

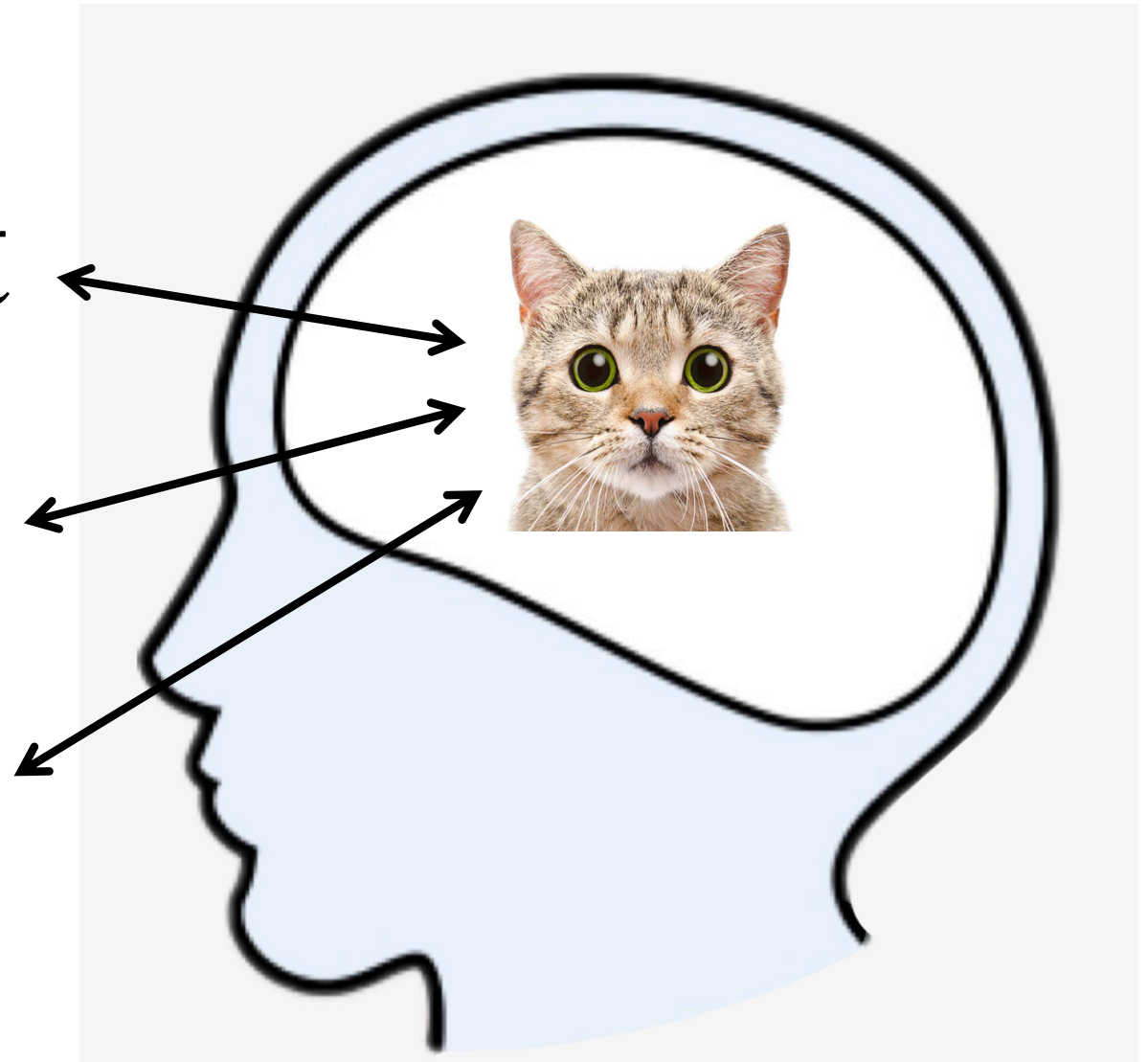
What is Language?

Language connects FORM and MEANING

speech: kæt

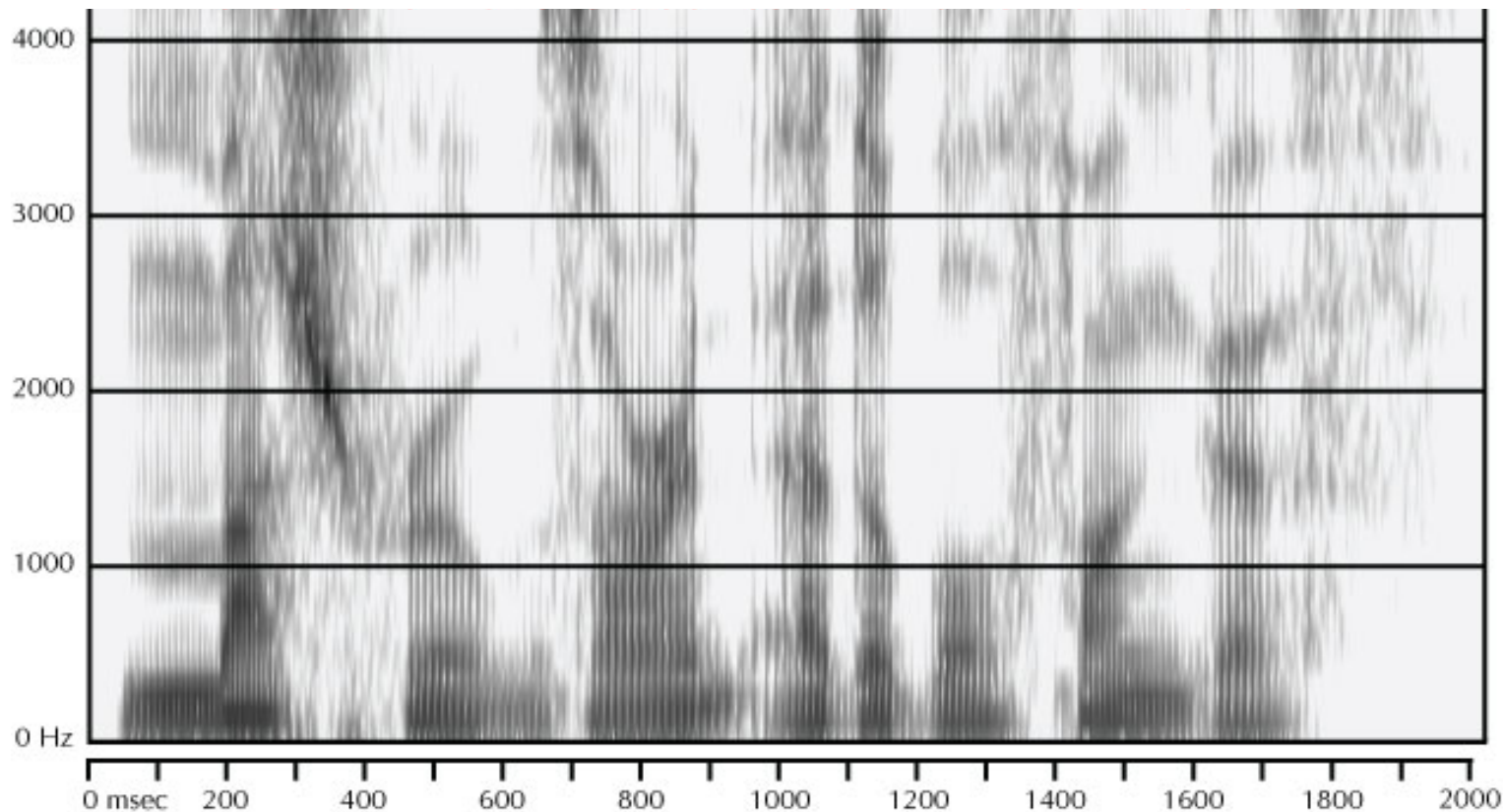
writing: cat

sign:



“mushrooms are an edible fungus”

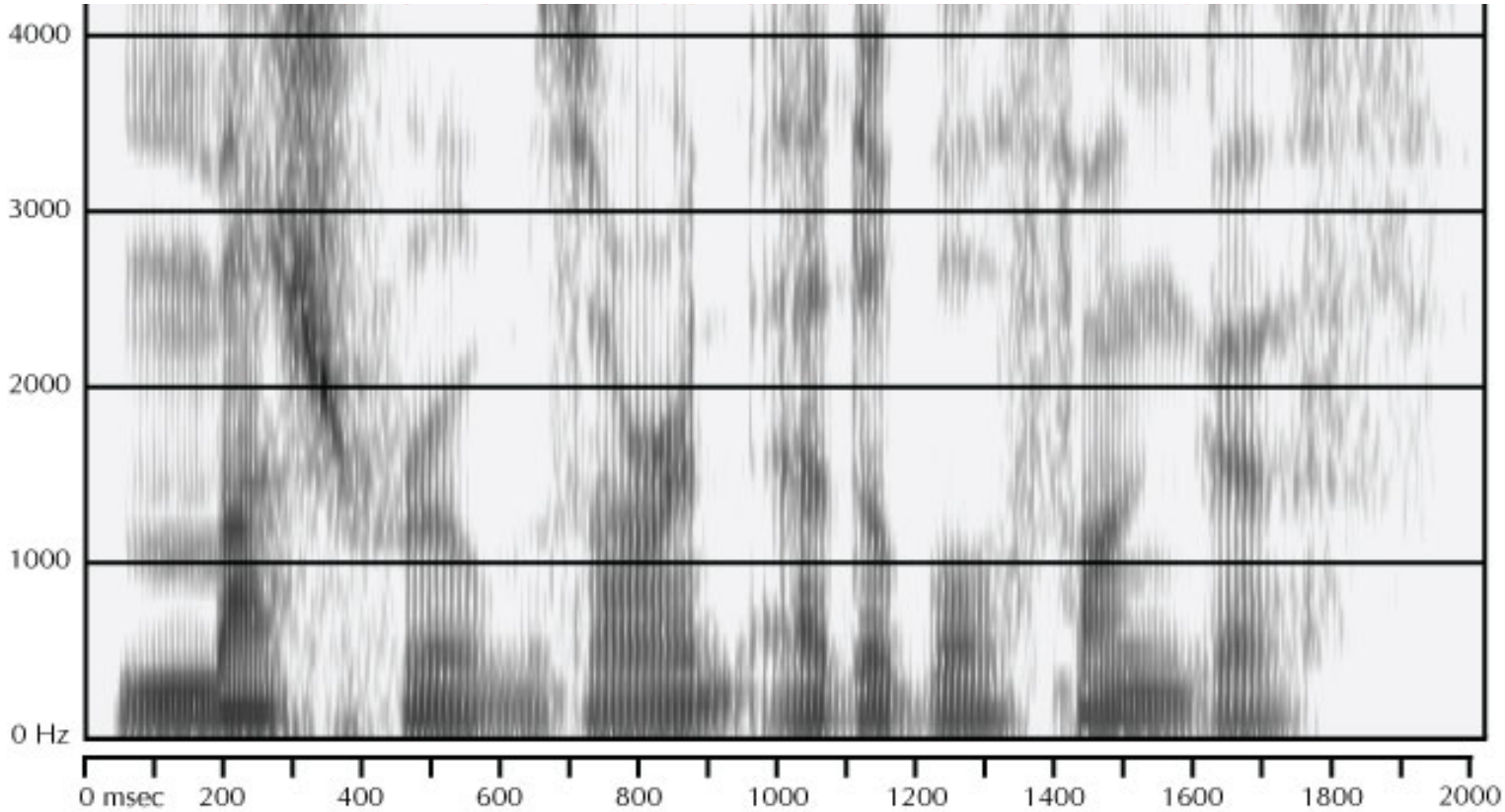
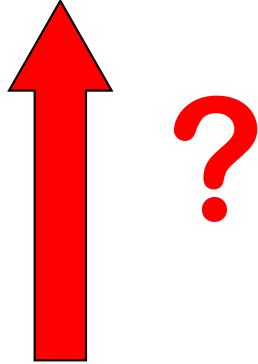
Spectrogram: Representation of sound amplitude across different frequencies over time.



continuous speech
signal

“mushrooms are an edible fungus”

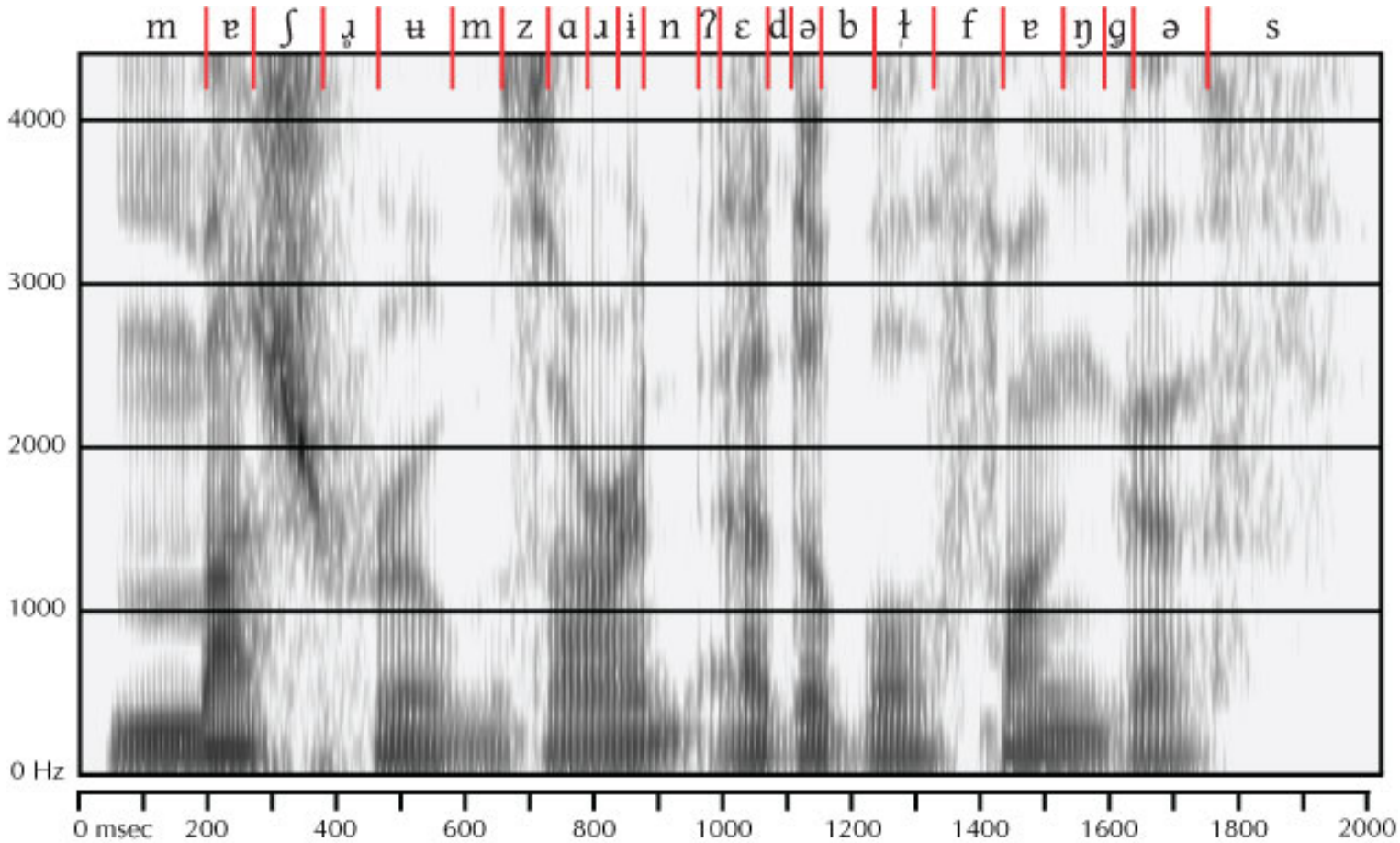
“In general, if x is a mushroom, then x is edible and x is a fungus”



continuous speech
signal

“mushrooms are an edible fungus”

“In general, if x is a mushroom, then x is edible and x is a fungus”



sound categories

continuous speech
signal

“mushrooms are an edible fungus”

“In general, if x is a mushroom, then x is edible and x is a fungus”



mushroom

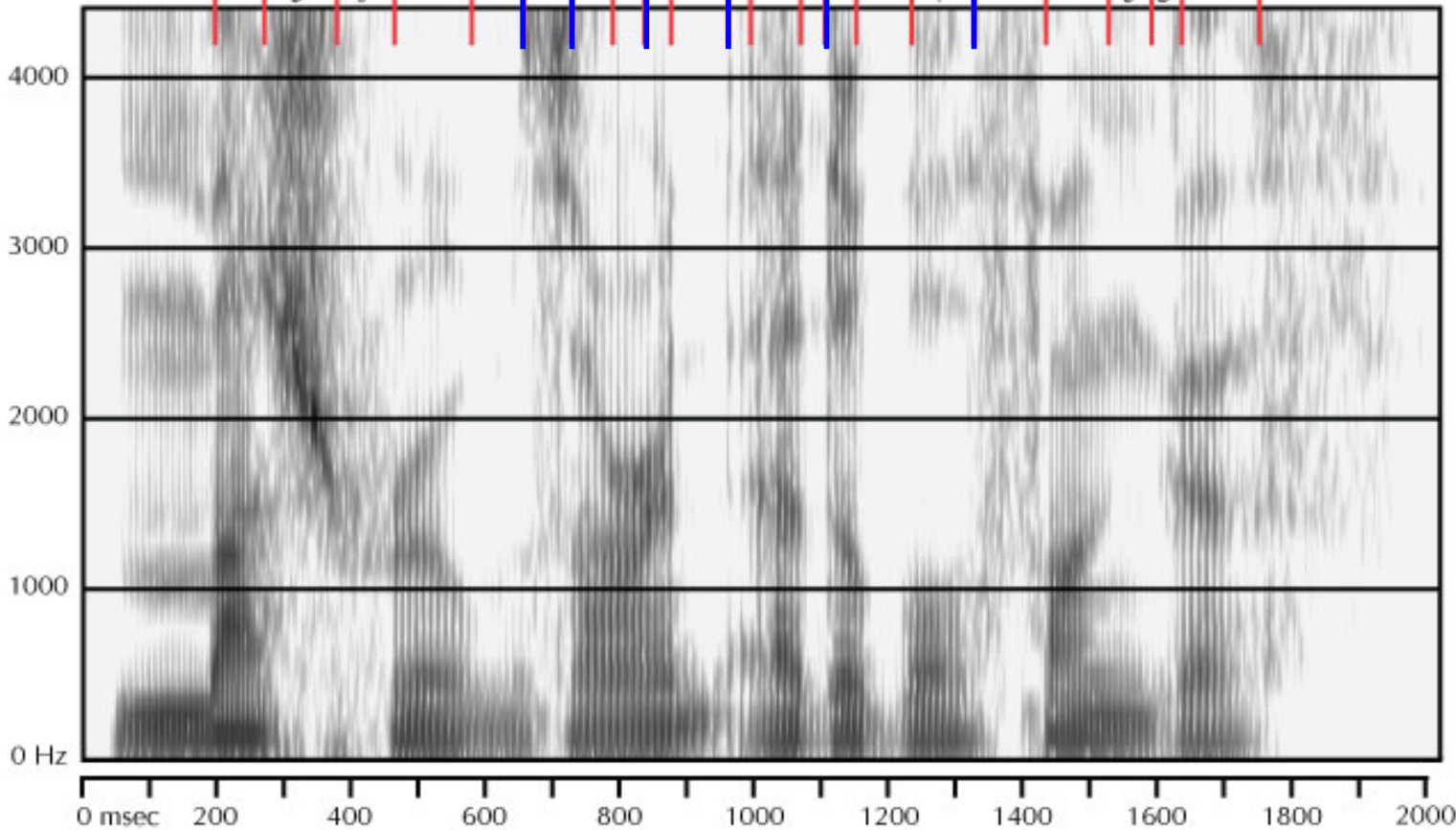
s are an edi able

fungus

morphemes

m | e | ʃ | ɹ | ʌ | m | z | a | ɹ | i | n | ? | ε | d | ə | b | t | f | ə | ŋ | g | ə | s

sound categories



continuous speech
signal

“mushrooms are an edible fungus”

“In general, if x is a mushroom, then x is edible and x is a fungus”



mushrooms

are an

edible

fungus

“words”

mushroom

s

are an

edi

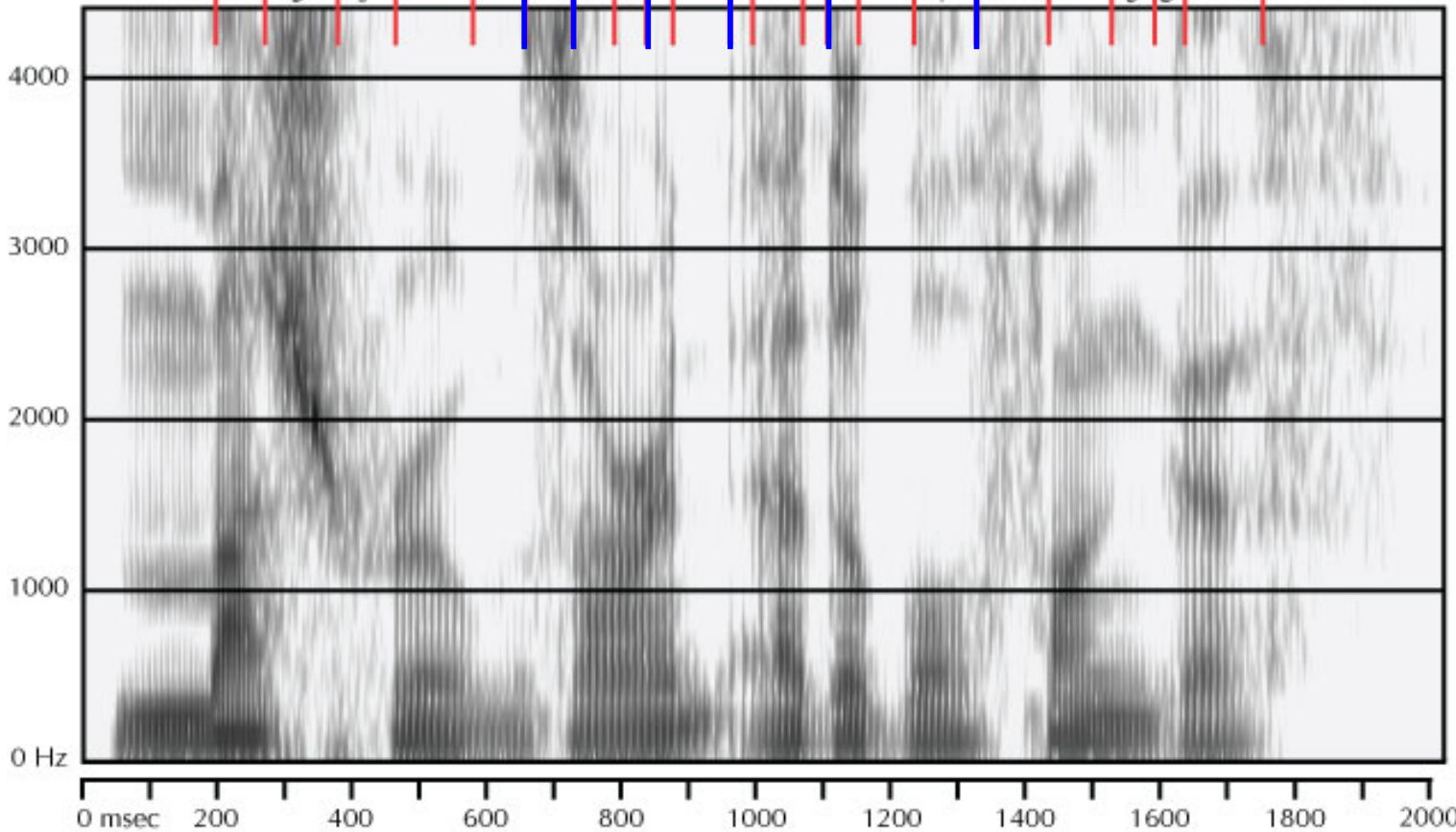
able

fungus

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sound categories



continuous speech
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“mushrooms are an edible fungus”

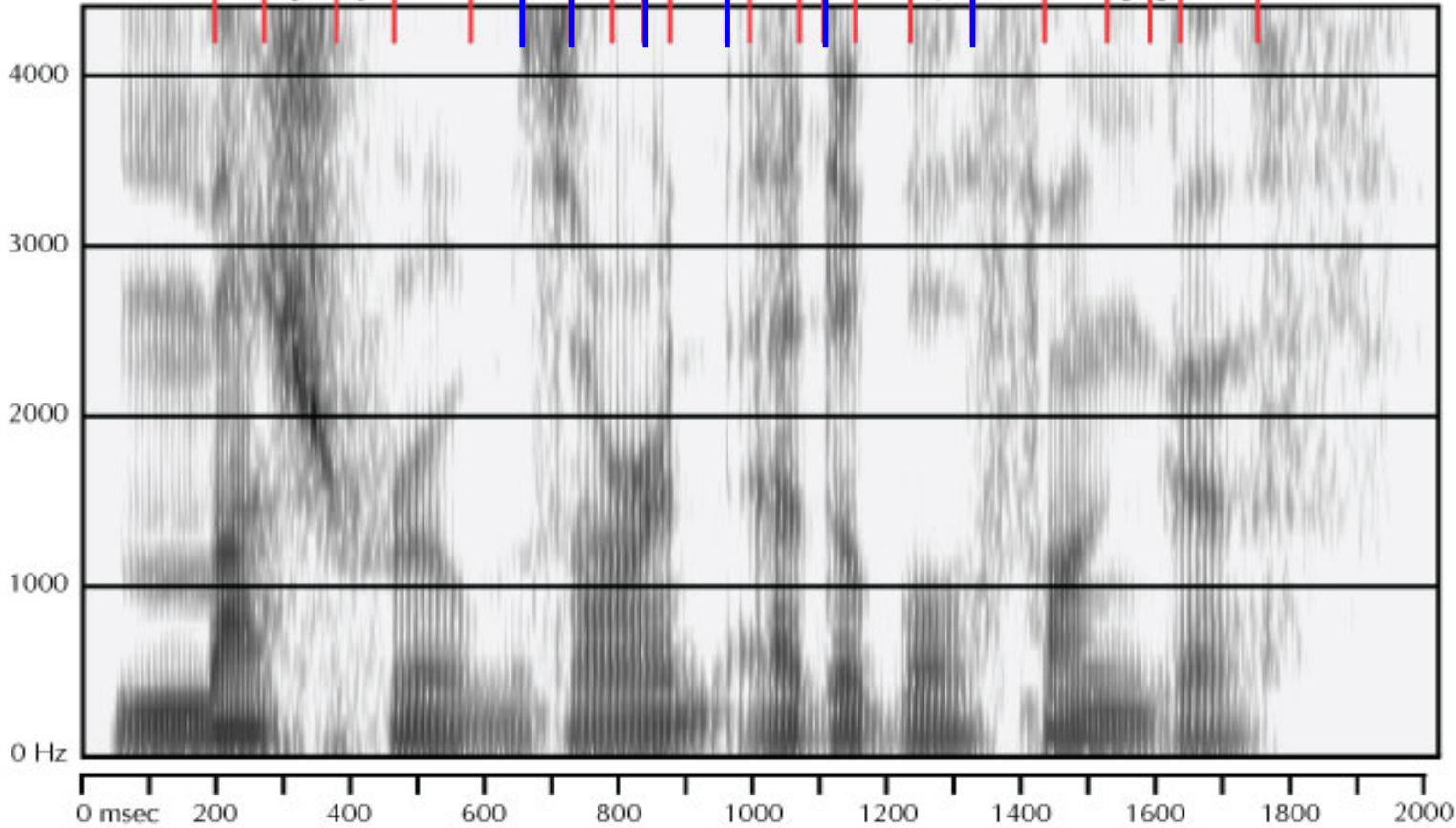
“In general, if x is a mushroom, then x is edible and x is a fungus”



mushrooms are an edible fungus

mushroom s are an edi able fungus

m | e | ʃ | ɹ | ʌ | m | z | a | ɹ | i | n | ? | ɛ | d | ə | b | l | ɪ | f | ə | ŋ | g | ə | s



syntax

“words”

morphemes

sound categories

continuous speech
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“mushrooms are an edible fungus”

“In general, if x is a mushroom, then x is edible and x is a fungus”

semantics



syntax

mushrooms are an edible fungus

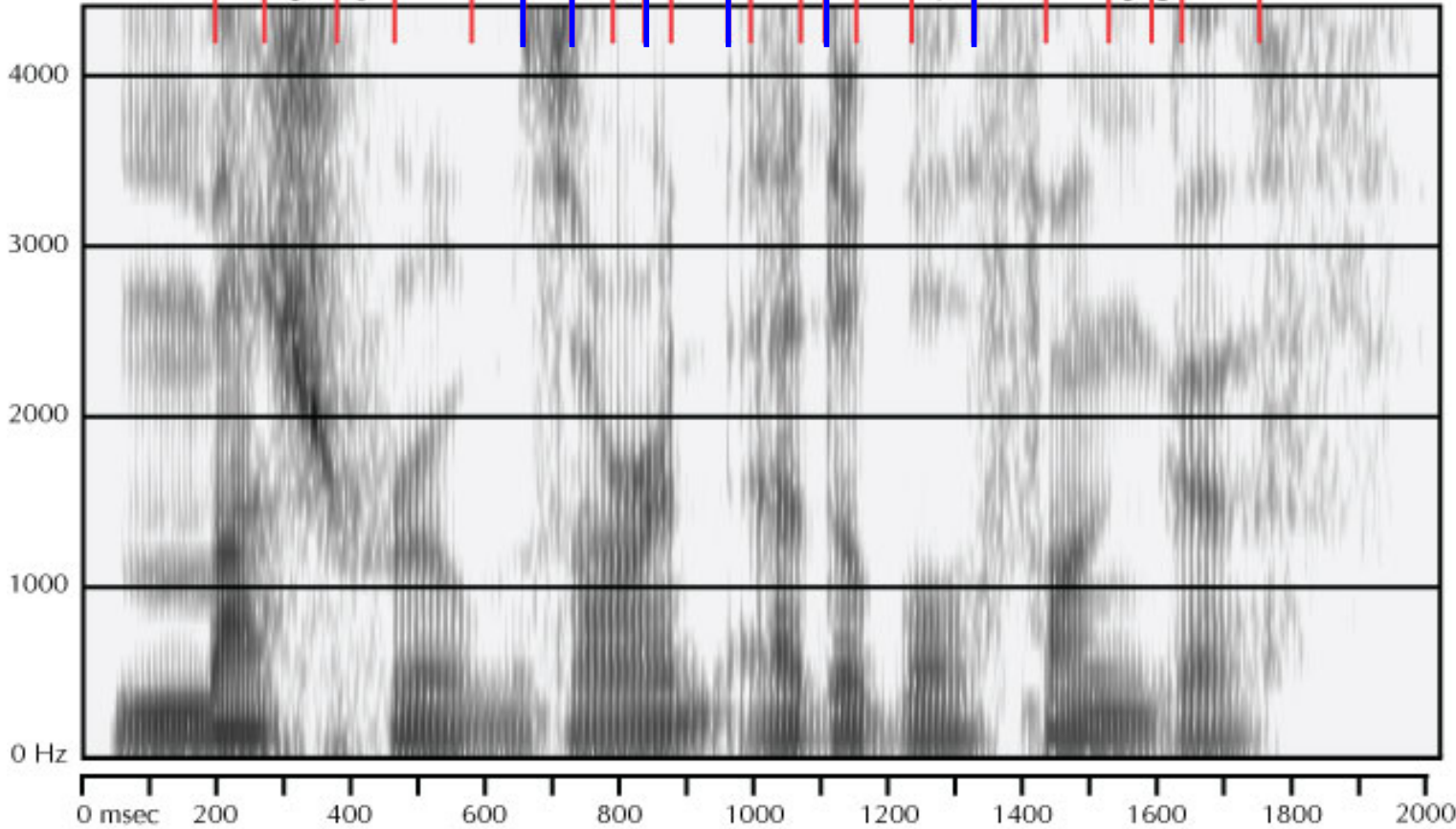
“words”

mushroom s are an edi able fungus

morphemes

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sound categories



continuous speech
signal

“mushrooms are an edible fungus”

- The meanings of linguistic expressions - Semantics semantics
- Study of the internal structure of sentences - Syntax syntax
- Study of the internal structure of words - Morphology “words”
morphemes
- Study of the abstract categories of speech sounds: Phonology sound categories

- Study of speech sounds: Phonetics continuous speech
signal

So what is LANGUAGE?

A system with multiple levels of representation that allows us to connect
MEANING to FORM (in language production)
and
FORM to MEANING (in language comprehension)