# Vowels in Motion 

John Goldsmith

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## Overview of today's lecture

(1) Introduction

2 What's a vowel?
(3) Vowels in English today
4. Other vowels systems you may know
(5) The Great Vowel Shift
(6) The Northern Cities Vowel Shift
(7) Conclusion: vowels in motion

## Change

All languages change, but all the changes happened in front of some people's eyes. What did that look like?
...is in the present
What does language look like today? All change is in the present: not all people speak the same language the same way.

## What changes?

Changes can occur in vocabulary, in pronunciation, and in grammar (syntax).

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## Vowels?

What is a vowel, and what is a consonant?
A vowel is a sound in A consonant is produced which the hum from the larynx resonates in the chambers of the mouth.
by blocking airflow in the mouth and producing turbulence.

## Vowels

- Jaw position
- Tongue position
- Lip rounding
- Length
- movement (diphthongs move!)


## Vowels: positions and formants



## Vowels: formants



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## Front vowels in English

| Short vowels |  |  |  | Long vowels |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| pit | $\breve{\mathrm{i}}$ | $[\mathrm{I}]$ | by | $\overline{\mathrm{i}}$ | $[\mathrm{aj}]$ |  |
| pet | è | $[\varepsilon]$ | Pete | $\overline{\mathrm{e}}$ | $[\mathrm{ij}]$ |  |
| pat | ă | $[æ]$ | pate | $\overline{\mathrm{a}}$ | $[\mathrm{ej}]$ |  |

## Back vowels in English

Short vowels Long vowels

| put | $\breve{o c o}$ | $[v]$ | boot | $\bar{o} o$ | $[\mathrm{uw}]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| putt | $\breve{\mathrm{u}}$ | $[\Lambda]$ | bound | ou | $[æ w]$ |
| bought | $\hat{o}$ | $[\mathrm{y}]$ | boat | $\overline{\mathrm{o}}$ | $[\mathrm{ow}]$ |
| pot | $\breve{o}$ | $[\mathrm{a}]$ |  |  |  |


| a | 0 |
| :--- | :--- |
| Don | dawn |
| cot | caught |
| Connery | Sean <br> coffee <br> off |
|  |  |

## Diphthong?

New Yorkers often make this vowel (in awe, off. ..) a diphthong. Listen to me...

American h-d h- b-d h-t $\quad$ k-d

| ij | heed | he | bead | heat | keyed <br> I |
| :---: | :--- | :--- | :--- | :--- | :--- |
| hid |  | bid | hit | kid |  |
| ej | hayed | hay | bayed | hate | Cade |
| $\varepsilon$ | head |  | bed |  |  |
| $æ$ | had |  | bad | hat | cad |
| a | hod | ha! | bod | hot | cod |
| $\rho$ | hawed | haw | bawd | haughty | cawed |
| $v$ | hood |  |  |  | could |
| ow | hoed | hoe | abode | Hoat | code |
| uw | who'd | who | booed | hoot |  |
| $\Lambda$ | Hudd |  | bud | hut | cud |
| $\partial$ | herd | her | bird | hurt | curd |
| aj | hide | high | bide | height |  |
| $æ w$ |  | how | bowed |  | cowed |

## Simple vowels in English

Rounded vowels
i
High vowels
e
$\Lambda ə$
Mid vowels

Low vowels

## u

U

O
a

Front vowelsCentral vowelBack vowels

## Diphthongs in English

Rounded vowels


Front vowelsCentral vowelBack vowels

## Related words

| long | short | long | short |
| :--- | :--- | :--- | :--- |
| serene | serenity | $[\mathrm{ij]}$ | $[\varepsilon]$ |
| please | pleasant | $[\mathrm{ij}]$ | $[\varepsilon]$ |
| crime | criminal | $[\mathrm{aj}]$ | $[\mathrm{II}]$ |
| divine | divinity | $[\mathrm{aj}]$ | $[\mathrm{II}$ |
| profane | profanity | $[\mathrm{ej}]$ | $[æ]$ |
| abound | abundant | $[æ \mathrm{w}]$ | $[\Lambda]$ |
| goose | gosling | $[\mathrm{uw}]$ | $[\mathrm{a}]$ |

## Spanish diphthongs: stressed mid vowels

cantar sing llamar call pensar think

| 1st Sg | canto | llamo | pienso |
| :--- | :--- | :--- | :--- |
| 2nd Sg | cantas | llamas | piensas (pensás) |
| 3rd Sg | canta | llamo | piensa |
| 1st Pl | cantamos | llamamos | pensamos |
| 2nd Pl | cantáis | llamáis | pensáis |
| 3rd Pl | cantan | llaman | piensan |

## The Great Vowel Shift in English



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## The Great Vowel Shift in English



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## The Great Vowel Shift in English



## The Great Vowel Shift

- Before the Great Vowel Shift, English speakers used to pronounce the vowels of the words that they shared with speakers of other European languages in much the same way.
- The GVS affected the long vowels of Middle English, and began around 1400.
- So the Great Vowel Shift began well before Shakespeare's time, and continued during his lifetime (1564-1616).


## The Great Vowel Shift

- When did the GVS begin? Some time after the Black Death, the great plague that killed somewhere around half the population of Europe in the middle of the 14th century. But we really don't know what the social factors were that gave rise to it.


## Before the Great Vowel Shift

- The long vowel spelled $i$ (e.g., time) was pronounced [i:]. like was pronounced [li:k], much like English leak today.
- The long vowel spelled ee was pronounced [e:]. feet was pronounced [fe:t], a little like English fate today.
- The long vowel spelled ea was pronouned [ $\varepsilon$ ]. break was pronounced [bre:k], a little like English Breck today, but with the vowel drawn out purely in length.


## 1400 s: the 15 th century



Battle of Agincourt, Joan of Arc, the fall of Constantinople, Leonardo da Vinci, and 1492.

## 1400s: the 15th century

- Battle of Agincourt, Joan of Arc, the fall of Constantinople, Leonardo da Vinci, and 1492.
- /[i:/] as in crime became a diphthong, probably [ry]: like, time, crime. The first part of this diphthong would become lower over the following centuries.
- At around the same time, [e:] (as in feet) became a long [i:] (but it did not get confused with the old [i:], which was no longer pronounced that way); and [ $\varepsilon$ :] was also raised, to take the place of [e:]. So the old east, which had been [ $\varepsilon: s t]$, was now [e:st].


## 1500s: the 16th century

- The century of Henry VIII, Martin Luther, and Queen Elizabeth, and most of Shakespeare's life.
- The long vowel [a:], as in name [na:mə], now became [æ:]. In the 1600s, around the time of the English Revolution, it kept on moving, and became [ع:]. Around the time of the American Revolution, it became [e:], and by the time of our Civil War, it shifted to become a diphthong: [ej].


## 1500s: the 16th century

- In the 1600s, English Revolutionary time, [ry], as in crime, kept on changing - to become [әj]. That is a lowering of the first part of the vowel, and that lowering has continued up to modern times; the pronunciation now begins with a very low vowel: [aj].


## Chaucer


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## Chaucer: The Friar's Tale (end of 14 century)

This worthy lymytour, this noble Frere, This worthy licensed beggar, this noble Friar
He made alwey a maner louryng chiere He always made a kind of scowling face
Upon the Somonour, but for honestee At the Summoner, but for propriety
No vileyns word as yet to hym spak he.
No churlish word as yet to him spoke he.
source: Larry Benson.

## Chaucer: The Friar's Tale (end of 14 century)

But atte laste he seyde unto the wyf, But at the last he said to the wife, "Dame," quod he, "God yeve yow right good lyf!
"My lady," said he, "God give you a right good life!
Ye han heer touched, also moot I thee,
You have here touched, as I may prosper,
In scole-matere greet difficultee.
On academic problems of great difficulty.
source: Larry Benson.

## Chaucer: The Friar's Tale

Ye han seyd muche thyng right wel, I seye;
You have said many things right well, I say;
But, dame, heere as we ryde by the weye, But, my lady, here as we ride by the way,
Us nedeth nat to speken but of game,
We need not speak of anything but pleasant matters,

## Chaucer: The Friar's Tale

And lete auctoritees, on Goddes name, And leave authoritative texts, in God's name,
To prechyng and to scoles of clergye.
To preaching and to the universities.

## Shakespeare: Troilus (1602)

Troilus: Call here my varlet, I'll unarm again, Why should I war without the walls of Troy:
That find such cruel battle here within?
Each Trojan that is master of his heart, Let him to field, Troilus alas, hath none. Pandarus: Will this gear ne'er be mended? Troilus: The Greeks are strong and skillful to
their strength
Fierce to their skill, and to their fierceness valiant,
But I am weaker then a woman's tear; Tamer then sleep; fonder then ignorance,

## Shakespeare: Troilus

Troilus: Less valiant then the virgin in the night,
And skilless as unpractised infancy:
Pandarus: Well, I have told you enough of this;
for my part I'll not meddle nor make no farther; he that will have a cake out of the wheat must needs tarry the grinding.

## The Great Vowel Shift


$? 1$

## Great Vowel Shift

| 1300 | 1400 |  | 1500 | 1600 | 1700 | 1800 | present |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| driven | i: | ii | ei | عi | ^i | ai |  |
| house | u: | vW | ow | ЈW | ^W | aw |  |
| feet | e: |  | i: |  |  |  |  |
| fool | O: |  | u: |  |  |  |  |
| beat | $\varepsilon:$ |  |  |  | e: | i: |  |
| foal | ว: |  |  |  | O: |  | әu |
| take | a: |  | æ: | $\varepsilon:$ | e: | ei |  |
| sail | ai |  | æi | عi | e: | ei |  |
| law | aw |  | DW | D: |  | ว: |  |
| This nice graphic based on material from Raymond Hickey, at www-uni-due.de, on Studying The History of English. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## The Northern Cities region



## North America

## North American English Dialects



D, in

## The United States



## The Northern Cities region

## Also known as the Inland North



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## History of migration



## Northern Cities vowel shift



## The Northern Cities vowel shift

- A major shift in the vowel quality of several short vowels in American English.
- Became more distinct after World War II, in the Northern inland cities: Chicago, Detroit, Rochester, Cleveland.
- Its antecedents already existed further east, in New York, for example.
- William Labov, the dean of sociolinguists in the 20th century, has studied this system in great detail.


## Tense æ

- It started with two slightly different pronunciations of the vowel in cat and Sam. Instead of pronouncing them both with the same vowel ( $c[æ] t, S[æ] m$ ), many speakers throughout the United States used a slightly raised and slightly diphthongized form in Sam. This vowel is often described as tense, and is [ $e^{\ominus}$ ]


## Tense æ

- In fact, there was a phonological principle determining where they used this vowel: $e^{\jmath \text { is }}$ used when followed by an $m$ or $n$ (but not [ n$]=$ ' ng ') in the same syllable. The consonant that precedes is of no importance.

| Sam | sand | sang |
| :--- | :--- | :--- |
| s $e^{\ominus} \mathrm{m}$ | se $e^{\ominus} \mathrm{nd}$ | sæng |

Different syllables:
Pamela Canada
pæmələ kænədə

## Tense æ

- But then things started changing. In the Inland area-and this includes Chicago- $x$ changed unconditionally: everywhere there had been an $x$, a tense $e^{\ominus}$ was now used by many speakers, including in words like hat, cat, that, and at where this would not happen on the East Coast.
- The other big change was that the vowel /a/ (as in block, top) started to move forward, and took over the phonetic pronunciation [æ], which was no longer being used for cat and hat.


## Conclusion 1

- Linguists do not know much about the causes of the great changes in pronunciation of English, and other languages, over the decades.
- But for the last 200 years, linguists have been able to document and infer an enormous amount of change, in both vowels and consonants.
- The one great constancy in language is change.
- Each generation and each social group has the opportunity to add its particular twist to the way its language is pronounced, and often one group's twist is adopted by all, or almost all, of the rest of the speakers.


## Conclusion 2

- You can open your ears and hear vowels as they really are.
- We hear and ignore a great deal of difference in the way others speak our language. As those differences add up, languages as a whole change and evolve.

