Rhetorical coherence and the given/new distinction

In conveying a message, we have to consider more than just "who did what to whom." We also have to keep in mind what our listeners know, and how to lay the message out for them in an orderly and understandable way.

We have to be careful not to assume knowledge listeners don't have. If a stranger comes up to us on the street and says, out of nowhere, "what is the frequency?" we are likely to assume that he is crazy, or perhaps mistaking us for someone else. Young children make this sort of communicative mistake all the time, because their ability to model other people's knowledge and belief is not well developed.

Similarly, we have to be careful not to introduce familiar things as if they were new. Aside from being insulting, this can be confusing, since our listeners may try to find a new interpretation to match our implication of novelty. If your roommate says "there's a letter for you on the table", and it's the same old letter that both of you know has been there for several days, you may waste some time looking for an additional one.

There are many aspects of language that help to indicate whether a particular piece of information is "old" or "new", and to manage the amount of detail that we use in talking about it, and to make it more or less salient for our listeners or readers.

For example, "old information" (part of the earlier content of a discourse, for instance) is frequently referred to using a pronoun, and generally occurs early in a sentence. What is "new" typically occurs as a noun, and occurs later in the sentence:

"When John appeared at the party, he was introduced to Pearl. She had arrived with her friend Julie."

In this text fragment, John turns into 'he' when John is "known",

and this pronoun occurs at the beginning of the clause that introduces Pearl as new.

When Pearl becomes known, she also gets converted to the pronoun 'she' in the next sentence, occupying a slot at the beginning of the next sentence, which in turn introduces the new character, Julie, in the typical sentence-final position.

Here's a more realistic example, taken from a transcript of conversation about fashions that took place in 1991 (sw4746):

B.72  [Sniffing] One thing I've noticed is come back here are clogs.
A.73: Really?

B.74: Yeah. They're starting to make a comeback.
: You see them in the stores more and more and I said I didn't think I'd ever see those again.
[laughter]

The new information "clogs" is put at the end of the phrase that introduces it, and then referred to with a pronoun at the start of the next full sentence that discusses it. Consider how odd it would be to do the opposite, switching the structures of the first and second of B's sentences:

B.72: [Sniffing] Clogs're starting to make a comeback.
A.73: Really?
B.74: Yeah. One thing I've noticed is come back here are them.
: You see them in the stores more and more and I said I didn't think I'd ever see those again.
[laughter]

In fact, it is usually concerns like this that regulate word order in languages that don't use word order to distinguish subjects from objects.

Consider two Latin examples with different orders, but the same basic meaning, "the cat saw the dog":

(i) Felis canem vidit. The cat saw a dog
(j) Canem vidit felis. The dog was spied by a cat

(i) ok out of the blue, answering "what happened"; ok if cat is already mentioned
(ii) not ok to answer "what happened", but ok as answer to "what happened to the dog?"

This examples also demonstrates that in addition to givenness versus newness, it is also relevant whether a noun phrase is indefinite or definite ("a man" or "some people" vs. "the man" or "those people"). Here's a real example from another transcribed conversation (sw4787), this one about family reunions (overlapping speech is marking with #...#):

B.52: And well they elect officers every year and #they have a#
A.53: #You're kidding.# I have never heard of this. [laughter]
B.54: Yeah, they have a, - they have a- a president. Usually they try to elect a family and inside that family, there'll be the president and- or the chairman or whatever and then each person has an assignment to- to you know, carry out one part of the thing.

Here speaker B starts out by saying "they have a president", and then, in adding more information, switches to "the president". The same sort of switch from indefinite to definite occurs in saying "usually they try to elect a family and inside that family, there'll be..." As this
Another way to study how we organize and package information according to the communicative context is to look at the usage of different sentence forms with very similar meaning.

(k) I need a nickel.
(l) It's me that needs a nickel.
(m) What I need is a nickel.
(n) A nickel is what I need.

Now, imagine yourself standing next to a phone booth fishing for change. Someone trying to be helpful might say:

(o) What are you looking for?
(p) Here's a dime.

Which of (k)-(n) are appropriate responses to each of these?

What would be appropriate contexts for the others?

Studying such potention question and answer pairs shows us that sentences can express the same semantic content and still have different pragmatic circumstances of appropriate usage. This is because language has many devices for indicating what is given and what is new, and questions (explicit or implicit) set up expectations that are respected in the answers.

Coherence and pronouns

The data: the interaction of discourse coherence and interpretation of pronouns.

*Topic* is, vaguely, "what the sentence/utterance/speech/text is about". - vague and so useless

Simple idea: within a small piece of discourse (roughly like a paragraph of text), we can find, for each utterance (roughly, a sentence) a single discourse entity that this utterance is "about" - the center of attention for this utterance, the utterance topic. These central entities, of course, change as we go from sentence to sentence. Depending on how much the topic changes, we get a smoother or a rougher transition between the utterances.

Centering Theory

This framework is called the Centering Theory. This is how it works:

- Every discourse entity mentioned in an utterance is a potential topic for future discourse. The list of all the discourse entities in an utterance is called the list of Forward-looking centers.
• The potential topics in the Forward-looking center list are ranked by how prominent they are - in English, the subject is more prominent than object, which is, in turn, more prominent than other things.

The highest-ranked entity is called the Preferred Center of this utterance. This is the entity that's most likely going to be the topic of a future utterance.

• The highest-ranked entity from the previous utterance that actually occurs in the current utterance is the topic of the current utterance, called the Backward-looking center.

For example, here is an analysis of a short discourse:

*John went to school with Mary. She did his homework for him.*

Utterance 1: John = subject = Preferred Center; John, Mary = forward-looking centers; no backward-looking center since this is the first utterance.

Utterance 2: She=Mary = subject = Preferred Center; Mary, John = forward-looking centers; John is the backward-looking center since this is the Preferred Center of the previous utterance.

• We only hypothesize what the actual backward-looking center is, since there are many factors affecting the ranking, besides subject-object-other. There is, however, a way of telling exactly what the backward-looking center is, by using the Pronoun Rule:

**Pronoun Rule:** If there are pronouns in an utterance, the backward-looking center of this utterance is one of them.

This rule allows us to know exactly what the backward-looking center is when an utterance contains only one pronoun. (since the backward-looking center is our topic, it's very salient in everyone's mind, so we don't need to mention the full NP to make the listeners think about it)

• There are four types of transitions between utterances, depending on how the topic is managed. The four transitions are, from smoothest to roughest:

**Continue** The backward-looking center of the current utterance is the same as the backward-looking center of the previous utterance, and the same as the Preferred Center of the current utterance.

**Retain** The backward-looking centers of the current and previous utterances are the same, but the preferred center of the current utterance is different.

**Smooth-Shift** The backward looking center of the current utterance is different from the backward-looking center of the previous utterance, but it is the same as the preferred center of the current utterance.

**Rough-Shift** The backward-looking centers of the current and previous utterances are different, and the backward-looking center of the current utterance is different from the preferred center.
The Rough-shift indicates a complete breakdown in coherence. In discourse, smoother transitions are preferred over rougher ones.

The Pronoun rule, together with the preference for smoother transitions can explain how we interpret pronouns in certain discourses. That is, when we have a choice, we prefer to interpret a pronoun in such a way as to create a smoother transition.

If you're curious about Centering Theory and its applications, here are some additional readings.

- The article that started Centering Theory by Barbara Grosz, Aravind Joshi, and Scott Weinstein.
- A book that contains a number of seminal papers in Centering Theory, with an introduction by the theory's originators, and a number of applications to various phenomena in various languages is Marilyn A. Walker, Aravind K. Joshi, and Ellen F. Prince, editors, Centering in Discourse. Oxford University Press.