

# Prosody

# Outline




- Main contrasts that prosody can signal
  - Presence vs. absence of an accent
  - Quality of the pitch target
  - Phrasing
- Functions of intonation

# Stress vs. accent

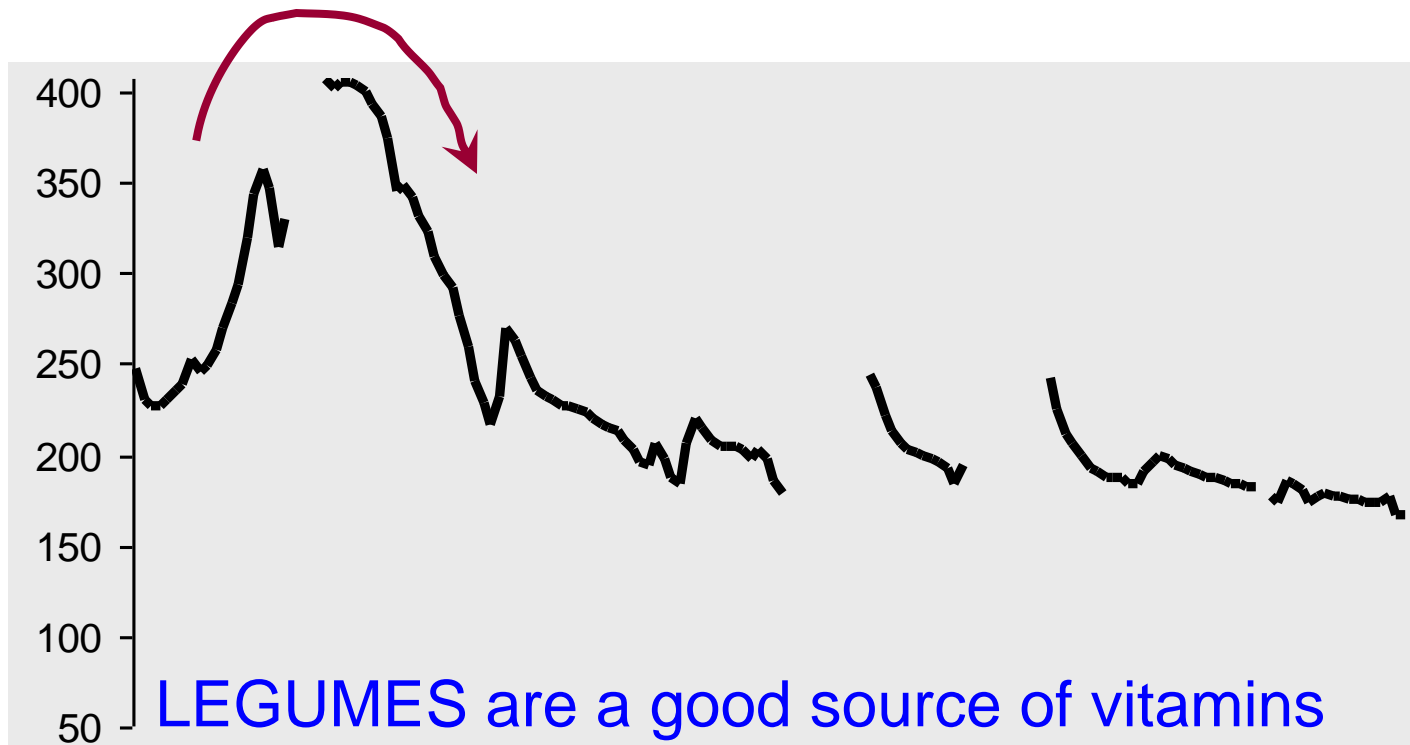
- **Stress** is a structural property of a word — it marks a potential (arbitrary) location for an accent to occur, **if** there is one.
- **Accent** is a property of a word in context — it is a way to mark intonational prominence in order to ‘highlight’ important words in the discourse.

(x)				(x)			(accented/tonic syll)
x				x			stressed syll
x			x	x			full vowels
x	x	x	x	x	x	x	syllables
vi	ta	mins		Ca	li	for	nia

# Which word receives an accent?

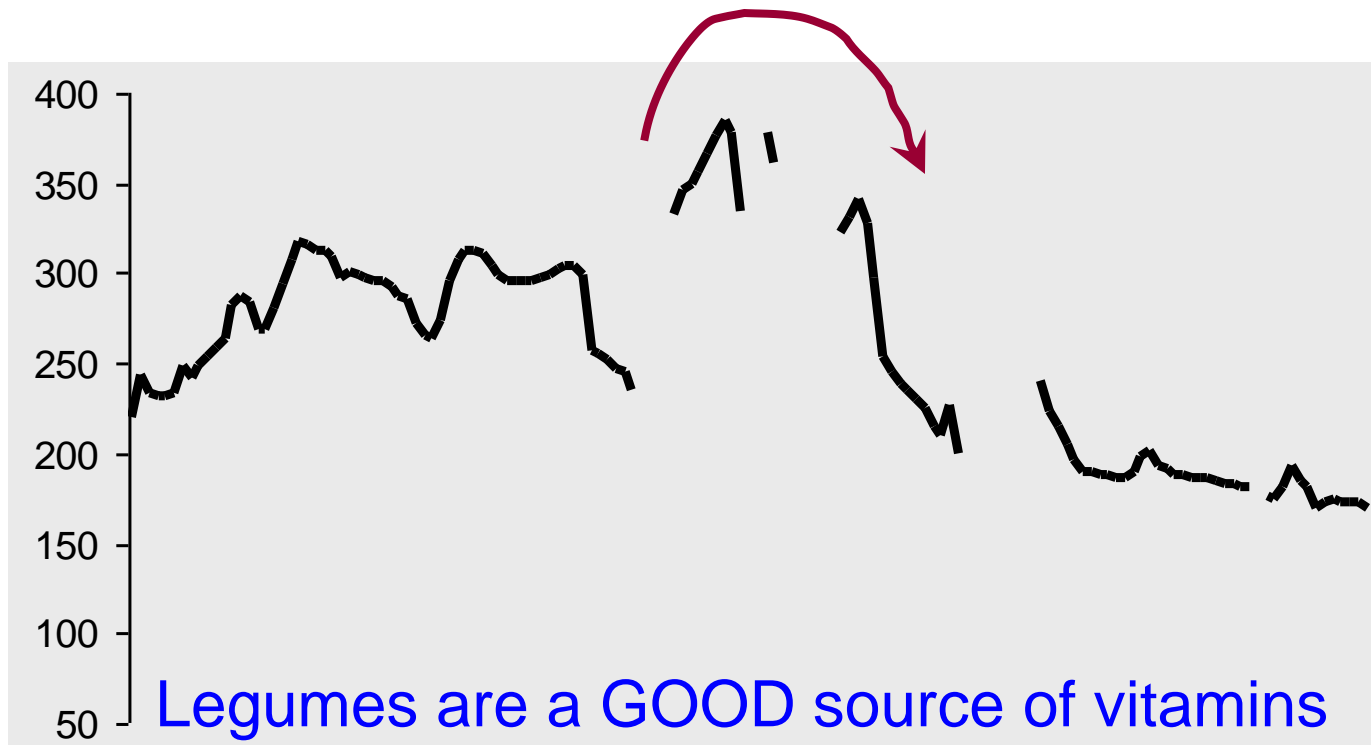
- It depends on the context. For example, the ‘new’ information in the answer to a question is often accented, while the ‘old’ information usually is not.
  - Q1: What types of foods are a good source of vitamins?
  - A1: **LEGUMES** are a good source of vitamins. 
  - Q2: Are legumes a source of vitamins? 
  - A2: **Legumes** are a **GOOD** source of vitamins.
  - Q3: I’ve heard that legumes are healthy, but what are they a good source of ? 
  - A3: **Legumes** are a good source of **VITAMINS**.

# Same 'tune', different alignment



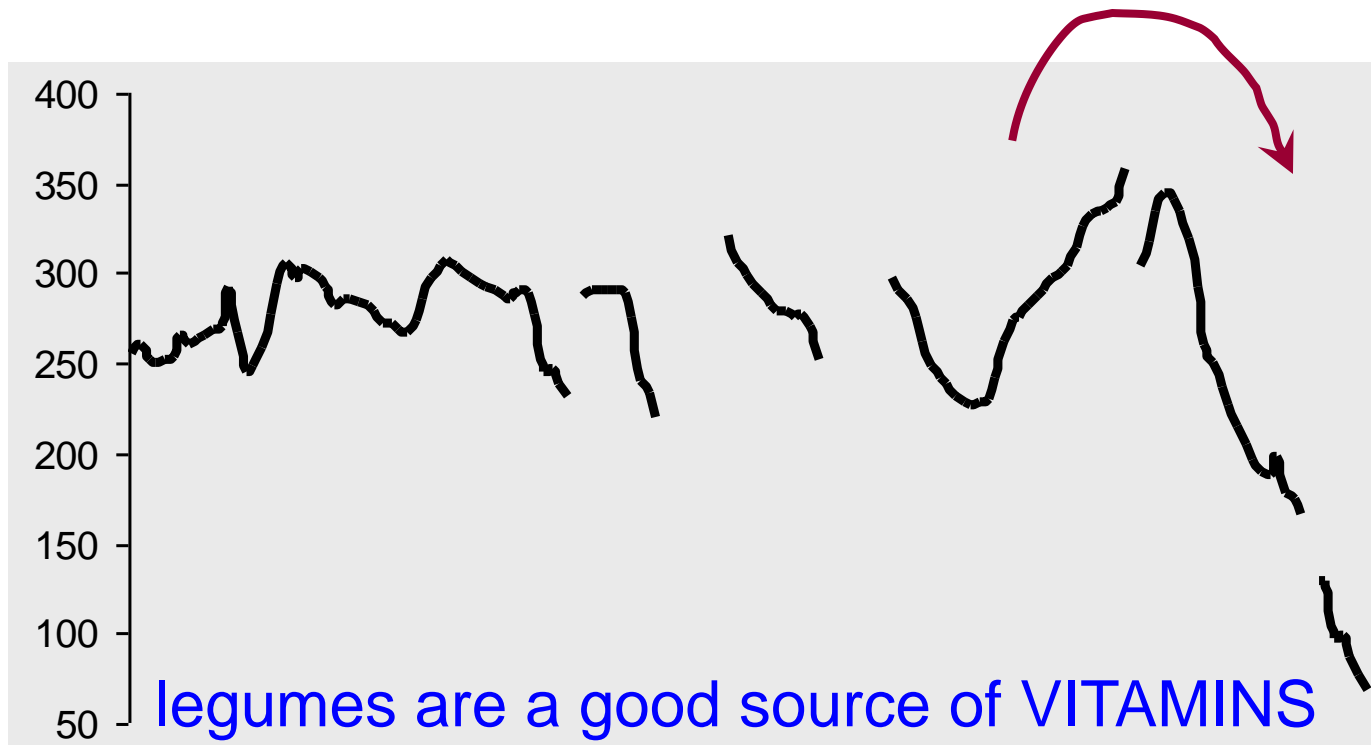
The main **rise-fall** accent (= “I assert this”) shifts locations.

# Same 'tune', different alignment



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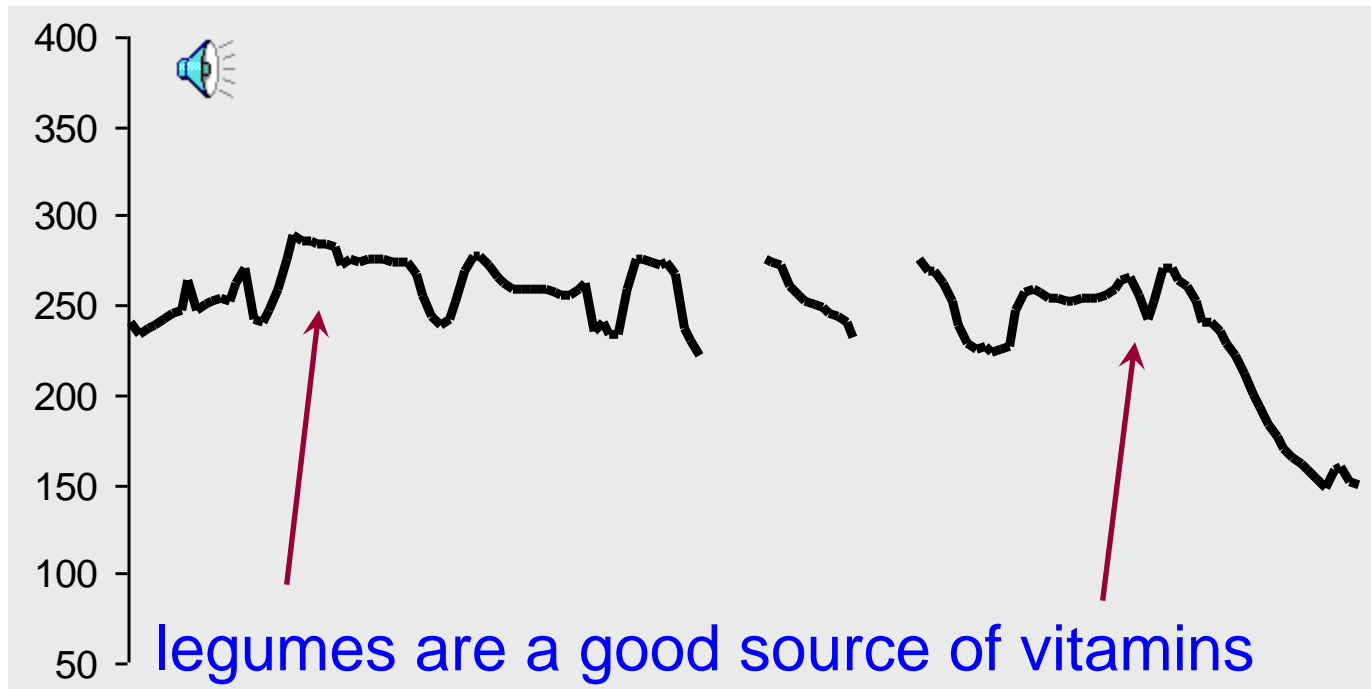
# Same 'tune', different alignment



The main **rise-fall** accent (= “I assert this”) shifts locations.

# Broad focus

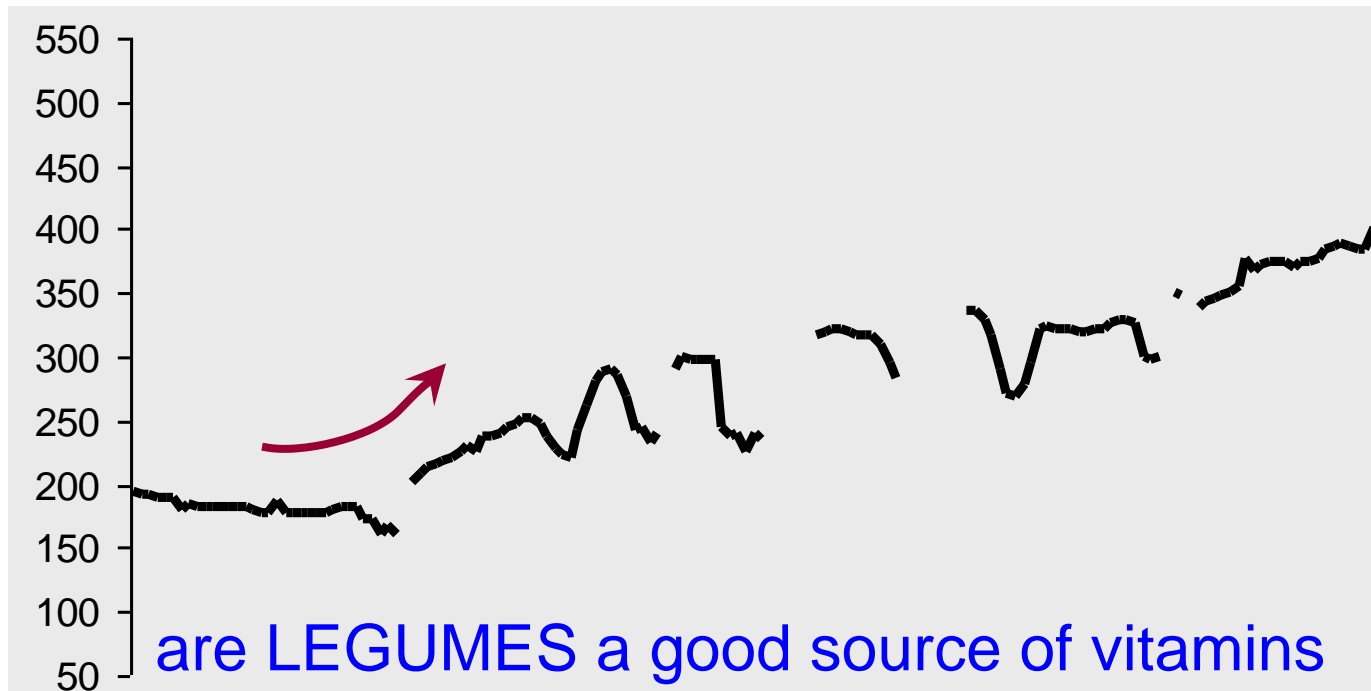
“Tell me something about the world.”



In the absence of narrow focus, English tends to mark the **first** and **last** ‘content’ words with perceptually prominent accents.



# Yes-No question tune



**Rise** from the main accent to the end of the sentence.

# Pitch accents and boundary tones

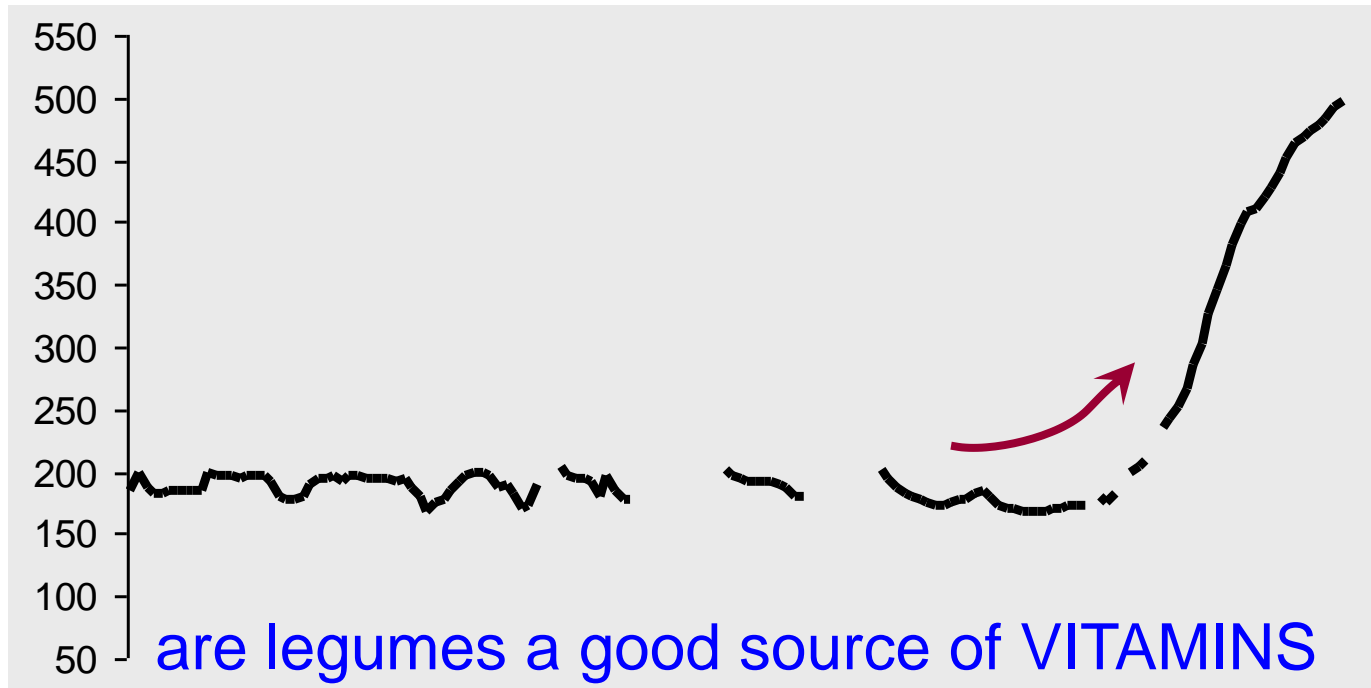
- Prominent words are not necessarily highlighted with high pitch accents
- Hence, both presence vs. absence AND the type of the accent are important
- Similarly, the pitch that marks the end of an intonational (tone) unit is important
  - Low for declaratives
  - High for yes-no questions

# Yes-No question tune



**Rise** from the main accent to the end of the sentence.

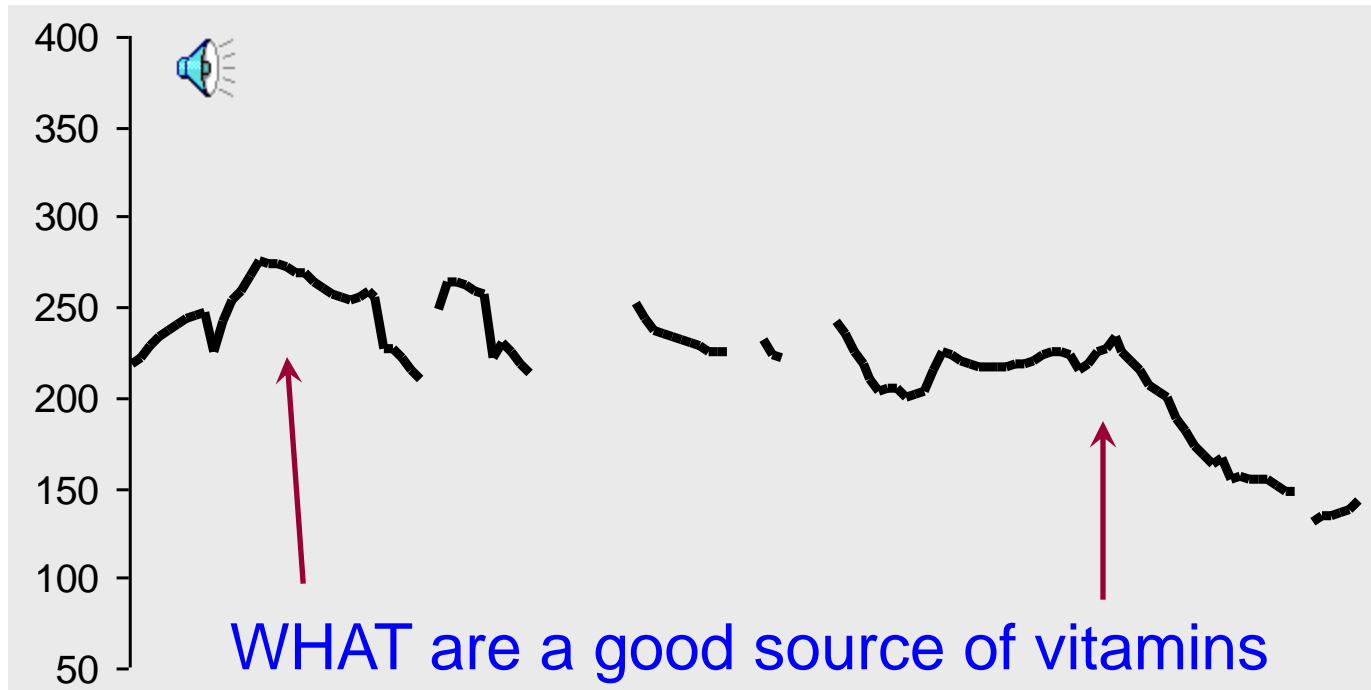
# Yes-No question tune



**Rise** from the main accent to the end of the sentence.

# WH-questions

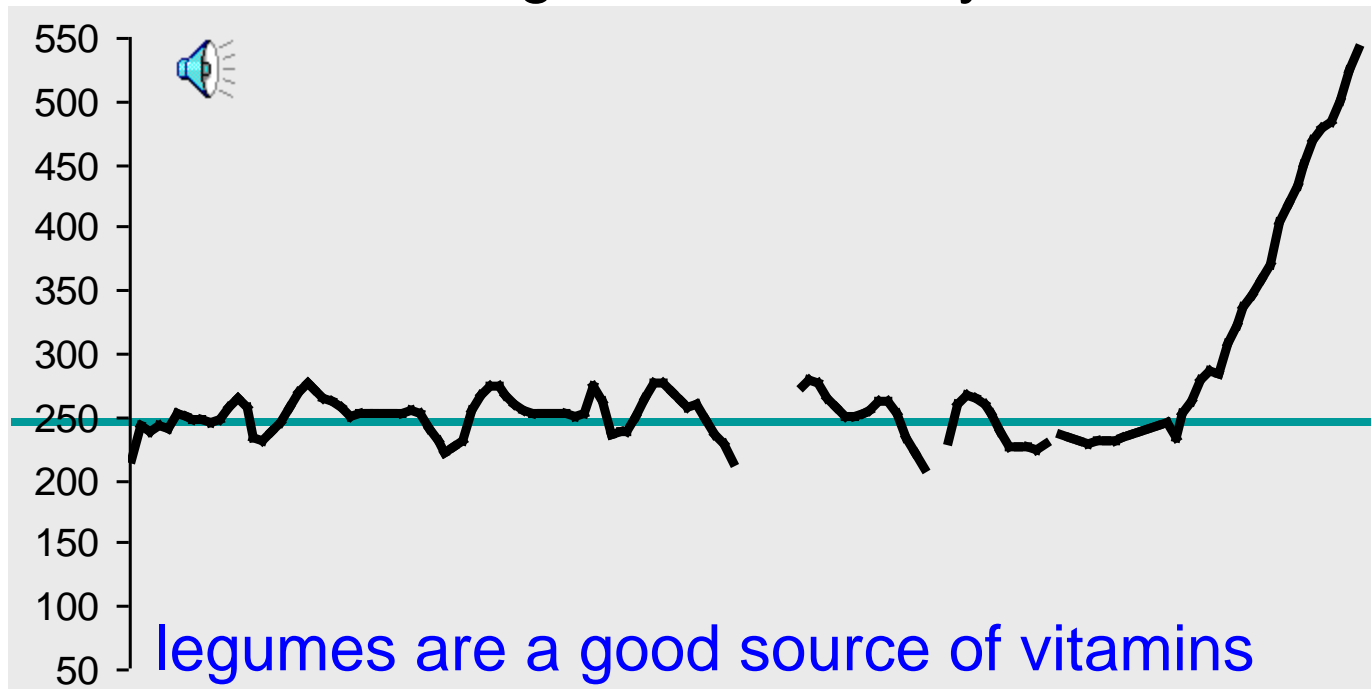
[I know that many natural foods are healthy, but ...]



WH-questions typically have **falling** contours, like statements.

# Rising statements

“Tell me something I didn’t already know.”

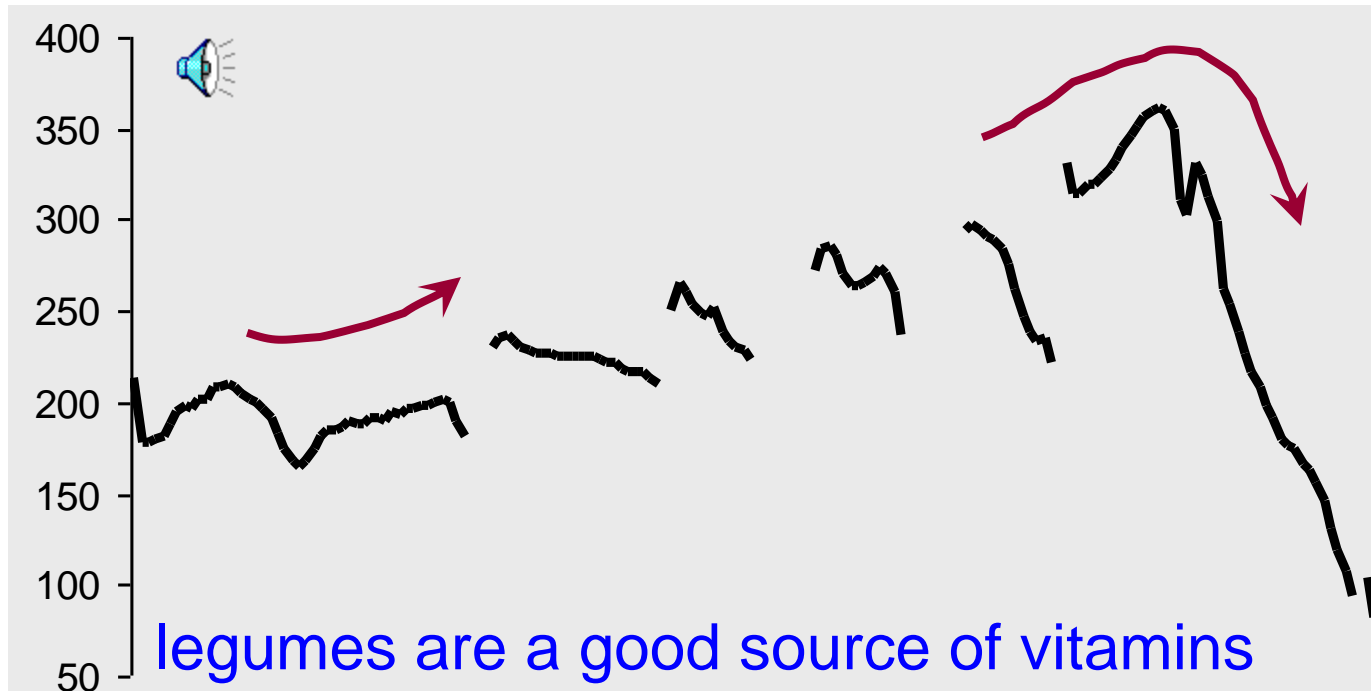


[... does this statement qualify?]

**High-rising** statements can signal that the speaker is seeking approval.

# 'Surprise-redundancy' tune

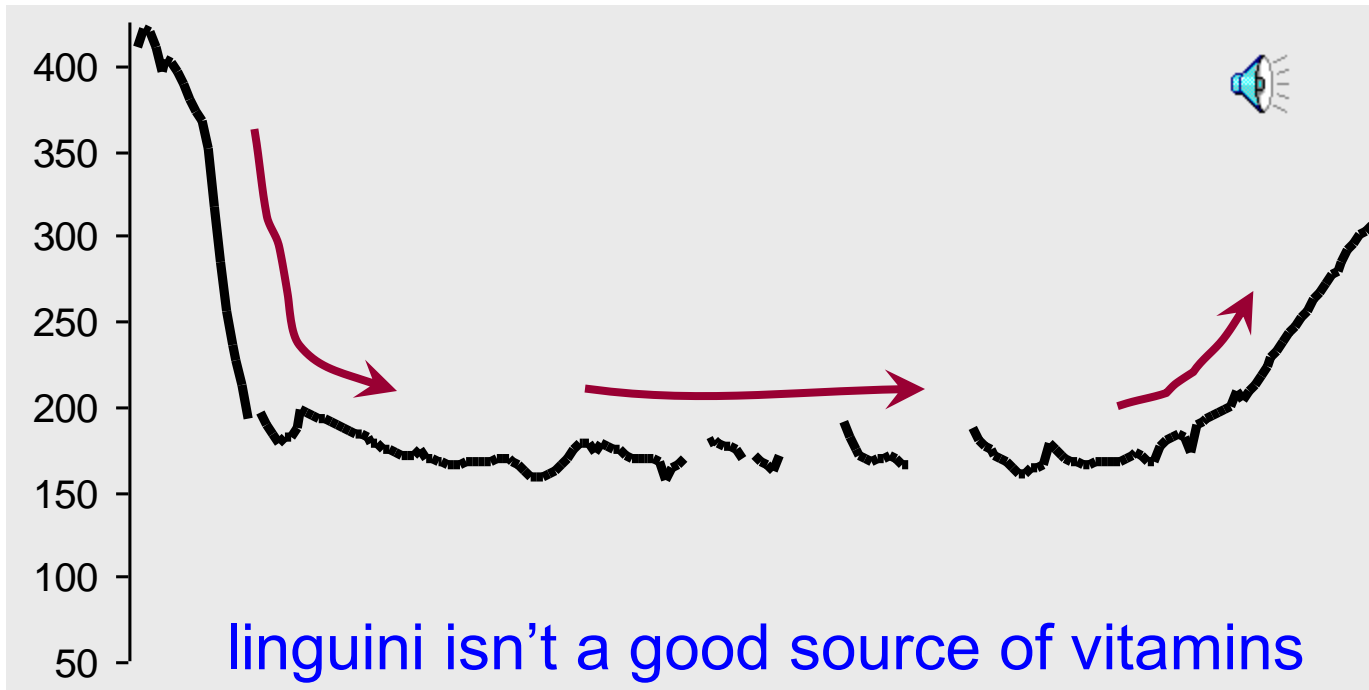
[How many times do I have to tell you ...]



**Low** beginning followed by a gradual rise to a **high** at the end.

# 'Contradiction' tune

"I've heard that linguini is a good source of vitamins."



[... how could you think that?]

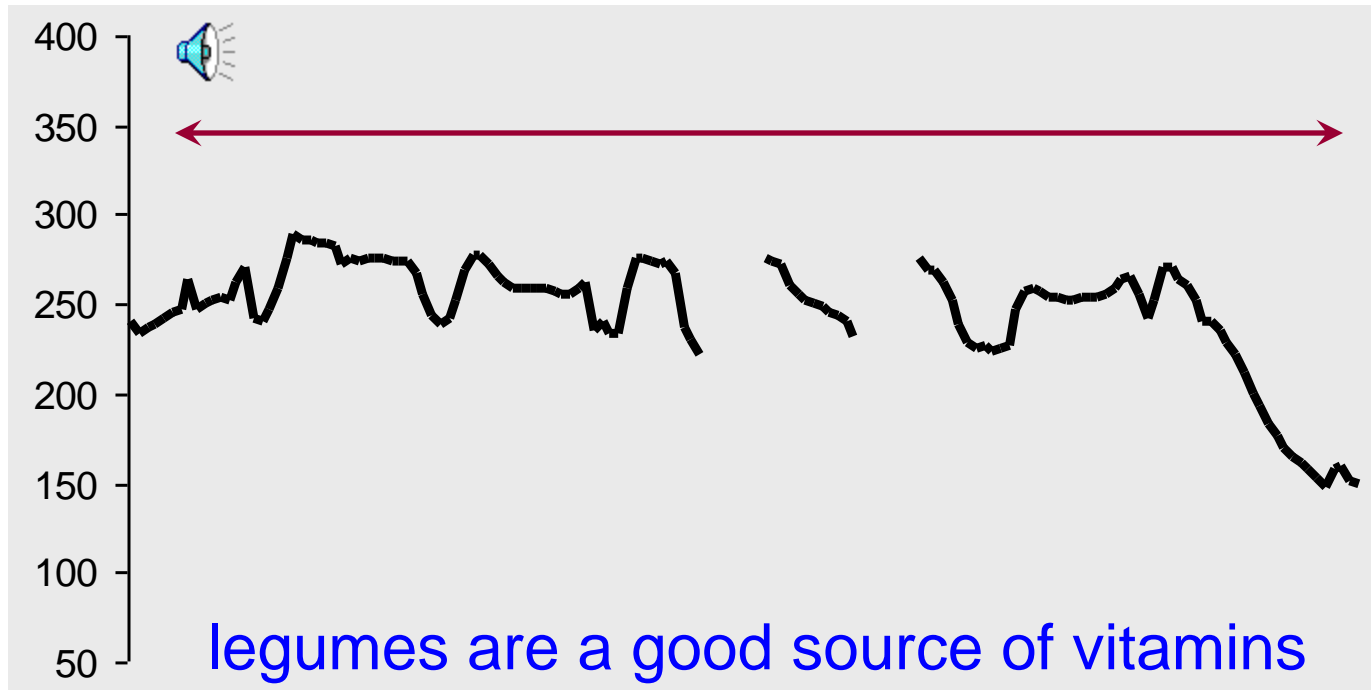
**Sharp fall** at the beginning, **flat and low**, then **rising** at the end.



# Tune meanings with *yes* & *no*

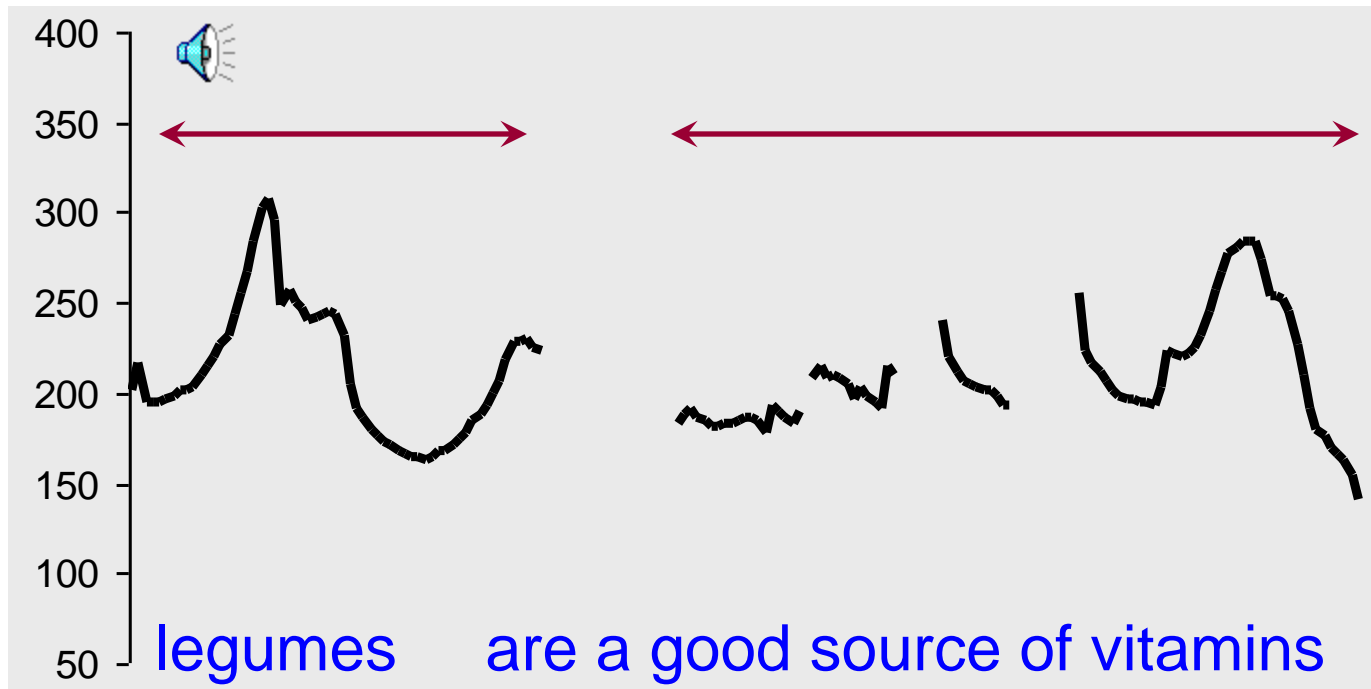
- Do you know John? Do you like pizza?
  - Fall
    - Finality
  - Rise
    - Something more to follow
  - Fall-rise
    - Reservation
    - Uncertainty
- But no one-to-one relationship between tunes and functions

# A single intonation phrase



Broad focus statement consisting of one intonation phrase (that is, one intonation tune spans the whole unit).

# Multiple phrases



Utterances can be 'chunked' up into smaller phrases in order to signal the importance of information in each unit.

# Phrasing can disambiguate

- **Global ambiguity:**

- Sally saw the man with the binoculars.
  - Sally saw % the man with the binoculars.
  - Sally saw the man % with the binoculars.
- John doesn't drink because he's unhappy.
  - John doesn't drink because he's unhappy.
  - John doesn't drink % because he's unhappy.

# Phrasing can disambiguate

- **Temporary ambiguity:**

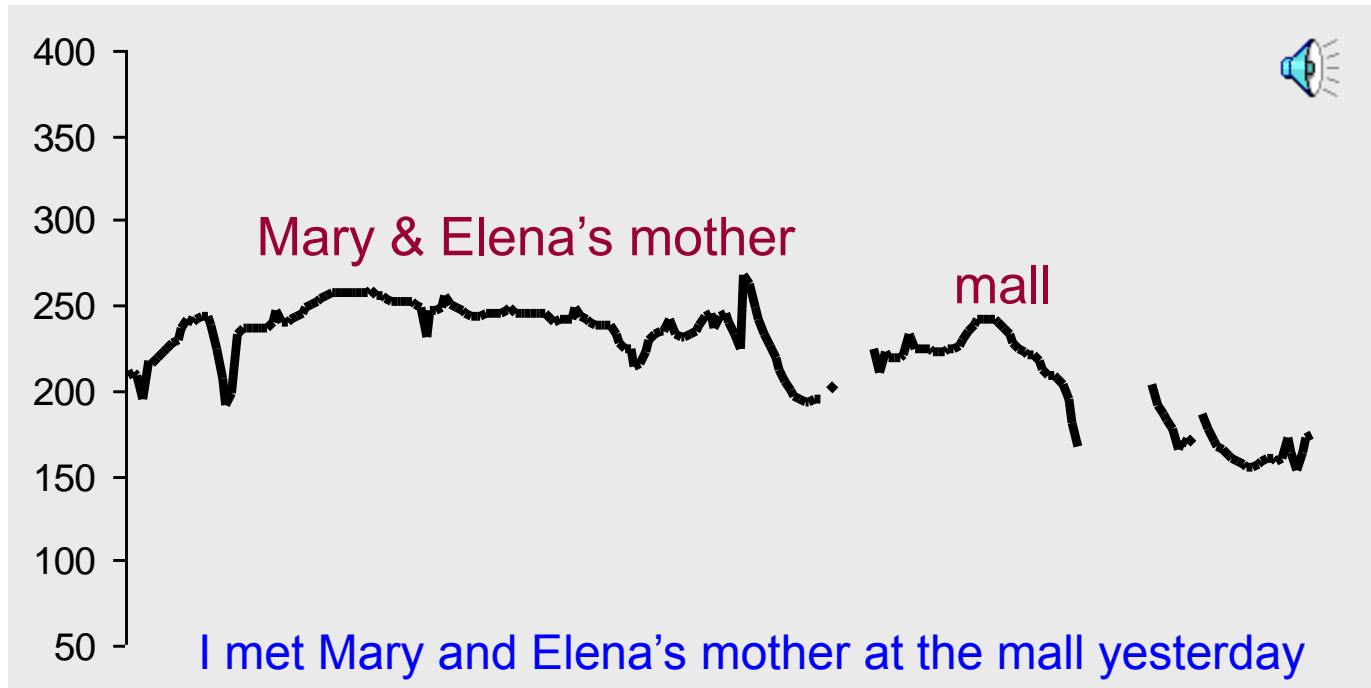
When Madonna sings the song ...

# Phrasing can disambiguate

- **Temporary ambiguity:**

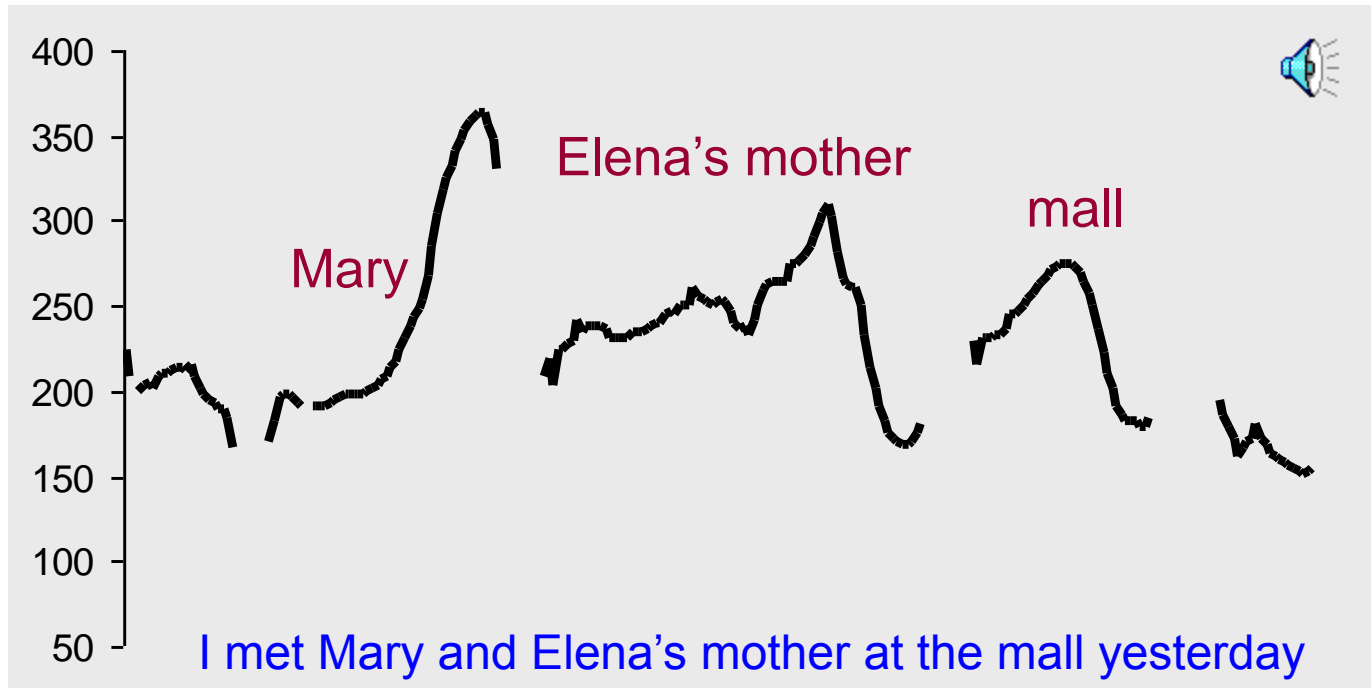
When Madonna sings the song is a hit.

# Phrasing can disambiguate



One intonation phrase with relatively flat overall pitch range.

# Phrasing can disambiguate



Separate phrases, with expanded pitch movements.



# Other ambiguities potentially disambiguated by prosody

- PP attachment:
  - *You should buy the ticket with the discount coupon.*
- Clause attachment
  - *If you need me when you get there call me.*
- Modifier scope:
  - *This fare is restricted to retired politicians and civil servants*
- Relative clauses
  - *My friend who likes to cook came to visit.*
    - Simple complement*
    - Parenthetical*

# (cont'd)

- Scope

- Negation

*You aren't booked through Rome because of the fare.*

- Quantifiers

*John only introduced Mary to Sue.*

- Modals

*Dogs must be carried.*

# Prosodic vs. lexical function of pitch



Chinese character	Standard Chinese ma		English gloss
	Tone symbol	Tone description	
媽	1	high level	'mother'
麻	1	high rising	'hemp'
馬	2	low falling rising	'horse'
罵	4	high falling	'scold'



Chinese character	Cantonese si		English gloss
	Tone symbol	Tone description	
詩	4	high falling	'poem'
試	1	mid level	'to try'
事	1	low level	'matter'
時	1	extra low	'time'
使	1	high rising	'to cause'
市	1	mid rising	'city'

# Summary

- How do we describe the differences in the form and function among these four utterances?



# **Next: other functions of intonation**

(Roach Ch 15-19)