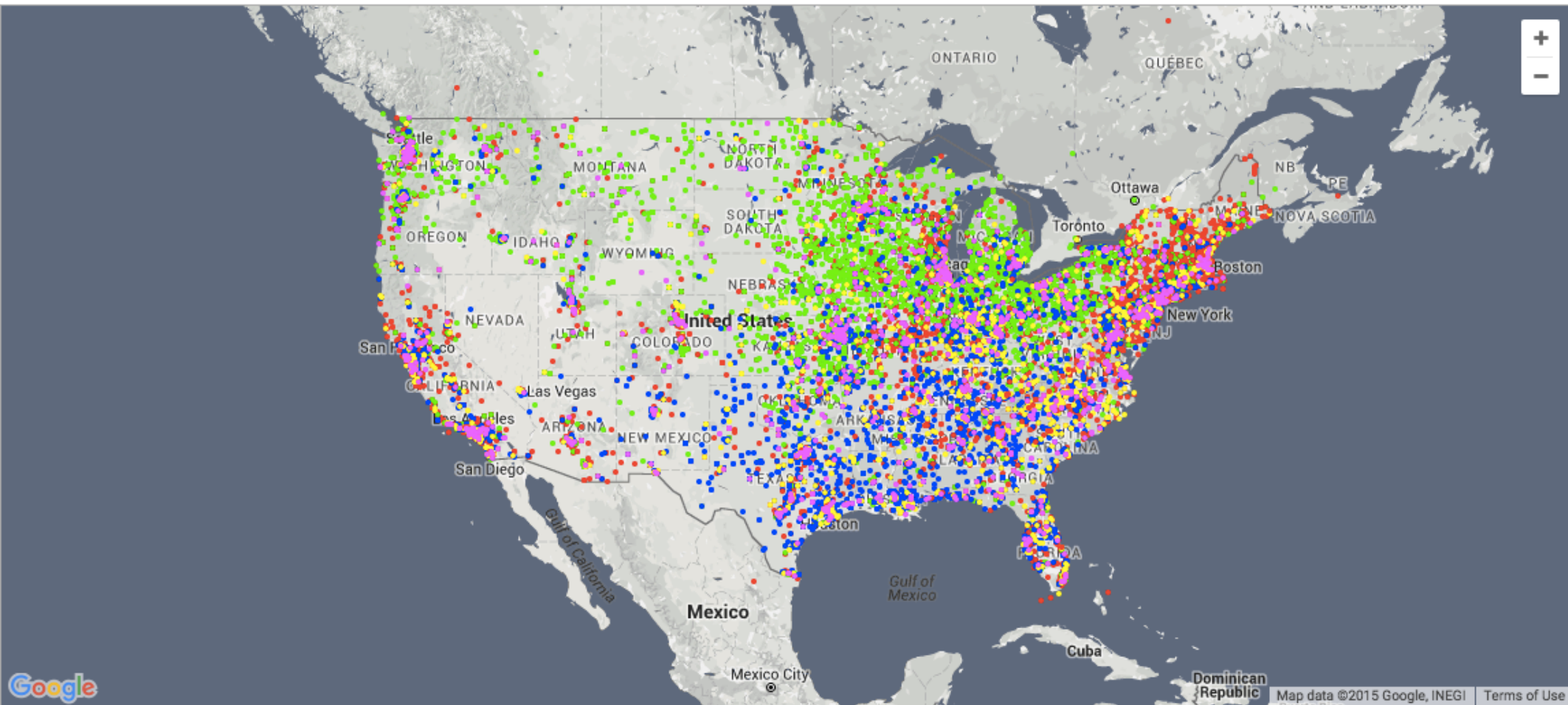


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Harvard Dialect Survey

What is your generic term for a sweetened carbonated beverage?

■ soda (47%) ■ pop (28%) ■ coke (14%) ■ soft drink (5%) ■ other (2%)

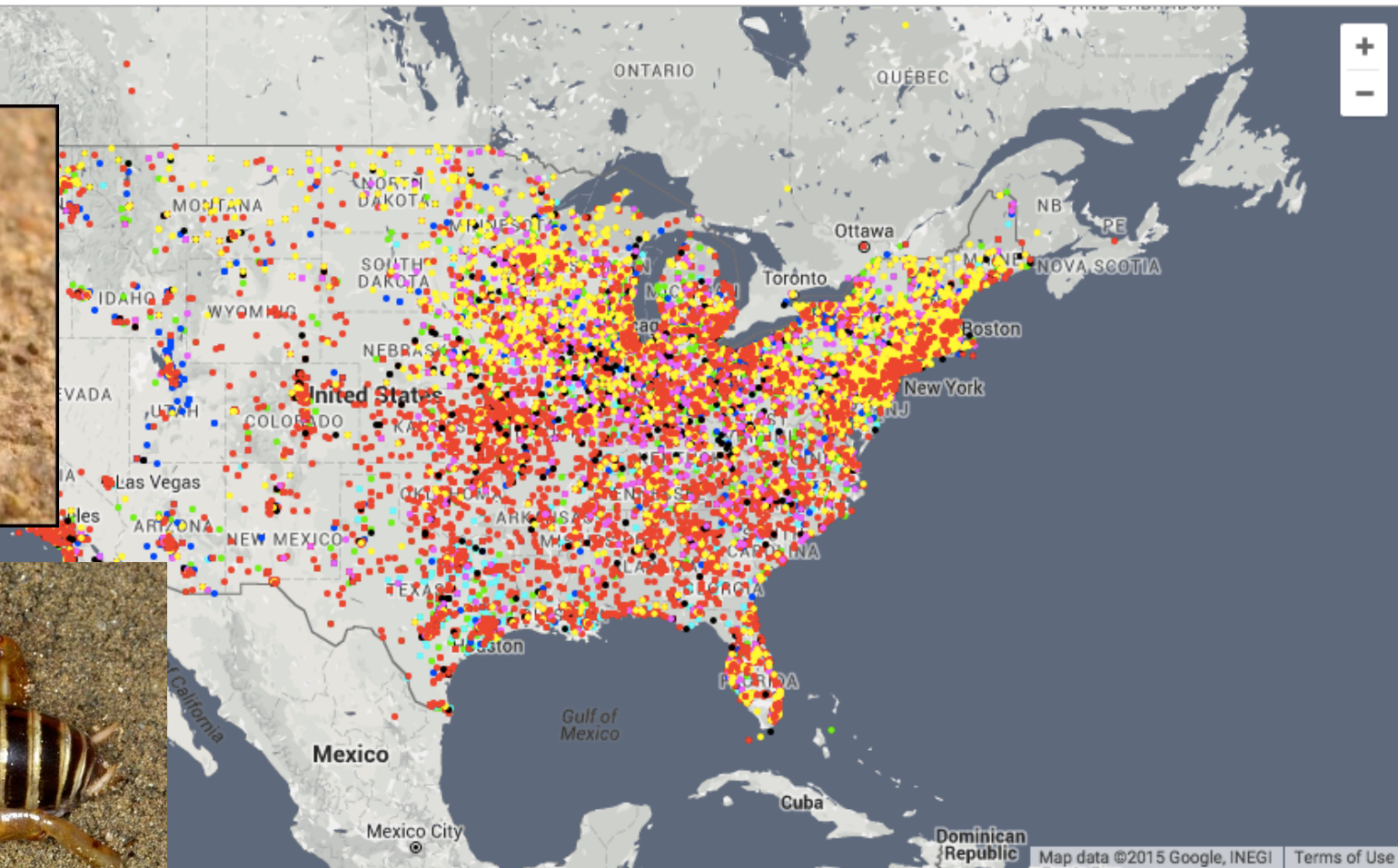


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Harvard Dialect Survey

What do you call the little gray creature (that looks like an insect but is actually a crustacean) that rolls up into a ball when you touch it?

roly poly (34%) pill bug (14%) potato bug (12%) I have no idea what this creature is (11%)
I know what this creature is, but have no word for it (8%) doodle bug (5%) sow bug (4%)

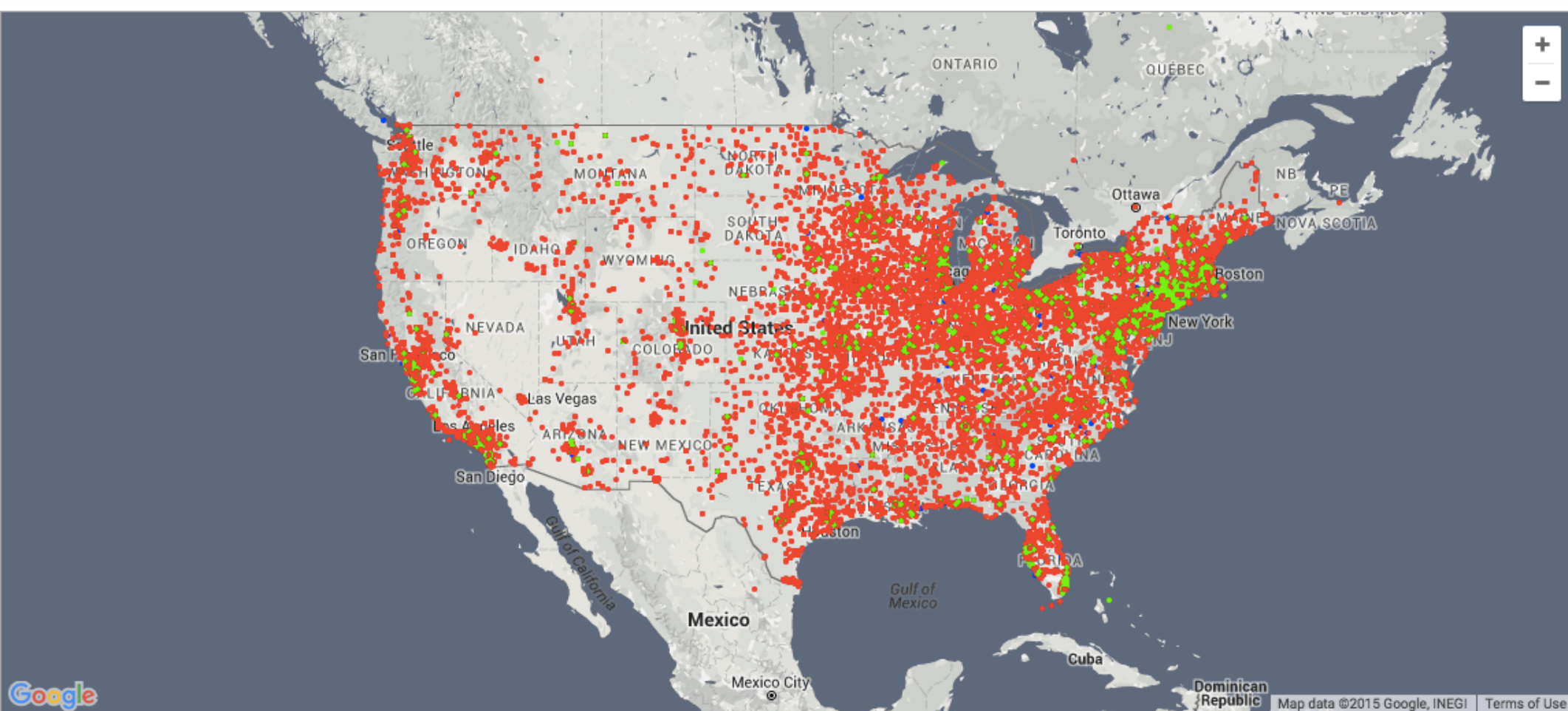


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Harvard Dialect Survey

When you stand outside with a long line of people waiting to get in somewhere, are you standing "in line" or "on line" (as in, "I stood ____ in the cold for two hours before they opened the doors")?

■ in line (91%) ■ on line (3%) ■ both sound equally good (3%)

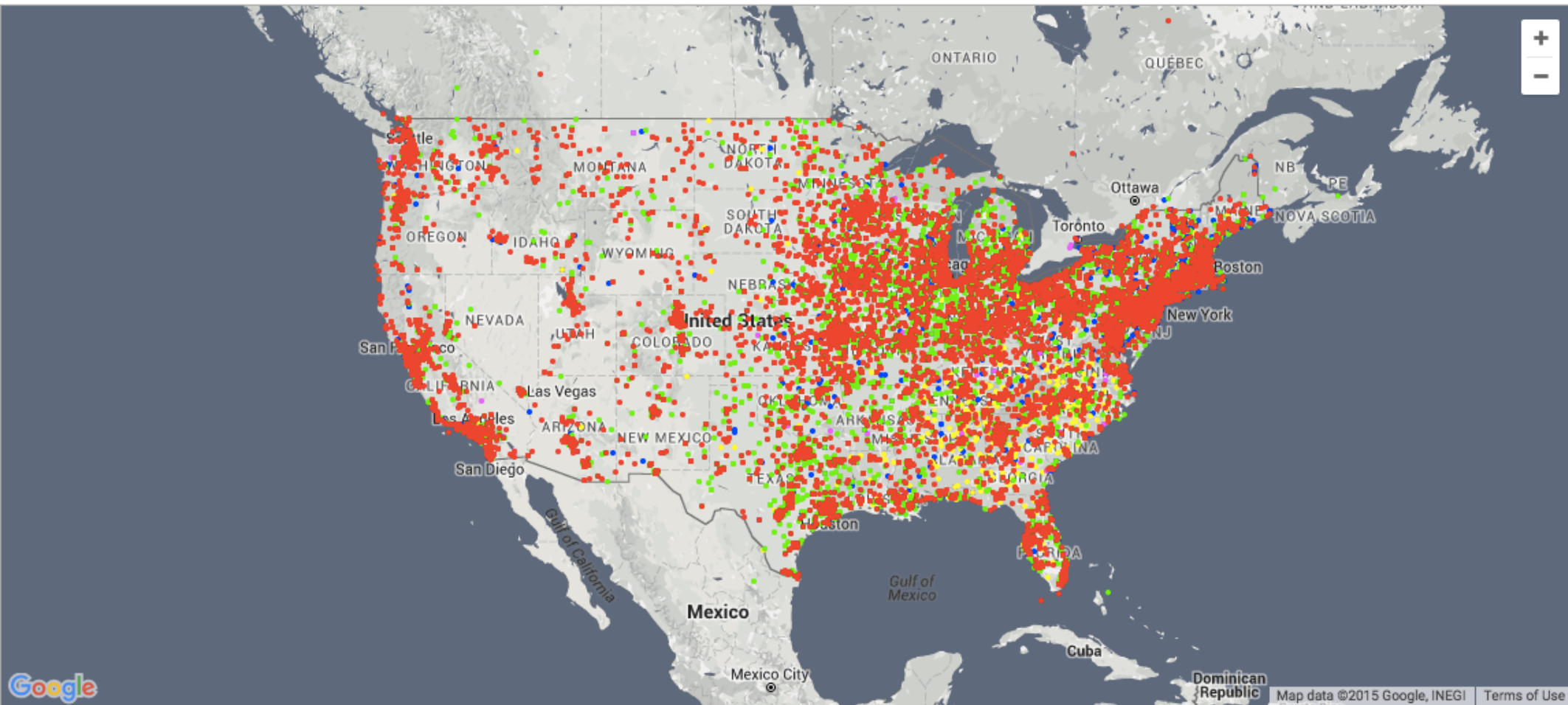


http://www.tekstlab.uio.no/cambridge_survey/maps

Harvard Dialect Survey

What do you call an easy course?

other (43%) blow-off (38%) gut (10%) crip course (4%) bird (1%)



http://www.tekstlab.uio.no/cambridge_survey/maps

Strange sentences = Syntax

Sometimes we might hear people who speak different “dialects” produce a sentence that doesn’t sound “correct”.

In many cases, these strange sentences are actually the result of **slightly different syntactic rules** (phrase structure rules and transformations) in their language!

Pittsburgh English:

This floor needs wash**ed**.

General American English:

This floor needs wash**ing**.

This floor needs **to be** wash**ed**.

<http://microsyntax.sites.yale.edu/needs-washed>

Pittsburgh



Strange sentences = Syntax

Philadelphia English:

It gets dark early **anymore**.

General American English:

It gets dark early **these days**.

This is called “**positive anymore**”.

Philadelphia



All Englishes have **negative anymore**. Negative anymore shows up in negative sentences, and means something like “it used to be like this, but now it is not”:

I **don't** like linguistics **anymore**. = I used to like linguistics, but now I don't

Positive anymore is the exact opposite. It appears in positive sentences, and means “it didn't use to be like this, but now it is”.

I really like linguistics **anymore**. = I didn't used to like linguistics, but now I do

Conclusion

A human language will have a phonology, morphology, syntax, and will be acquired using language learning mechanisms.

There is quite a bit of language diversity in the world (non-pulmonic consonants, tones, reduplication, CV-skeletons). By studying it, we study the abilities of the human mind.

The idea of a “dialect” is a sociopolitical construct. There is no way to define the difference between a language and a dialect in cognitive science. There are just languages!

Differences in accents across “dialects” is really a difference in phonology between the two languages. Differences in words across “dialects” may be a difference in morphology between the two languages, or a difference in lexical items. Strange sentences across “dialects” is really a difference in syntax between the two languages.

This means that we can study language variation by looking at “dialects” (which are really just languages), including the variation that we see right here in the US!