11. Possible worlds

11.1 Introduction

So far, we've stuck with the notion that the denotation of a sentence is a truth value. But this idea has certain limitations.

(1) a. Trump is the President of the US.
    b. Xi is the President of China.

As both the above sentences are true, they denote the same thing. Further, when embedded we get strange predictions.

(2) a. Jane believes that Trump is the President of the US.
    b. Jane believes that Xi is the President of China.

In any model in which both sentences in (1) are true, then the sentences in (2) are equivalent.

The next issue, how do we capture a difference between the following? Are (b) and (c) truth-value denoting?

(3) a. Smiley skateboards.
    b. Does Smiley skateboard?
    c. Who skateboards?

The goal for this handout:

a. Incorporate a notion of *possible world*
b. Solve the belief verbs problem.
c. Give a semantics for questions.
d. Explain a link between questions and focus.
e. Explore the semantics of focus intonation.

11.2 Possible worlds

What's a possible world?

> Contingent sentences depend for their truth value on facts about the world, and so are true at some possible worlds and false at others. A possible world corresponds to a possible totality of facts, determinate in all respects. Lewis 1970

> You are about to kick a ball. You may either score a goal, or not. The two options 'score', 'not-score' are the two relevant situations, which you can represent as the two valuations for an atomic statement p = 'I score a goal', one with $[p(w_1) = \mathbf{T}]$ and one with $[p(w_2) = \mathbf{F}]$. The same pattern can of course happen in many other scenarios: 'Pass' or 'Fail' for an exam that you have taken, 'Head' or 'Tails' for the outcomes of the next throw of a coin, 'Left' or 'Right' for the correct way to the Rijksmuseum, and so on. Benthem et al. 2016

A semantics which doesn't make reference to possible worlds (i.e., alternative ways a sentence could be true of false) is *extensional*. The semantics we've seen so far has been extensional.

A semantics which can make reference to alternative possibilities is *intensional*.

Here's our old, extensional type space for **TY**.

(4) **Possible Types** (extensional):

a. e is a type
b. t is a type
c. If σ and τ are types, then $\langle\sigma,\tau\rangle$ is a type.
d. Nothing else is a type.

Here's a new intensional version, from Gallin 1975 (cf. Montague 1973). s stands for world.

(5) **Possible Types** (intensional):

a. e is a type
b. t is a type
c. s is a type
d. If σ and τ are types, then $\langle\sigma,\tau\rangle$ is a type.
e. Nothing else is a type.

This new type space, for an updated logic $\mathbf{TY}_2$, preserves all the properties from **TY**, but is strictly more expressive.

Now we can make crucial reference to *propositions*: objects of type $\langle s,t\rangle$.

In **TY**, the ML expression **rain!** was type t. Now it's type $\langle s,t\rangle$. And so on for any sentence meaning. Therefore, $[\![\textbf{rain!}]\!]_* = \{w_1, w_2, w_5\}$.

(6) $$[\![\textbf{rain!}]\!] = \begin{bmatrix} \mathrm{w}_1 & \mapsto \mathbf{T} \\ \mathrm{w}_2 & \mapsto \mathbf{T} \\ \mathrm{w}_3 & \mapsto \mathbf{F} \\ \mathrm{w}_4 & \mapsto \mathbf{F} \\ \mathrm{w}_5 & \mapsto \mathbf{T} \end{bmatrix}$$

A simple but more-or-less effective way to update **TY** to **TY**$_2$: just find-and-replace any t with $\langle s,t\rangle$ (Benthem 1991).

(7) a. Properties: $\langle e,t\rangle \mapsto \langle e,\langle s,t\rangle\rangle$
b. Relations: $\langle e,\langle e,t\rangle\rangle \mapsto \langle e,\langle e,\langle s,t\rangle\rangle\rangle$
c. Quantifiers: $\langle\langle e,t\rangle,t\rangle \mapsto \langle\langle e,\langle s,t\rangle\rangle,\langle s,t\rangle\rangle$
d. Determiners: $\langle\langle e,t\rangle,\langle\langle e,t\rangle,t\rangle\rangle \mapsto \langle\langle e,\langle s,t\rangle\rangle,\langle\langle e,\langle s,t\rangle\rangle,\langle s,t\rangle\rangle\rangle$

Redo-ing our compositional semantics will take too much time, but once you have the hang of it, it is very systematic and predictable. Let's just redo a simple sentence.

(8) $$[\![\textbf{skateboards}]\!] = \begin{bmatrix} ☺ \mapsto \begin{bmatrix} w_1 & \mapsto \textbf{T} \\ w_2 & \mapsto \textbf{T} \\ w_3 & \mapsto \textbf{F} \\ w_4 & \mapsto \textbf{F} \\ w_5 & \mapsto \textbf{T} \end{bmatrix} & 😎 \mapsto \begin{bmatrix} w_1 & \mapsto \textbf{F} \\ w_2 & \mapsto \textbf{T} \\ w_3 & \mapsto \textbf{T} \\ w_4 & \mapsto \textbf{T} \\ w_5 & \mapsto \textbf{F} \end{bmatrix} \end{bmatrix}$$

(9) **skateboards**(**smiley**) : $\langle s,t\rangle$
smiley : e **skateboards** : $\langle e,\langle s,t\rangle\rangle$

skateboards(**smiley**) is a *contingent proposition*, true in some worlds, false in others. What is $[\![\textbf{skateboards(smiley)}]\!]$? What about $[\![\textbf{skateboards(smiley)}]\!]_*$?

We can always get back to the extension, by using terms which refer to worlds in the metalanguage.

(10) a. What type is **skateboards**(**smiley**)(w_1)?
b. $[\![\textbf{skateboards(smiley)}(w_1)]\!] =$
c. $[\![\textbf{skateboards(cool)}(w_2)]\!] =$
d. $[\![\textbf{skateboards(smiley)}(w_5)]\!] =$

With this update into *IL* (intensional logic), we need new definitions of truth and entailment.

(11) **Truth**:
a. Formerly, a proposition p is true iff $[\![p]\!] = \textbf{T}$.
b. Now, a proposition p is true at w iff $w \in [\![p]\!]_*$ (equiv. $[\![p(w)]\!] = \textbf{T}$).[1]

(12) **Entailment** (of declaratives at least):
a. Formerly, p entails q iff $[\![p \rightarrow q]\!] = \textbf{T}$
b. Now, p entails q iff $[\![p]\!]_* \subseteq [\![q]\!]_*$

The definition of entailment (12-b) corresponds to the intuition that p is true in a more restricted set of circumstances, i.e., subset of worlds.

If Smiley skateboards joyfully at w_1, then he also skateboards at w_1. But if Smiley skateboards at w_2, he doesn't necessarily skateboard joyfully at w_2.

[1] It's somewhat sloppy to use the symbol w in both the metalanguage and the model, but we'll manage.

11.3 Belief verbs

Let's go back to the belief verbs problem. In the last handout, we hypothesized that belief verbs like *believe* and *know* are relations between an individual and a proposition.

(13) a. *Smiley believes it's raining* $\rightsquigarrow$ **believe(rain!)(smiley)**
b. *Cool believes it's snowing* $\rightsquigarrow$ **believe(snow!)(cool)**

A sample *extensional* denotation for **believe** (without worlds).

(14) $[\![\textbf{believe}_{ext}]\!]_* = \{\langle \textbf{smiley}, \textbf{T}\rangle, \langle \textbf{cool}, \textbf{F}\rangle, \langle \textbf{angel}, \textbf{F}\rangle\}$

This makes some crazy predictions. Smiley will believe any proposition that is true. And Cool and Angel believe any proposition that is false. If (a) is true, (b) is also true and vice versa.

(15) a. Smiley believes that Trump is the President of the US.
b. Smiley believes that Xi is the President of China.

Intensions get us out of this problem.

(16) a. $[\![\textbf{president-of-US(trump)}]\!] = \{w_1, w_2, w_4\}$
b. $[\![\textbf{president-of-China(xi)}]\!] = \{w_2, w_3, w_4\}$

Now *believe* in (15-b) can be a relation between an individual (such as Smiley) and a proposition.

Just because 'Xi is president' and 'Trump is president' are both true at w_1 does not mean they are the *same proposition*. They are true in a different set of worlds.

(17) $[\![\textbf{believe}]\!]_* = \{\langle \textbf{smiley}, \{w_1, w_2, w_4\}\rangle, \langle \textbf{smiley}, \{w_2, w_3, w_4\}\rangle, \ldots\}$

Now Smiley can believe non-equivalent propositions which may both be true (or false) in the actual world. Propositions with different truth conditions correspond to different world-sets.

Let's spell out **believe** a bit further.

(18)
believe(rain!)(smiley) : $\langle s, t\rangle$
- **smiley** : e
- **believe(rain!)** : $\langle e, \langle s, t\rangle\rangle$
  - **believe** : $\langle\langle s, t\rangle, \langle e, \langle s, t\rangle\rangle\rangle$
  - **rain!** : $\langle s, t\rangle$

believe denotes a function which takes a proposition p, and returns a property f. The following proposal is from Hintikka 1961, based on Kripke's 1963 semantics for modals.

(19) $[\![\textbf{dox}(\textbf{smiley}(w))]\!]$ is the set of worlds compatible with what Smiley's beliefs at w.

For example let's say in w that Smiley is certain that he has a Jack, but isn't certain whether Cool has a Queen or not. In all worlds in $[\![\textbf{dox}(\textbf{smiley})(w)]\!]$, Smiley has a Jack, but in some worlds Cool has a Queen, and in some he doesn't.

Under this analysis, if Smiley believes p, p is true in all of his **dox**-worlds.

(20) *believe* $\rightsquigarrow \lambda p.\lambda x.\lambda w.\forall w'[\mathbf{dox}(x)(w)(w') \rightarrow p(w)]$

(21) a. $\mathbf{believe}(\mathbf{rain!})(\mathbf{smiley})$
b. $= \lambda p.\lambda x.\lambda w.\forall w'[\mathbf{dox}(x)(w)(w') \rightarrow p(w)](\mathbf{rain!})(\mathbf{smiley})$
c. $= \lambda x.\lambda w.\forall w'[\mathbf{dox}(x)(w)(w') \rightarrow \mathbf{rain!}(w)](\mathbf{smiley})$
d. $= \lambda w.\forall w'[\mathbf{dox}(\mathbf{smiley})(w)(w') \rightarrow \mathbf{rain!}(w)]$

i.e., *Smiley believes it's raining* is true at any world w in which in all worlds compatible with what Smiley is certain about at w, it is raining.

What about factive verbs like *know*? Following the insight of Kiparsky and Kiparsky 1970, *know* is just like *believe*, except that it presupposes p is also true in the world of evaluation.

(22) $\mathbf{know} \rightsquigarrow \lambda p.\lambda x.\lambda w : p(w)\ .\ \forall w'[\mathbf{dox}(x)(w)(w') \rightarrow p(w)]$

(23) a. $\mathbf{know}(\mathbf{rain!})(\mathbf{smiley})$
b. $= \lambda w : \mathbf{rain!}(w)\ .\ \forall w'[\mathbf{dox}(\mathbf{smiley})(w)(w') \rightarrow \mathbf{rain!}(w)]$

This is absolutely the tip of the iceberg when it comes to so-called 'modal expressions', including:

a. modal auxiliaries: *can*, *must*, *might*, *will*
b. belief predicates: *think*, *suppose*, *believe*
c. other attitude predicates: *seem*, *want*, *hope*, *forget*, *evident*
d. adjectives with modal suffixes: *edible*, *drinkable*, *breakable*, *flammable*
e. modal adverbs: *possibly*, *definitely*, *maybe*

See especially Kaufmann, Condoravdi, and Harizanov 2006; Kratzer 1981, 1991; Lassiter 2011, 2017; Lewis 1973; Stalnaker 1968, 1979, and Benthem et al. 2016:§5.

11.4 Questions

The most influential theory of questions comes from Hamblin 1973 and Karttunen 1977 (though see Ciardelli 2016; Ciardelli, Groenendijk, and Roelofsen 2018; Ginzburg 1996; Groenendijk and Stokhof 1989; Krifka 2001 for alternatives, Charlow 2019 for an update of Hamblin-Karttunen semantics.)

Hamblin's central insight: the meaning of a question is the set of its possible answers.

(24) (rough) $[\![\textit{Does Smiley skateboard?}]\!]_* = \{[\![\textit{Smiley skateboards}]\!]_*, [\![\textit{Smiley doesn't skateboard}]\!]_*\}$

11.4.1 Polar (Y/N) questions

Under Hamblin's approach, extensional semantics won't work. Every polar question will denote $\{\mathbf{T}, \mathbf{F}\}$ and thus every polar question will be semantically equivalent.

Under an intensional semantics, $[\![\textit{Smiley skateboards}]\!]_*$ and $[\![\textit{Smiley doesn't skateboard}]\!]_*$ will be world sets, and thus non-equivalent to $[\![\textit{Cool medidates}]\!]_*$ and $[\![\textit{Cool doesn't meditate}]\!]_*$ and so on.

Let's propose a polar question operator Q, realized in English by moving the auxiliary before the subject, in Chinese by *ma*, Japanese by *ka*, Modern French by *est-ce que* and so on.

(25) $Q(\textbf{skateboards}(\textbf{smiley})) : \langle s, \langle \langle s,t \rangle, t \rangle \rangle$

$Q : \langle \langle s,t \rangle, \langle s, \langle \langle s,t \rangle, t \rangle \rangle \rangle$ $\quad$ $\textbf{skateboards}(\textbf{smiley}) : \langle s,t \rangle$

$\textbf{smiley} : e$ $\quad$ $\textbf{skateboards} : \langle e, \langle s,t \rangle \rangle$

(26) Hamblin's semantics for Q:
$Q \rightsquigarrow \lambda q.\lambda w.\lambda p.p = q \vee q = \neg q$ $\quad$ NB: the λw operator doesn't do anything, why?

For me, this is much easier to reason about using set theory.

(27) $$[\![Q(\textbf{skateboards}(\textbf{smiley}))(w)]\!] = \left\{ \begin{array}{c} [\![\textbf{skateboards}(\textbf{smiley})]\!], \\ [\![\neg\textbf{skateboards}(\textbf{smiley})]\!] \end{array} \right\}$$

Under this theory, *yes* and *no* can be taken to be propositional anaphors, co-indexed with p, the declarative argument to Q (or maybe ellipsis of p).

(28) a. *yes* $\rightsquigarrow p$ (= $\textbf{skateboards}(\textbf{smiley})$)
b. *no* $\rightsquigarrow \neg p$ (= $\neg\textbf{skateboards}(\textbf{smiley})$)

Here's a dialogue under this theory.

(29) Q: Does Smiley skateboard? $\quad$ Is the actual world a Smiley-skateboard world or not?
A: No. $\quad$ The actual world is not a Smiley-skateboard world.

What are the following?

(30) a. $\bigcup [\![Q(\textbf{skateboards}(\textbf{smiley}))(w)]\!] =$
b. $\bigcap [\![Q(\textbf{skateboards}(\textbf{smiley}))(w)]\!] =$

What are the intuitions about the above values? Are questions informative?

11.4.2 Wh-questions

Hamblin semantics gives the following value for *who*, an interrogative quantifier.

(31) $\textbf{who} \rightsquigarrow \lambda P.\lambda w.\lambda p.\exists x[\textbf{person}(x)(w) \wedge p = P(x)]$

(32) $\textbf{who}(\textbf{skateboards}) : \langle s, \langle \pi, t \rangle \rangle$ $\quad$ $P = \langle e, \pi \rangle, \pi = \langle s,t \rangle$

$\textbf{who} : \langle P, \langle s, \langle \pi, t \rangle \rangle \rangle$ $\quad$ $\textbf{skateboards} : P$

Again, using set theory, this is more intuitive. See if you can understand the equivalence with (32).

(33) $$[\![\textbf{who}(\textbf{skateboards})(w)]\!] = \{[\![\textbf{skateboards}(\textbf{smiley})]\!], [\![\textbf{skateboards}(\textbf{cool})]\!], [\![\textbf{skateboards}(\textbf{frowny})]\!], \ldots\}$$

Equivalent, but more compact:

(34) $$[\![\textbf{who}(\textbf{skateboards})(w)]\!] = \{[\![\textbf{skateboards}]\!](x) \mid x \in [\![\textbf{person}(w)]\!]\}$$

i.e., take every person x at w, the possible answers to *Who skateboards* are the set of propositions of the form x *skateboards*. Some questions

(35) a. What about the worlds in which no one skateboards?
b. What is $\bigcup[\![\textbf{who}(\textbf{skateboards})(w)]\!] =$
c. What is $\bigcap[\![\textbf{who}(\textbf{skateboards})(w)]\!] =$

English, and many other languages, allow "multiple *wh*-questions" like (36).

Let's provide a semantics for (36) using Hamblin's framework for question meanings.

(36) Who saw what?

Hamblin semantics for questions are the answer set.

(37) $[\![\textit{who saw what}]\!] = \{[\![\textit{Smiley saw Cool}]\!], [\![\textit{Cool saw Frowny}]\!], \ldots\}$

First a semantics for *what*, the inanimate version of *who* (or is the inanimacy of *what* an implicature?)

(38) a. $\textbf{who} = \lambda P.\lambda w.\lambda p.\exists x[\textbf{person}(x)(w) \wedge p = P(x)]$
b. $\textbf{what} = \lambda P.\lambda w.\lambda p.\exists x[\textbf{non-person}(x)(w) \wedge p = P(x)]$

(39) $[\![\textbf{who}(\lambda x.\textbf{what}(\lambda y.\textbf{see}(y)(x)))(w)]\!]$
$= \{[\![\textbf{see}]\!](x)(y) \mid x \in [\![\textbf{person}(w)]\!] \text{ and } y \in [\![\textbf{non-person}(w)]\!]\}$

I have a hunch that this analysis predicts strange things about cases in which you aren't sure about whether Smiley is a person or not. That would be a good paper topic.

Without going into too much detail, we can also start to see ways to account for embedded questions.

(40) a. Smiley knows whether Frowny skateboards.
b. Smiley knows who skateboards.
c. Smiley knows who saw what.

i.e., Smiley knows which $p \in [\![Q]\!]$ is true.

11.5 Intensional semantics and pragmatics

Possible worlds give us a new way to think about pragmatics, and a way to spell out Grice's maxims.

We can think about pragmatic presuppositions as set of worlds, i.e., the set of worlds in which I'm from Australia, the set in which I'm teaching this class, etc.

This lets us define a notion of the *Common Ground* (Stalnaker 1979)

(41) **Common Ground**:
The set of propositions which are publicly endorsed by interlocutors.

A sample common ground for us.

(42) $$CG_{623} = \left\{ \begin{array}{c} [\![\textbf{from-Australia(james)}]\!], \\ [\![\textbf{in-Hawaii(us)}]\!], \\ [\![\textbf{speak-English(us)}]\!], \\ \ldots \end{array} \right\}$$

> In the simple picture, the common ground is just common or mutual belief, and what a speaker presupposes is what she believes to be common or mutual belief. The common

> beliefs of the parties to a conversation are the beliefs they share, and that they recognize that they share: a proposition ϕ is common belief of a group of believers if and only if all in the group believe that ϕ, all believe that all believe it, all believe that all believe that all believe it, etc. Stalnaker 2002

A common ground leads us directly to the context set.

(43) **Context Set**:
The set of worlds consistent with the interlocutors' beliefs.

The context set C is just calculated by conjoining each proposition in the common ground.

(44) $$C_{623} = \bigcap \left\{ \begin{array}{c} [\![\textbf{from-Australia(james)}]\!], \\ [\![\textbf{in-Hawaii(us)}]\!], \\ [\![\textbf{speak-English(us)}]\!], \\ \ldots \end{array} \right\}$$
$$= [\![\textbf{from-Australia(james)}]\!] \cap [\![\textbf{in-Hawaii(us)}]\!] \cap [\![\textbf{speak-English(us)}]\!] \ldots$$

The result is a set of worlds which are compatible with the interlocutors' *mutual, public* beliefs.

Using notions like this, we can think about how notions like relevance, presupposition, informativity, contextual entailment, and so on can be spelled out.

11.5.1 Assertion and presupposition

To simply assert a proposition like *it's raining* means adding it to the context set. This is intended to model interlocutors incorporating the belief that it's raining.

(45) $C[\textbf{rain!}] = C \cap [\![\textbf{rain!}]\!]$

We eliminate from C any world in which it is not raining. We can iterate this in case we uptake multiple assertions.

(46) $C[\textbf{rain!}][\textbf{wednesday!}] = C \cap [\![\textbf{rain!}]\!] \cap [\![\textbf{wednesday!}]\!]$

By this method, multiple assertions reduces simply to conjunction. We end up with the worlds (i) which are compatible with the common ground, (ii) in which it's raining, and (iii) in which it's Wednesday.

What if we have a presupposition?

(47) *Smiley stopped skatboarding*
  a. Presupposition: *Smiley skateboarded before*
  b. Assertion: *Smiley doesn't skatebord now*

Stalnaker's view is that *presuppositions are conditions on* C: the presupposition must be true in every world in C. Otherwise the update is undefined.

(48) $C[\textbf{stop}(\textbf{smiley})(\textbf{skateboard})]$
defined iff $C \subseteq [\![\textbf{before}(\textbf{skateboard}(\textbf{smiley}))]\!]$
where defined, $C[\textbf{now}(\textbf{skateboard}(\textbf{smiley}))]$

(49) $C\,[\mathbf{know}(\mathbf{smiley})(\mathbf{rain!})]$
defined iff $C \subseteq [\![\mathbf{rain!}]\!]$
where defined, $C\,[\mathbf{believe}(\mathbf{smiley})(\mathbf{rain!})]$

The pragmatic conditions might be such that the interlocutors accommodate the presupposition, e.g., if the speaker has high authority and/or the presupposition is highly plausible.

In this case, the presupposition becomes just a simple addition to the context set, rather than a definedness condition.

(50) $C\,[\mathbf{stop}(\mathbf{smiley})(\mathbf{skateboard})]$
under accommodation $= C\,[\mathbf{before}(\mathbf{skateboard}(\mathbf{smiley}))][\mathbf{now}(\mathbf{skateboard}(\mathbf{smiley}))]$

(51) $C\,[\mathbf{know}(\mathbf{smiley})(\mathbf{rain!})]$
under accommodation $= C\,[\mathbf{rain!}][\mathbf{believe}(\mathbf{smiley})(\mathbf{rain!})]$

11.5.2 Gricean maxims

Defining the Gricean maxims using the common ground is also quite simple.

Gricean quality involves the private beliefs of the speaker: don't utter things which you yourself do not believe are true. For this we can use **dox**.

(52) **Gricean quality** (strong):
If a speaker a utters U in world w, then $[\![\mathbf{dox}(a)(w)]\!] \subseteq [\![U]\!]$

This amounts to the speaker only uttering things that she believes. We could define a weaker version.

(53) **Gricean quality** (weak):
If a speaker a utters U in world w, then $[\![\mathbf{dox}(a)(w)]\!] \cap [\![U]\!] \neq \emptyset$

This amounts to the speaker not uttering things that she believes to be false. Why are these definitions different? Note that neither of these definitions reference the common ground.

Quality or informativity, on the other hand, involves the common ground: i.e., don't utter things which your interlocutors already know.

(54) **Gricean quantity**:
If a speaker a utters U, then $C\,[U] \subset C$

Every utterance should be non-trivial, i.e., eliminate at least one world from the context set.

(55) a. Either she's coming or she isn't.
b. She's coming

Relevance will relate the utterance to a QUD.

(56) Which floor is Smiley on?
a. He's on the third floor (strongly relevant)
b. He's in the bathroom on the third floor (relevant, over-answer)
c. He's not on the first floor (weakly relevant)
d. He has brown hair (irrelevant)

(57) $$[\![\mathbf{which}(\mathbf{floor})(\lambda x.\mathbf{on}(\mathbf{smiley}(x)))]\!] = \left\{ \begin{array}{l} [\![\mathbf{on}(\mathbf{smiley})(\mathbf{f}1)]\!], \\ [\![\mathbf{on}(\mathbf{smiley})(\mathbf{f}2)]\!], \\ [\![\mathbf{on}(\mathbf{smiley})(\mathbf{f}3)]\!] \end{array} \right\}$$

We can say something is weakly relevant as long as it at least partially answers the QUD (cf. (d))

(58) **Gricean relevance** (weak):
If a speaker a utters U given QUD Q, then $\exists p \in Q[[\![U]\!] \cap p = \emptyset]$

Why is (d) in (56) irrelevant? Why is (c) weakly relevant?

(59) **Gricean relevance** (strong):
If a speaker a utters U given QUD Q, then $\exists p \in Q[[\![U]\!] \subseteq p]$

Why are (a) and (b) strongly relevant?

11.6 Looping back

Here are some examples we saw in the first lecture. What do you make of them now?

(60) Larry King: Do you have a theory about death?
Trixie Mattel: I think it happens to most of us. (*Larry King Now*, 2018)

(61) Elaine: Is Lippman getting rid of me? It's OK I won't say anything.
Secretary: I don't know anything.
Elaine: Ah, you don't know anything. You see, "*I don't know anything*", means there's something to know. If you really didn't know anything you would have said "*You're crazy.*" (*Seinfeld*, 1991)

(62) Mark Halperin: Who did you vote for in the primaries?
Man: Jeb Bush.
Mark Halperin: Oh, you're the one. (MSNBC, Mar 2017)

(63) Rogan: I'm going to pretend half of that applause is for me.
Fox: Some of it is for you.
Rogan: Like 30 percent?
Fox: *Some* of it is for you. (Michael J. Fox and Seth Rogan at the Oscars, 2017)

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