Interpreting quotations

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Semantics Research Group, 21 March 2008

There's treasure everywhere:
a Calvin and Hobbes collection by Bill Watterson

Mixing mention and use

Pure/direct quotation

Quine says ‘quotation has a certain anomalous feature’
(which has 6 words).

Indirect quotation

Quine says quotation has a certain anomalous feature
(which he asserted using a negative tag question in Japanese).

Mixed quotation

Quine says quotation ‘has a certain anomalous feature’
(but he refered to quotation only deictically).

(Davidson 1979)

Most speech is made of mixed quotes.

- **Empirical observations**
  - Nested mixed quotes
  - Mixed quotes of constructions

The essence of mixed quotation
- An ‘abstract’ formalization
- Formal languages

The prevalence of mixed quotation
- Names, definitions, non-coinages
- Quantification and polarity

Internalizing interpretation

A mixed quote means what someone uses the quoted expression to mean (Geurts and Maier 2003).

The journalist

The president said he has an ‘ecelectic’ reading list.

The politician

I am sorry to have used an ‘epithet’.

Nested mixed quotes

The journalist

The politician said she is ‘sorry to have used an ‘epithet’ ’.

Just like mixed-quoting any other form.

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Just like mixed-quoting any other form.

Mixed quotes of constructions

The journalist

The politician admitted that she ‘lied [her] way into [her job]’.

The politician

It is a long story how I lied my way into this despicable position of deception.

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Mary

John doesn’t know much French, but he thinks he does and tries to show it off whenever possible. At dinner, he ordered not ‘[some dessert] à la mode’ but ‘à la mode [some dessert]’.

John

I would like some à la mode [apple pie] please.

Mixed quotes of constructions

Abbott 2003: Mixed quotes of non-constituents?

Mary allowed as how her dog ate ‘odd things, when left to his own devices’.

Mary

Fido devoured odd things, when left to his own devices.

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Mixed quotes of constructions

Abbott 2003: Mixed quotes of non-constituents?

Mary allowed as how her dog ‘[ate] odd things, when left to his own devices’.

Mary

Fido devoured odd things, when left to his own devices.

Not Mary

Whereas under human supervision Fido ate odd things, when left to his own devices he would only eat Nutrapup.

Constructions are meaningful non-constituents?

Mixed quotes of constructions

The journalist: semantic interjection

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The journalist: syntactic interjection

The secret guide suggested that interested eaters ‘kiss up to [name redacted], class of 2008, for a good meal’ at the Ivy.

The secret guide

You should kiss up to John Doe, class of 2008, for a good meal if you are interested.

Mixed quotes of constructions

The journalist: semantic interjection

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Use notation for *staging* in programming languages.

Interpreting quotes

If everyone spoke the same language—

- The form $\ulcorner f \urcorner$ means f.
- If the form f means the form g, and in turn g means h, then $!f$ means h.
  - Hence reduce $!\ulcorner f \urcorner$ to f.
- If the form f means the form g, then the form $\ulcorner \cdots \sim[f] \cdots \urcorner$ means $\cdots g \cdots$.
  - Hence reduce $\ulcorner \sim[f] \urcorner$ to f.
- If the form f means g, then the form $\ulcorner \cdots \%[f] \cdots \urcorner$ means $\cdots g' \cdots$, where g' is something (possibly formless) that means g.
  - Kaplan's *vivid names*?

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▶ **The essence of mixed quotation**
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- Formal languages

The prevalence of mixed quotation
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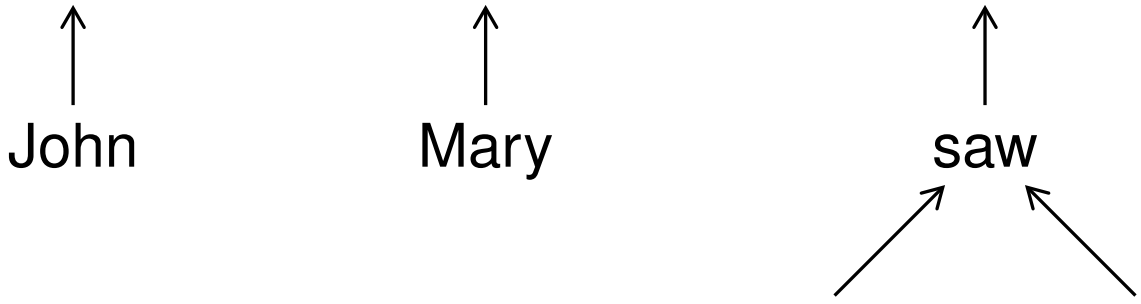
An ‘abstract’ formalization of constructions

A construction has a form (function) and a meaning (function).



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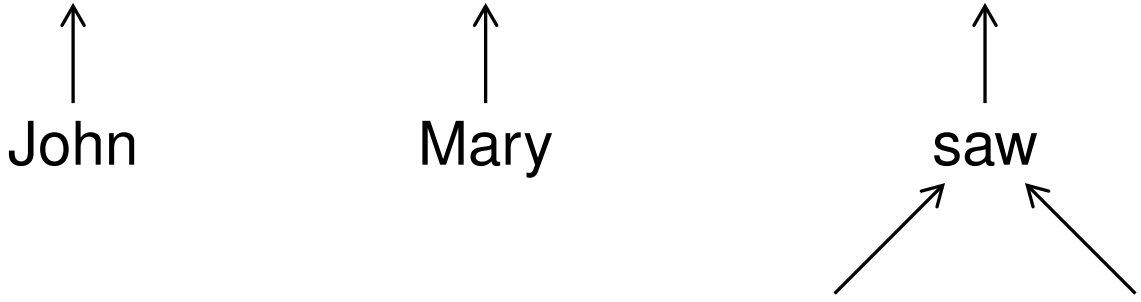
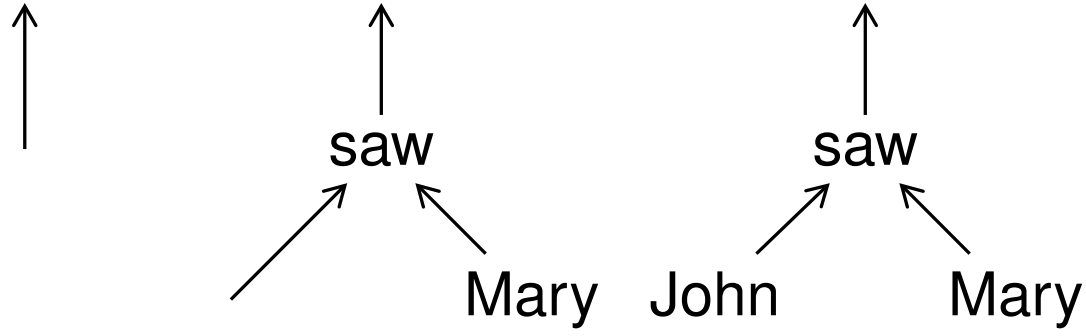


A grammar is a set of constructions
closed under identity and composition.



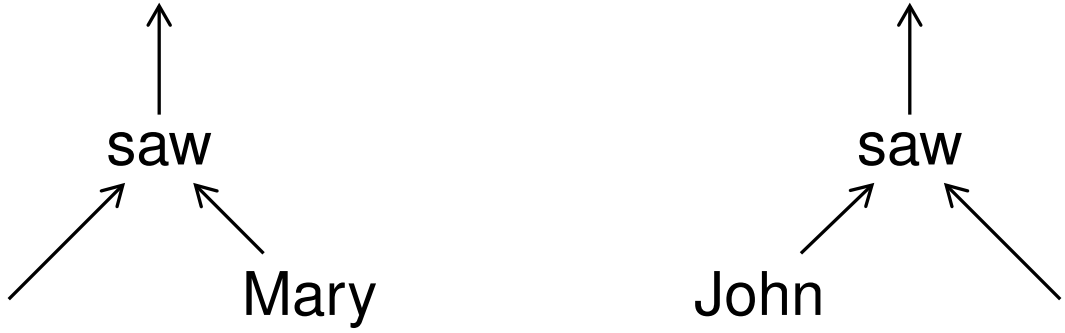
No higher-order constructions for now.

An ‘abstract’ formalization of construction use

A speaker uses the closure conditions to generate derived constructions from primitive ones.

To use a construction is to use its form to mean its meaning.

If you use a construction derived from other constructions (in multiple equivalent ways), then you also use these other constructions.



In general, any connected subgraph of the derivation tree.

An ‘abstract’ formalization of mixed quotes

For a mixed quote:

- The form is

$$Qf$$

  where f is a form.
  For example,

$$Qfx_1 \ldots x_n = \bar{`} \frown (f([\bar{} \frown x_1 \frown \bar{]}) \ldots ([\bar{} \frown x_n \frown \bar{]})) \frown \bar{'}$$

  in written English.

- The meaning is

$$\iota g.\ x \text{ uses the form } f \text{ to mean } g$$

  with unresolved anaphora and presupposition.

Desugar staging notation into mixed-quote constructions.

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Formal languages

Code switching

Alice said $\Gamma(2)$ is negative.

Paraphrase

Alice said what mathematicians use $\Gamma(2)$ to mean is negative.

A mixed quote is an *interpreted* Gödel number.

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Names, definitions, non-coinages

A causal chain of naming (Kripke)

Aristotle

Names, definitions, non-coinages

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¡⌜¡⌜¡⌜… Aristotle …⌝⌝⌝

Perhaps with generic events and institutional speakers.

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Let $e = \lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n$. The number $e^{i\pi}$ is equal to -1.

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Non-coinages; deference

Aristotle saw his sister

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Do they have children? Yes, they have one child. (de Swart)

Names, definitions, non-coinages

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Scope freedom in mixed quotes?

Names take scope differently from ordinary mixed quotes (Michael Johnson, p.c.).

1. It might have been the case that Quine said quotation ‘sucks’.
2. It might have been the case that Aristotle was not named ‘Aristotle’.

Scope freedom in mixed quotes?

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1. It might have been the case that
   Quine said quotation ‘sucks’.
2. It might have been the case that
   Aristotle was not named ‘Aristotle’.

Ordinary constructions allow wh-extraction and quantifying-in.

1. Who did !⌜%[!⌜Aristotle⌝] see %[_]⌝?
2. !⌜%[!⌜Aristotle⌝] saw %[nobody]⌝

Quantification

Think of a quantifier as a higher-order construction, as usual.
Suppose construction abstraction is not freely available.

everyone : $(e \to t) \to t$	Everyone saw Mary.
someone : $(e \to t) \to t$	Mary saw someone.

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~~someone : $(e' \to e \to t) \to (e' \to t)$~~	~~Everyone saw someone.~~

Want to maintain uniform left-to-right evaluation. (Barker)

Inverse scope

Mixed-quote the scope of the later quantifier

!⌜Someone saw %[everyone]⌝.

For everyone y, the sentence ⌜Someone saw %[y]⌝ is true.

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Polarity licensing

Alice introduced nobody to anybody.

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For everyone y, the sentence ⌜Someone saw %[y]⌝ is true.

Polarity licensing

Alice introduced nobody to anybody.

No inverse polarity licensing

*!⌜Alice introduced anybody to %[nobody]⌝.
For nobody y, the sentence ⌜Alice introduced anybody to %[y]⌝ is true.

Conclusion

Most speech is made of mixed quotes.

- Names
- Definitions
- Non-coinages; deference
- Quantifier scope

Quotation is modality.

What does ‘use to mean’ mean?