Among linguists who study meaning rather than syntax (grammatical structure) or phonetics and phonology (speech sounds and the linguistic patterning of speech sounds), there are two main camps. In the first are those who focus on semantics, the study of what words and sentences mean. In the second are those who—like me—specialize in pragmatics, the study of what the speakers (or writers) of those sentences mean over and above the meaning of the words themselves. We all share the intuition that speakers sometimes say one thing and mean another. People who study semantics are interested in what has been said. Those who study pragmatics are interested in the additional layers of meaning and how they are arrived at: in what goes on beyond the words.

This is not to deny the importance of the words themselves. Another important subdiscipline of linguistics is discourse analysis. Discourse analysts examine spoken, signed, and written words and may focus on any aspect of linguistic behavior—from the study of particular patterns of pronunciation through word choice, sentence structure, and semantic representation, to the analysis of how speech encounters are organized (including any combination of these elements in spoken, written, or signed discourse).

According to discourse analysts, the recipes we read in cookbooks and journals fall into the category of procedural discourse, which includes directions or instructions on how to make something or set something up. Indeed, *procedural discourse* is sometimes referred to as language used in the “instructional register,” in that it instructs an addressee by presenting a coherent, usually chronological series of steps to follow.

Compare the following examples: procedure (1) gives instructions for connecting a television to a PC, while procedure (2) is a recipe for a cucumber and chive salad from one of my late mother’s favorite cookbooks, *Entertaining with Kerr: The Galloping Gourmet*:

(1) 1. Power off both computer and display before making any connections.
2. Use 15-pin d-sub display cable to connect a PC to the LCD TV.
3. When the connection is made, switch to PC source.
4. Set the resolution that suits your viewing requirements.

(2) 1. Slice peeled cucumber into paper thin slices.
2. Sprinkle with salt and leave for one hour, then wash and drain.
3. Mix sugar with vinegar, add cream and season with salt and pepper.
4. Place cucumbers in a salad bowl—toss in dressing and garnish with chives.

Typically, procedural discourse is agency-neutral, which means that although it is aimed at the person reading the
Discourse, it does not matter who that person is. It is also time-neutral: if followed properly, the procedure will work at any time. In many languages, this agency/time neutrality is reflected in the use of the imperative form (marked in bold in the examples above). Because the imperative has no overt subject, it is agency-neutral, and because it has no grammatical tense, it is time-neutral. Indeed, the English word *recipe* has its roots in the imperative form of the Latin verb *recipere*, “to take.” In essence, *recipe* means “Take!”

In some other languages (Hungarian, for example) recipes are traditionally written in the first-person plural. So the recipe in (2) would begin: “We slice peeled cucumber into paper-thin slices; we then sprinkle them with salt and leave them for one hour…” Many chefs adopt this approach when broadcasting on television or on the Internet, as the English imperative is also commonly used to communicate requests or even orders. Presumably, the chef believes that the first-person form will make viewers feel more included, or involved and less as if they are being ordered to do something.

This link between imperatives and orders is reflected in traditional linguistic and philosophical accounts of the grammatical form. The Speech-Act approach of the Ordinary Language philosopher John Austin (and, later, of his student, American philosopher and free-speech activist John Searle) analyzes imperatives as performing directive speech acts, in which the speaker (or writer) requests the hearer (or reader) to bring about some state of affairs. This analysis works well for the familiar sign in example (3) below, which genuinely is an instruction or strong request. However, in the context of a recipe the imperative loses its directive force. The sentence in (4) is not an order, request, or entreaty of any kind. It is simply one stage in a series of steps the reader can choose to follow or not.

(3) Now wash your hands.
(4) Now wash your cucumber.

Linguist (and gastronome) Richard Horsey notes in a 1998 paper that in addition to the imperative form, there is another form commonly used in recipe writing that has no overt subject. This usage is unexpected in a language such as English, which requires an overt subject in every sentence, unlike, say, Portuguese. The English sentence in (5) is ill formed unless it contains the subject pronoun *I*, but the Portuguese sentence in (6) is perfectly acceptable without it:

(5) I have four books.
(6) Tenho quatro livros.

Horsey notes that this characteristic of the English language does not prevent many recipes from being headed by sentences such as (7) and (8):

(7) Serves six.
(8) Feeds a hungry family of four.

There are other examples in which a normally obligatorily transitive verb, such as *beat*, will be used without an overt object:

(9) Take three eggs. Beat well.

A final foible of the grammatical structures used in recipes is that they occasionally contain that quite rare construction, the anti-passive ergative, as in examples (10) and (11):

(10) This dish also eats well with thick toast.
(11) Spinach eats very well with this dish, as do Fondant Potatoes.

Neither potted salmon nor spinach eats anything, but the sentences are well formed.

In order for a piece of procedural discourse to work properly, the writer must take careful account of the readership for which it is intended. The readership, after all, dictates the kind of recipe, the style of presentation as a whole, the technical or nontechnical nature of the vocabulary, and the number of stages into which the procedure is broken down. All of these elements will reflect the knowledge and ability of the person who will be cooking the recipe and help sell the recipe to the reader. While the recipe in (2) is intended very much for a home audience, the one in (12) below is clearly aimed at professionals (or at the very least proficient amateurs). This recipe presupposes a range of expensive ingredients. It also assumes that the person following the recipe understands not only the technical terms used (one of which is an inflected French word) but the concepts behind them:

(12) 1. Reduce the Madeira, Port, truffle stock and shallot until almost a glaze.
2. Add brown veal stock and reduce until required consistency is achieved.
3. Monté with butter, add the finely chopped truffles and season with salt and pepper.

David Farkas, an information designer with a background in linguistics, points out that a piece of procedural discourse typically has two aims: first, to sell itself as a
procedure—the recipe must try to be convincing and credible and implicitly assure the reader that it comes from a reliable source; and second, to convince the reader that any effort put into following it will be rewarded. If the recipe fails in these dual aims, the reader may look for another recipe (or dive in and attempt the dish without following the instructions). Although closely related, these points remain distinct. It is not hard to imagine a recipe (such as [12]) that succeeds with the first aim but would likely fail with the second. Such issues can be explained in terms of context.

In the study of pragmatics context is everything. The distinction between context-dependent and context-independent meaning lies at the very heart of the distinction between pragmatics and semantics. Consider [13]:

(13) He works there.

In the absence of any context, our understanding of this utterance remains incomplete. Before we can infer the referent of the words he and there, we need a context. Sometimes this is provided by preceding discourse, as in [14]:

(14) A: Why was Bill coming out of that fancy restaurant?
   B: He works there.

Sometimes it is provided by other means. Consider the utterance in (15), which contains the ambiguous word fork:

(15) He’s taken the wrong fork.

If the speaker utters (15) as she is standing with you next to a fork in the road, pointing at a car, then it will be the physical environment rather than any preceding discourse that ensures you arrive at the intended interpretation. If you are standing in a restaurant, and the speaker is a chef explaining why he was chastising a sloppy waiter, the interpretation of the word fork will likely be different.

A great deal of work within pragmatics concentrates on aspects of context such as the prior discourse, which provides an evolving backdrop against which utterances are interpreted as a conversation proceeds; and any relevant features of the physical environment in which the conversation is taking place. However, many other aspects of context play a role in utterance interpretation. Context can be viewed from a much wider, sociolinguistic perspective to include also the sociocultural nature of the communicative event taking place, or the social status of those involved in it.9 It could be argued that even this view of context is not broad enough. The set of beliefs or assumptions an individual uses in interpreting an utterance can be drawn from just about any piece of knowledge available to both speaker and hearer.

Philosopher Steven Schiffer10 calls this condition “mutual knowledge.” Consider the exchange in (16):

(16) A: Is he a good chef?
   B: Well, he worked at The French Laundry for three years.

A’s successful understanding of the implied meaning, or implicature, conveyed by B’s utterance—that he probably is a good chef—depends not just on prior discourse but on a mutually known, shared background knowledge of the American culinary scene. Someone who has never heard of The French Laundry will fail to see how B’s reply is even relevant as a response to her question. Indeed, someone who does not know (or fails to infer) that The French Laundry is a restaurant may misunderstand the utterance entirely.

One attempt to view context in this broadest sense is to see it as a cognitive phenomenon. Construed in this way, context is a “psychological construct…a subset of the hearer’s assumptions about the world.”11 Context comprises all these beliefs or assumptions used by the hearer in the interpretation of an utterance, whatever their source.

Considerations of context, then, are crucial to a recipe’s success or failure. Indeed, the whole issue of a recipe needing to meet the needs and demands of its reader can be understood in terms of context. If context is a cognitive phenomenon (and I believe that it is, since other aspects of context such as prior discourse and the physical environment exist for us only in that they are perceived), then the responsibility of the cookbook writer is to get inside the head of the readers: to understand their knowledge and abilities and to give them what they want or need.

Although the mutual knowledge hypothesis is problematic (we can never really know what others are thinking), all communicators certainly aim at establishing a set of assumptions that they at least believe they share, which will represent an unnoticed and unacknowledged backdrop against which the main act of communication will take place. This is what I understand as context.

All the examples of procedural discourse discussed so far share a number of properties. The most immediately obvious is how they look—the way they are laid out on the page. Each procedure is broken down into a number of separate numbered or bulleted points in order that the instructions can be followed easily and effortlessly. In general, a reader does not want to have to wade through paragraphs of elaborate, florid prose when trying to find out how to connect a television to a PC, or—for that matter—to make a cucumber and chive salad.
However, it is worth noting that readers are often prepared to invest significantly more effort in reading a recipe than they might in another example of procedural discourse. It is certainly true that many recipes favor the clear layout of the examples in (2) and (12), but recipes often appear in a much denser, more prose-based layout, as in (17) below:

(17) Briefly, you must soak 2 lb. of salt cod in cold water for 12 hours at least. Drain and rinse it, put it in a pan of fresh cold water and bring it very gently to the boil, then remove it at once from the fire. Take out all the bones, flake the fish, add a crushed clove or two of garlic, and place over a low flame. In separate small saucepans have some olive oil and some milk. Keep all three saucepans over a flame so low that the contents never get more than tepid. Crushing the fish with a wooden spoon you add, gradually and alternately, a little milk and a little olive oil, until all is used up and the cod has attained the consistency of a thick cream. All this, however, is quicker said than done...

It would be unthinkable to “translate” other types of procedural discourse, such as the example in (1), in the same way. One look at (18) below would have the individual searching for another set of directions (or a window out of which to throw the leaflet and possibly the television). What is required here is a clear format that can be followed with minimal effort:

(18) In order that an image from a personal computer might be seen on the television screen display, a successful connection is required between the two devices. Turn off the power to both the computer and display before any connection between the two is attempted, and be sure to have at hand a 15-pin D-sub display cable. The connection between the computer and the television set can then be made by plugging one end into the television and the other into the computer. Once the connection has been achieved, switch the television to the computer “source” (for more information on how to do this, please turn to the “input selection” section of this manual). Once this has been done, consult the resolution information in the appendix to this manual and adjust the resolution so that it best suits your viewing requirements.

The balance between effort and effect is a crucial factor in the way we process information, whether we are reading a set of instructions or engaged in conversation. Pragmatists Dan Sperber and Deirdre Wilson have built a theory of utterance interpretation around the notion of “relevance.” Humans, they propose, are geared to look out for information that is relevant, that will interact with existing mentally represented assumptions. This interaction brings positive effects by strengthening or revising these assumptions, or by drawing new implications or conclusions. Relevance itself is a property of anything that, as humans, we care to think about (or any input to our cognitive processes). It is defined in terms of costs and rewards: the more positive effects gained, and the less processing effort expended in gaining those effects, the greater the relevance of the input to the individual who processes it.

Why are we prepared to put more effort into reading recipes than we are to reading other pieces of procedural discourse? The answer is clear. We put more in because we get more out. A recipe is more than just a set of instructions: it educates and entertains, informs and inspires. In many ways some recipes transcend the category of procedural discourse completely. In discussing the writings of M.F.K. Fisher, linguist Ruth Carroll suggests that recipes are sometimes blended into a more mainstream essay genre that might be called “culinary literature,” or the “food essay,” or “savory reminiscences.” Whatever we call it, the finest recipe writing is, in my opinion, among the finest writing of any kind.

Consider the work of Edouard de Pomiane. De Pomiane’s recipes often contain a gentle preamble and conclusion, which is more than a summary of the dish. These are often highly personal interludes that elevate the procedure—the main event of the piece—into something else entirely. De Pomiane’s recipe for Tourte au Mouton...
Linguistic communication exploits the human ability to interpret the actions of others in terms of the mental states behind these actions, known as “theory of mind.” Indeed, research suggests that the human disposition to attribute mental states is so much a part of our individual (and collective, species-specific) psychological makeup that it is not something we can choose to do or not: we can’t help ourselves, any more than we can help pulling our hand back from a source of extreme heat. Human communication is not just about reading words. It is about reading minds.

The discipline of pragmatics is built largely on foundations laid by the philosopher Paul Grice, who proposed an alternative to the code model: what is now known as the inferential model of communication. Under this model, utterance interpretation is a rational, inferential activity involving the expression and recognition of intentions. It is, in essence, a two-stage process: in the first stage, a hearer decodes the words he or she has heard; in the second, the hearer uses the linguistic meaning to work out (or infer) the speaker’s intended meaning.

By means of illustration, consider the following 1932 recipe from Madame Annette Poulard for her famous omelette de la mère Poulard. She produced the recipe for a certain Monsieur Robert Viel. M. Viel had tired of the rumors and mystique that had grown around Mme. Poulard’s magical omelettes, as well as the proliferation of recipes purporting to offer an explanation. He wrote to Mme. Poulard requesting that she publish an official recipe to set the record straight once and for all. This is what she answered:

Voici la recette de l’omelette: je casse de bons œufs dans une terrine, je les bats bien, je mets un bon morceau de beurre dans la poêle, j’y jette les œufs et je remue constamment. Je suis heureuse, monsieur, si cette recette vous fait plaisir.

Mme. Poulard’s words have a clear, literal meaning. This semantic level of meaning can easily be translated into English:
Here is the recipe for the omelette: I break some good eggs in a bowl, I beat them well, I put a good piece of butter in the pan, I throw the eggs into it, and shake it constantly. I am happy, monsieur, if this recipe pleases you.

However, the message she intends to convey clearly amounts to more than just the sum of the linguistic meaning of those words. Her recipe makes clear that Mme. Poulard has no time for secrets: that she understands (and wants to communicate to M. Viel) that given the freshest eggs and the finest butter, the appropriate amount of salt and pepper, and the proper technique, a delicious omelette will emerge. How does M. Viel arrive at this conclusion? Why, as hearers, do we even feel the need to go beyond the words in the first place? Paul Grice answered these two questions with a single proposal. He suggested that communication was fundamentally rational and cooperative, and that participants work toward a “common aim,” which he explained using a Cooperative Principle and a set of four Maxims of Conversation.20 It follows from the Principle and Maxims that hearers are guided in the interpretive process by the expectation that a speaker will be meeting certain standards. A hearer can therefore recognize the best hypothesis about the speaker’s meaning by arriving at an interpretation that satisfies the expectations the speaker is aiming at, or the standards he or she is trying to meet.

In one sense, of course, it could be argued that Mme. Poulard is being anything but cooperative. But notice that she did not respond to M. Viel’s request for her omelette recipe with a recipe for Sauce Béarnaise, or instructions on how to fly a kite. Nor has she ignored his request completely. Grice’s analysis would suggest that Mme. Poulard is blatantly flouting one of his Maxims of Conversation. She knows that M. Viel will realize this (and knows that he knows—he is currently aware of, and all the facts or assumptions they are aware of, given their cognitive abilities and physical environment. The communication of moods and impressions might typically involve a speaker’s intention to bring about in the hearer a marginal increase in the manifestness of a very wide range of assumptions.

Consider the following example. Laura and I have arrived by ferry at a small Greek island. We disembark. Having scanned the quayside, I smile at her and sigh as my whole body visibly relaxes, the tensions of the journey (indeed, the past few months) leaving me. I then look back to the quayside again, clearly urging her to look too. She gazes along the quayside. What am I drawing her attention to? Is it the taverna at the water’s edge, the octopus drying in the breeze, the fish grilling over charcoal outside the door, the ragged cats sniffing the nets of the proprietor’s boat, the basil plant on the windowsill, the bougainvillea in the old town beyond the main square, the brilliant light? Is it one, many, or all of these things? Or could it in fact be none of these things individually but rather the effect they are clearly having on me?

But Laura does not turn to me and ask, “What on Earth do you mean?” She acknowledges me and smiles back, because she understands. The sights, sounds, and smells perceptible in her physical environment interact with her inferential abilities and her memories to alter her cognitive environment in a way that I might have fore-
seen, making it possible for her to have further thoughts, memories, and feelings similar to my own. This is all that I intended: to share an impression with Laura. My intention cannot be pinned down to one specific proposition or small set of propositions. It was simply to make more manifest to Laura whatever assumptions became manifest to me as I scanned the quayside.

Here is the level at which the best recipes and food writing work. Yes, in one sense they might be seen as a set of instructions. But cooking is not like navigating, or map-making, or linking a television to a computer. There is much more to writing a good recipe than providing a how-to list, and much more to reading one than following a set of instructions. A good recipe doesn’t just instruct its readers, it inspires them. It takes them to a different place, and makes life better.

A delicious derivation of the pissaladière was once, and perhaps still is, a specialty of a small hotel in the dusty, sleepy little town of St. Rémy, in Provence. It consisted of little open pastry cases with three different varieties of fillings; an onion and black olive mixture like the one shown above, one with mushrooms and tomatoes, and the third with prawns and green olives. Those who sometimes feel tempted to put everything from the larder into a pizza or pissaladière may care to take a hint from this. Each of these little tartlets was delicious in its own way, but I much doubt if they would have been so good if all the ingredients had been jumbled up together to make one mixture.22

Elizabeth David’s description of Tartelettes à la Provençale transports me to St. Rémy. I can see the faded, dusty-pink houses nestling in the green hills, I can feel the sun on my back as we walk through the park back to the hotel for lunch. Approaching the hotel, the hum of cicadas gives way to the gentle murmur of conversation and the clinking of crockery and glasses as we walk into the cool dining room. We sit down and order local wine, and I observe the condensation on the outside of the carafe. Those tartlets are perfection: the pastry short and crumbly, the fillings beautifully seasoned. Each ingredient tastes of itself. I take another draft of wine and wait for my lamb. Tomorrow, we’ll drive down to Sète to eat bourride, but that’s another recipe…

Cultural historian Theodore Zeldin once wrote: “Gastronomy is the art of using food to create happiness.”23 I agree. My favorite recipe books don’t live in my kitchen. They are on my bedside table. I read them before I sleep; I read them when I wake; they inform me and inspire me; they enthuse me and energize me; they comfort me. They are, in effect, part of my own personal recipe for happiness.

NOTES
1. This is something of an oversimplification, since in the study of meaning the domain of the technical term “what is said” is of interest to both semanticists and pragmatists.
5. In Portuguese and other “pro-drop” Romance languages, the first person is marked by the ending on the verb. In some languages—Japanese, for example—no morphological marker is present, so the hearer is left to infer pragmatically grammatical information such as person. Horsey questions the received wisdom on English. “English speakers regularly drop subjects (and objects) in a variety of situations. They do it when they are children acquiring the language. They do it as adults whenever they speak informally (i.e., most of the time). They also do it in a number of more formal contexts: in instructions, in diaries. And yet English is described as a language where the subject must be overt” (Horsey, “Null Arguments,” 64).
9. See, for example, Gillian Brown and George Yule, Discourse Analysis (Cambridge: Cambridge University Press, 1983).
12. Indeed, consumer research suggests that recipes are best presented in a certain way, following a specific presentation template. In “The Visual Language of the Recipe: A Brief Historical Survey,” a paper presented at the 2005 Oxford Symposium on Food and Cookery, Ruth Carroll provides an insightful and exhaustive study of the conventions behind the physical layout of both historical and modern recipes, including discussion of the research to which I refer.
16. Horsey questions the received wisdom on English is described as a language where the subject must be overt” (Horsey, “Null Arguments,” 64).
22. David, French Provincial Cooking, 209.