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Telephone *goodbye*s[1]

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ABSTRACT

In urban American telephone conversations, we propose, the final exchange of *goodbye*s doesn't terminate the conversation per se but brings to completion a process of leave-taking in which the two parties reaffirm their acquaintance before breaking contact. This process is optional, so that if the two parties are not acquainted, they should omit the process and not exchange *goodbye*s. We tested this proposal by examining *goodbye*s offered to operators in routine inquiries to a university switchboard. In requests for a single number, callers offered *goodbye* only 39 percent of the time. This percentage increased, however, (1) when callers asked for more personally revealing information, (2) when callers felt more appreciation for the information they received, as indicated by their use of *thank you very much* instead of *thank you*, and (3) when operators revealed more about themselves by making and then correcting their own mistakes. These and other findings suggest that the more closely acquainted the caller and operator feel they have become, the more likely the caller is to want to reaffirm acquaintance and say *goodbye*.

INTRODUCTION

Goodbye is one of those odd words that defy ordinary semantic analysis because they lack literal meaning. In Shakespeare's time, *goodbye* was pronounced *God be wy you*, and its literal meaning was clear. Since then it has acquired a phonetically reduced pronunciation whose origins are known only to dictionary devotees. Of course, even though *goodbye* doesn't have a literal meaning, it has conventional uses. Take its entry in the *Oxford English Dictionary:* "As an exclamation: A form of address at parting; farewell." Or in the *American Heritage Dictionary of the English Language:* "Used to express farewell." Or in *Webster's Third:* "Used conventionally as a concluding utterance at parting or often at closing a telephone conversation." What these specify about *goodbye* are the conventions governing its *use* – namely, that it be said on parting and on ending a telephone conversation.

These characterizations of the convention are clearly incomplete. We don't say *goodbye* to buildings, animals, passing strangers, or friends we expect to see again in just a few minutes. And on parting we might instead say *see you, so long, farewell, cheers, good day, good evening,* or *good night,* each of which

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conveys something slightly different (see Goffman 1971: 82). What conventions *do* govern the use of *goodbye*? In this paper we will try to spell out some of the conventions for its use in urban American telephone conversations. In doing so, we have a broader goal. In recent years there has been a good deal of investigation of word meaning but little investigation of word use. By looking at the extreme case of *goodbye*, we want to discover more about the factors that must be taken account of in any adequate theory of word use.

THREE PERSPECTIVES ON *GOODBYE*

The uses of *goodbye* in urban American telephone conversations can be viewed from three increasingly inclusive perspectives: (1) as isolated illocutionary acts; (2) as parts of an exchange of *goodbyes*; and (3) as parts of the final "closing section" of a telephone conversation. (Throughout, we will treat *goodbye*, *g'bye*, *bye*, and *bye-bye* as interchangeable, even though we are aware that they differ in subtle ways. They will all be called *goodbye*.)

As illocutionary acts, most utterances of *goodbye* would probably be classified by Searle (1976) as "expressives," along with utterances of *thank you*, *I apologize*, and *congratulations*. They belong in this category because they express a feeling of willingness to break contact immediately with the addressee. An utterance of *goodbye*, however, can mean other things too. Depending on the circumstances, it can be used as a hostile rejection of the addressee, as an expression of reluctance to break contact, and so on.

The main concern of speech act theories such as that of Searle (1969), however, is with utterances of sentences that have literal meanings. With these, the illocutionary force of what is said is considered to be a product of the literal meaning of the sentence uttered and the "context," very broadly construed. These theories offer little help in analyzing utterances that are *not* sentences with proper subjects and predicates, or in analyzing utterances that have conventional uses but no literal meanings. That is, they offer little help in analyzing uses of *goodbye*.

From a slightly broader perspective, most utterances of *goodbye* occur as parts of an exchange of *goodbyes*, as at the end of a telephone conversation. Schegloff and Sacks (1973) treat such an exchange as what they call an adjacency pair. In its first half, the caller directs to the callee a first *goodbye* that expects, or projects, a second one in response. In the second half, the callee completes the exchange in the projected way by responding with the second *goodbye*.

In telephone conversations, however, most *goodbye* exchanges aren't really on a par with such adjacency pairs as question and answer, offer and acceptance, and summons and answer.[2] If the two parties are of roughly equal status and if they know each other well, they ordinarily try to break off contact simultaneously. If either one says *goodbye* too soon, that person will be taken as trying to

cut the other one off, which is something both parties want to avoid. For this reason, many *goodbye*s are said simultaneously. Neither is the first half of an adjacency pair, and neither is the second half. Yet the two *goodbye*s are clearly paired, one requiring the other. If one party says *goodbye*, the exchange will be heard as incomplete unless the other says *goodbye* too. The *goodbye* exchange, therefore, might be called, instead of an adjacency pair, a *coordinate pair*. In many conversations, especially those in which the two parties are uncertain about whether such an exchange is required, the two *goodbye*s end up being said one after the other, as if they were a genuine adjacency pair.

From an even broader perspective, this characterization too seems incomplete, for it doesn't say where and how such a *goodbye* exchange is used. The most obvious proposal is offered by *Webster's Third*, quoted earlier: "Used conventionally as a concluding utterance at parting or often at closing a telephone conversation." That is, when the *goodbye* exchange occurs in a telephone conversation, its function is to terminate the call. Let us call this the "termination view" of the *goodbye* exchange. There is evidence, however, that in telephone conversations the *goodbye* exchange has a slightly different use. Our proposal is that it belongs to a specific part of a unit of conversation Schegloff and Sacks (1973) have called the "closing section." For reasons that will become clear, we will call this the "leaving-taking view" of the *goodbye* exchange.

The closing section, according to Schegloff and Sacks, is the last main part of a telephone conversation. The caller and callee cannot simply hang up when they have nothing more to say. They must first agree that they have no more topics to raise. One person, usually the caller, initiates this agreement with a "pre-closing statement," like *We-ell, Okay, So-oo,* or *Well, I've got to run now*. The other person completes it with *Okay* or some other signal of consent. If agreement is reached (the pre-closing statement could be responded to instead with the opening of a new topic), it is heard, according to Schegloff and Sacks, as the first exchange of the closing section. The two speakers may then reinvoke materials just talked about ("I'm glad you can make it to our party"), make arrangements for future contact ("So I'll see you at seven"), wish each other well ("Have a good afternoon"), and do other such things. Finally they exchange *goodbye*s and hang up.

The closing section, then, can be divided into three functionally distinct subsections:

1. *Topic termination*. This function is served by the pre-closing statement and its response, e.g., *okay–okay*.

2. *Leave-taking*. This function is served by the material following the pre-closing statement and its response and including the *goodbye* exchange.

3. *Contact termination*. This function is served by the clicks of the telephones being hung up. Ordinarily, the two parties try to coordinate their closing so that they terminate contact at the same time and don't actually hear these clicks.

The main thrust of our proposal is that the leave-taking subsection is functionally independent of the remainder of the closing section. In particular, it is optional, and when it is missing, there will be no *goodbye* exchange.

The basic function of the leave-taking subsection is a social process we will call "reaffirmation of acquaintance," or simply "reaffirmation."[3] People from different cultures have different ways of breaking contact with each other. In small close-knit societies in which continuing relations among individuals are taken for granted, people may not need an elaborate form of leave-taking. In urban America, however, people generally need to reassure each other that the break in social contact is only temporary – that they are still acquainted and will resume contact at some time in the future (Goffman 1971). As a consequence, in taking leave they will often: (1) summarize the content of the contact they have just had; (2) justify ending their contact at this time; (3) express pleasure about each other; (4) indicate continuity in their relationship by planning, specifically or vaguely, for future contact; and (5) wish each other well (Albert & Kessler 1976, 1978; Knapp, Hart, Friedrich, & Shulman 1973). Indeed, in telephone conversations studied in the laboratory by Albert and Kessler (1978), statements of these five kinds tended to occur near the ends of conversations, and in this order. Furthermore, in most languages, the common terminal expressions incorporate one or the other of the last two functions, at least historically. *See you, auf Wiedersehen, au revoir,* and *hasta la vista* are all derived from expressions of future contact; *goodbye, adios, bon voyage,* and *good night* are all derived from expressions of well-wishing. Thus, at least part of the reaffirmation process is generally expressed in the terminal exchange itself.

All this evidence suggests that the *goodbye* exchange is part and parcel of the leave-taking subsection, and its function ordinarily is to bring the subsection to completion. According to this view, speakers who say *goodbye* imply that they have been engaging in, and are now completing, a reaffirmation process. They imply this even when there is no evidence of reaffirmation other than the *goodbye* exchange itself. In this view, the function of the *goodbye* exchange is not to terminate the closing section itself. That is accomplished by the closing clicks of the telephones being hung up. Under the termination view, in contrast, the closing section and hence the telephone conversation are terminated not by the closing clicks but by the *goodbye* exchange. Speakers who say *goodbye* do not imply that they have been engaging in a reaffirmation process. All they imply is that they are terminating the closing section and therefore the telephone conversation.

If the leave-taking view is correct, then two parties who do *not* need to reaffirm each other's acquaintance should omit the leave-taking subsection and its *goodbye* exchange. There are two obvious types of conversation in which this might happen. The first is the continuation call. Imagine a boss telephoning her secretary in the next office and asking him to call for an airline reservation and then report back. Since the conversation will resume in a minute, it can end with

a pre-closing exchange (*Okay?-Okay*), after which the two immediately hang up. A *goodbye* exchange would seem out of place, for it would imply that the boss and secretary were preparing for a longer break (see Goffman 1971: 83). This implication is as it should be if the *goodbye* exchange belongs to the leave-taking subsection and does not terminate the telephone conversation itself.

The second type of conversation not needing a reaffirmation process is the routine inquiry, as when one calls directory assistance at the telephone company to ask for someone's telephone number. In such an inquiry, the caller typically gives the operator a name and address, receives the number, offers *thank you*, receives *you're welcome*, and hangs up, all in a brief and impersonal conversation. The caller isn't previously acquainted with the anonymous operator, doesn't make his or her acquaintance during their brief conversation, and has no reason to believe or pretend that they should ever meet or make contact again. The caller has no need to initiate a reaffirmation process. According to the leave-taking view, there should ordinarily be no *goodbye* exchange. In the termination view, it shouldn't matter whether the reaffirmation process is needed or not. If a *goodbye* exchange is used to terminate telephone calls, it should occur in routine inquiries too.

We will report three studies of routine inquiries in which we tested the leave-taking view of the *goodbye* exchange. The first was designed to confirm our intuitions that routine inquiries in urban America do not ordinarily end with a *goodbye* exchange. It was also designed to see how callers view the *thank you-you're welcome* that does end these inquiries. The second study was intended to identify some of the circumstances in which routine inquiries *do* end with a *goodbye* exchange. The final study was designed to give us a closer look at one of these conditions.

Experiment 1

The main switchboard at Stanford University employs a number of operators to answer requests for the telephone numbers of students, faculty, staff, and hospital patients. A typical inquiry goes like this:

(Ring)
OPERATOR: Stanford information.
CALLER: Yes. I would like the number of John Derringer.
O: Is this person a patient, student, or faculty/staff member?
C: Oh, it's a student.
O: Could you spell that last name, please?
C: D-E-R-R-I-N-G-E-R, Derringer.
O: One moment, please. (Pause.) The first name was John?
C: Yes.
O: The number we have is 698-9991.
C: 698-9991.

O: That's correct.
C: Thank you.
O: You're welcome.
C: (Closing click [hangs up].)
O: (Closing click [hangs up].)

In such an inquiry, the caller's aim is to get a single piece of information, and not to talk to the operator and make his or her acquaintance. If so, most callers shouldn't feel the need for a reaffirmation process and so shouldn't initiate a *goodbye* exchange. The first question to be investigated is how often routine inquiries like this end with a *goodbye* exchange.

If routine inquiries don't ordinarily end with a *goodbye* exchange, how do they end? In particular, what is the function of the "gratitude exchange," *thank you–you're welcome*? The obvious function of the gratitude exchange, of course, is to exchange an expression of appreciation and an acknowledgment of that expression. According to the leave-taking view, however, it should have an additional function, that of the pre-closing exchange. This pre-closing exchange gives the caller the opportunity of initiating a leave-taking subsection, with its reaffirmation process, before terminating contact by hanging up the telephone. It is just that most callers do not choose to take this opportunity, since they have no acquaintance to reaffirm.

An alternative view, consistent with the termination view we outlined earlier, is that each such conversation must end with some sort of terminal exchange. Ordinarily, that function is served by the two *goodbye*s. In routine inquiries, it happens to be served instead by *thank you–you're welcome*. There are two immediate strikes against this view. First, with *thank you–you're welcome* serving as the terminal exchange, there is now no sensible pre-closing exchange. That function would have to be served by the adjacency pair *698-9991–that's correct*, which isn't plausible. Second, it should never be necessary to follow up *thank you–you're welcome* with a *goodbye* exchange, since the conversation will already have been terminated by *thank you–you're welcome*. But as we will show, routine inquiries do sometimes end with *goodbye*s. Despite these difficulties, it could be assumed that routine inquiries, unlike ordinary telephone calls, lack a pre-closing exchange and have their own special terminal exchange, namely *thank you–you're welcome*. Let us call this the "terminal view" of the gratitude exchange.

To compare these two views, we enlisted the help of seven Stanford University telephone operators, three males and four females. We asked them to respond to the caller's *thank you* alternately (in cyclic fashion) with *you're welcome*, with *goodbye*, or with *you're welcome–goodbye*. All operators were given printed schedules specifying the response they were to give on each successive call, and for each call, they were to mark down on the same schedule, first, whether or not the caller said *goodbye*, and second, whether the caller was male or female. The

Table 1. *Percentages of callers saying* goodbye *following three different operator responses (Experiment 1)*

Operator response	Male operator	Female operator	Totals
You're welcome	30.6	45.8	39.2
Goodbye	42.1	56.9	50.4
You're welcome-goodbye	55.1	64.6	60.4
Totals	42.5	55.6	49.9

operators applied this routine only to callers requesting one student telephone number. Each operator did this for a total of 108 calls, 36 for each of the three types of responses. Discounting 17 incomplete recordings, we examined a total of 739 calls, 441 from male callers and 298 from female callers.

The percentages of callers saying *goodbye* for each type of operator response are listed in Table 1. Three aspects of these data are of particular interest: the relative paucity of *goodbyes*, the differences among the operators' responses, and sex differences for both callers and operators.

The terminal exchange. When the operators responded with *you're welcome* alone (as they ordinarily would), only 39% of the callers went on to initiate a *goodbye* exchange. The rest were content to break contact simply by hanging up. Our initial working assumption appears to be correct: for routine inquiries like these, callers who say *goodbye* are in the minority.

How should *thank you-you're welcome* be viewed in these inquiries, as a pre-closing exchange that precedes an optional *goodbye* exchange, or as a terminal exchange? The data just noted rule out the strongest version of the terminal view. If *thank you-you're welcome* were invariably heard as the terminal exchange, then no caller should ever initiate a *goodbye* exchange. But 39% of the callers did just that. That is, the callers had two options after the gratitude exchange: either to hang up or to initiate a *goodbye* exchange. A significant number took each of these options.

A weaker version of the terminal view is *not* eliminated by the 39% figure alone. Assume that *thank you-you're welcome* is heard as ambiguous between a pre-closing exchange and a terminal exchange. When it is heard as a pre-closing exchange, callers invariably go on to initiate a terminal exchange. According to the data just noted, 39% of the callers would have heard it this way. When it is heard instead as a terminal exchange, callers invariably hang up. According to the same data, 61% of the callers would have heard it this way.

This view can be tested by looking at what happened when the operators responded to *thank you* with *goodbye*. This response ought to change how often the (altered) gratitude exchange is heard as a pre-closing exchange rather than as a terminal exchange. *Thank you-goodbye* should be heard as an even stronger

terminal exchange than *thank you–you're welcome*, since *goodbye* is found only in terminal exchanges. This bias in interpretation shouldn't affect the 61% of the callers who would hear *thank you–you're welcome* as a terminal exchange anyway. However, it should convince at least some of the other 39% to treat it as a terminal instead of a pre-closing exchange. And those callers who are convinced should forgo the *goodbye* exchange. The prediction, then, is that for *thank you–goodbye*, even fewer than 39% of the callers will say *goodbye*. This prediction is clearly disconfirmed. As shown in Table 1, the number of callers who said *goodbye* in these conditions (50%) is larger, not smaller, than the 39% in the ordinary conditions, $t(6) = 1.89$, $p < .05$.

This increase in *goodbyes* is predicted by the leave-taking view. If *thank you* is invariably heard as the first half of a pre-closing exchange, it should project *you're welcome* and not *goodbye*. If the operator unexpectedly responds with *goodbye*, this should be heard, not as completing the gratitude exchange, but as initiating leave-taking. Callers should then return a *goodbye*, and they often did. If the operator unambiguously completes the gratitude exchange before initiating the *goodbye* exchange, as with *You're welcome–goodbye*, even more callers should return a *goodbye*, and they did. For *You're welcome–goodbye*, 60% of the callers returned a *goodbye*. This is reliably more than the 50% of the callers who did so when confronted with *goodbye* alone, $t(6) = 2.80$, $p < .01$. Put differently, the exchanges *thank you–you're welcome* and *goodbye–goodbye* both have their own functions in telephone conversations, and the functions do not overlap.

Why weren't there closer to 100% *goodbyes* in response to the operators' *goodbye* and *you're welcome–goodbye*? One reason is that many callers (61% of them) were in the process of hanging up the telephone after the anticipated response of *you're welcome*. When *goodbye* or *you're welcome–goodbye* appeared instead, many of these callers had probably committed themselves too far to recover and say *goodbye*. Our operators reported that the last half of *you're welcome–goodbye* was occasionally cut off by the callers, effectively making their response *you're welcome* anyway. Another reason, related to the first, is that it is ordinarily the caller, not the operator, who initiates the terminal exchange in these inquiries, and so the operators' *goodbyes* were not expected. It may be surprising that *goodbye* and *you're welcome–goodbye* received as many *goodbyes* as they did.[4]

Sex differences. How often *goodbye* was offered depended on whether the operator and the caller were male or female. The percentages of *goodbyes* classified by sex of operator and sex of caller are shown in Table 2. The male operators were offered *goodbye* reliably less often, by 13%, than the female operators, $t(5) = 4.97$, $p < .005$. Also, male callers offered *goodbye* less often than female callers, but by only 7%. This difference is not quite reliable, $t(6) =$

Table 2. *Percentages of callers saying* goodbye *by sex of operator and sex of caller (Experiment 1)*

	Male operator	Female operator	Totals
Male caller	36.7	54.5	47.9
Female caller	50.7	57.3	54.5
Totals	42.5	55.6	49.9

1.31, $p < .12$. Although there was a hint that *goodbye* was offered more often when the caller and operator were of the opposite sex, this 7% tendency was not reliable either.

Why were callers so reluctant to offer *goodbye* to male operators? One possible reason is that men may be perceived in general as being less friendly and so less willing to take part in a reaffirmation process. There is some evidence that women are more supportive, polite, and expressive in their use of language than men (Haas 1979; Lakoff 1973, 1975), although this evidence is in some dispute (Brouwer, Gerritsen, & de Haan 1979; Crosby & Nyquist 1977). If the evidence were firm, callers would have a legitimate reason for perceiving male operators as less willing than female operators to participate in the reaffirmation process.

A more likely reason is that men are seen as out of place as operators. In the United States, operators have traditionally been women; only recently have a few men begun to take these jobs. At Stanford University, most of the operators are women. The stereotype of the woman operator is very strong indeed. One student's father, calling long distance, was taken aback when his call was taken by one of our male operators. After fumbling with his inquiry, he remarked, "I didn't know they let *guys* be operators." His implication was that being an operator is "women's work," like being a nurse or secretary. Now if men are seen as out of place as operators, callers should be less comfortable with them and less willing to assume acquaintance and offer *goodbye*.

As for the difference between male and female callers, which reappears in experiments 2 and 3, there are, again, several possible explanations. One already mentioned is that men may be less supportive, polite, and expressive in general than women. If so, men should be more reluctant to get acquainted with operators and offer them a *goodbye*. Another possible explanation is that in our academic sample, there was a bias toward male callers who were dominant and assertive and toward female callers who were more supportive and polite. However, most of the callers were students, and given the professional orientation of most students, this explanation doesn't seem too likely. Whatever the explanation, the difference between male and female callers isn't large.

Experiment 2

The main function of the leave-taking subsection is to enable the caller and callee to reaffirm their acquaintance in preparation for breaking contact. If they aren't at least minimally acquainted, of course, they have nothing to reaffirm, and that is why, we have suggested, routine inquiries don't ordinarily have leave-taking subsections. Yet not all inquiries to the Stanford University switchboard are equally routine. Although most callers ask for a single telephone number (these were the only calls we looked at in Experiment 1), a significant number ask for such things as the time of a campus play or concert, the location of a university building, or the dates of registration or exam week. In these less routine calls, the callers reveal something more personal about their needs and allow the operators to show that they are more than substitute telephone books, that they are intelligent and know a good deal about campus life. Some of these callers should perceive that they have crossed the threshold of minimal acquaintance needed for at least a pro forma reaffirmation process. And the more personalized these calls become, the more likely callers should feel the need for a leave-taking subsection with its exchange of *goodbyes*.

To test this prediction, we had one part-time operator keep track of his calls over fourteen working days. He excluded two types of calls. The first were transfer calls, in which he either took a call transferred to him from an extension or transferred a call himself to another operator or extension. These were excluded because of the lack of opportunity for a typical ending. The second were emergency calls, which required the operator's undivided attention. Over the fourteen-day period he logged 530 calls.

Before the study began, we worked out with the operator a scheme for categorizing the calls into five types:

(1) *One telephone number*. The caller asked for a single number.

(2) *Two telephone numbers*. The caller asked for two or more numbers in succession.

(3) *Simple information*. The caller asked for information (other than a number) that could be provided in roughly a single sentence. Example: *What time does the basketball game start tonight?-Eight o'clock.*

(4) *Complex information*. The caller asked for information that required more than one sentence to be answered. Example: *Could you tell me how to get to Memorial Auditorium? I'm at the Good Earth on University Avenue.-Sure. Go down University to your right,* etc.

(5) *Operator mistake*. In giving a routine number, the operator would occasionally make a mistake in spelling a name, saying the number, or doing something else, and would apologize and correct himself. We decided to keep track of these one-number calls separately from the other calls in category 1.

For each call, the operator noted on his data sheet which of these five categories the call belonged in.

Table 3. *Percentages of* goodbye *exchanges for 530 telephone inquiries classified by content (Experiment 2)*

Information Requested	Male caller	Female caller	Totals
One telephone number (212; 134)*	21.7	29.9	24.9
Two telephone numbers (21; 9)	38.1	33.3	36.7
Simple information (51; 40)	58.8	57.5	58.2
Complex information (32; 10)	90.6	80.0	88.1
Operator mistake (15; 6)	53.1	100.0	66.7
Totals	36.6	40.2	37.9

*The two figures in parentheses are the numbers of male and female callers, respectively, falling in that category.

The operator also kept track of callers' expressions of gratitude. Ordinarily, callers say *thanks* or *thank you,* which we will call weak expressions of gratitude, but sometimes they say *thanks a lot* or *thank you very much*, which we will call strong expressions of gratitude. For each call the operator recorded whether the gratitude expressed was one of the weak forms, for which we will use *thank you,* or one of the strong forms, for which we will use *thank you very much.* To all these expressions, the operator responded *you're welcome.* Finally, the operator recorded for each call whether or not the caller said *goodbye* and whether the caller was male or female.

Not quite so routine inquiries. The percentages of *goodbye*s for the 530 calls logged, shown in Table 3, were much as we expected. If we set aside operator mistakes for the moment, we can use intuition to order the four categories of inquiries from least to most personal: one number, two numbers, simple information, and complex information. The percentage of *goodbye*s increases from each category to the next in this order, from 25% to 88%. The difference between every two adjacent percentages is significant, $\chi^2(1) \geq 3.03$, $p < .05$. That is, the more personal the inquiry, the more likely the caller was to offer *goodbye.*

These four categories, however, can be ordered for personalization by a more objective criterion: how often the caller expressed strong instead of weak gratitude. The less routine information the callers seek, the more they ask the operator to go beyond his ordinary duties and to grant them a personal favor. The callers should then have good reason to express something stronger than a pro forma *thank you.* Indeed, the percentages of strong-gratitude expressions went up step by step in the four categories in Table 3 as follows: 30%, 47%, 48%, and 71%.

Callers who use *thank you very much* to express appreciation should also be more likely to feel they have become acquainted enough with the operator to warrant a closing section and a *goodbye* exchange. That is, callers who used

Table 4. *Percentages of gratitude exchanges followed by* goodbyes *for 530 telephone inquiries classified by content (Experiment 2)*

Information requested	Gratitude expressed: Thank you	Gratitude expressed: Thank you very much	Totals
One telephone number (243; 103)*	14.0	50.5	24.9
Two telephone numbers (16; 14)	18.8	57.1	36.7
Simple other information (47; 44)	53.2	63.6	58.2
Complex information (12; 30)	83.3	90.0	88.1
Operator mistake (11; 10)	36.4	100.0	66.7
Totals	23.1	62.2	37.9

*The two figures in parentheses are the numbers of callers saying *Thank you* and *Thank you very much*, respectively, falling in that category.

thank you very much should be more likely to offer *goodbye*. And they did, by a ratio of about three to one.

The percentages of *goodbyes* following *thank you* and *thank you very much* are listed in Table 4 separately for each of the five categories of inquiries. On the average, *thank you* was followed by *goodbye* 23% of the time, whereas *thank you very much* was followed by *goodbye* 62% of the time. For this kind of data, such a difference is very large, and it is highly reliable, $\chi^2(1) = 79.33$, $p<.001$. This difference held for each of the five categories separately, even though the combined number of *goodbyes* per category also rose dramatically. For one-number calls taken separately, the difference was 14% to 50%, which was highly reliable, $\chi^2(1) = 49.64$, $p<.001$. For two-number calls, the difference was 19% to 57%, which was also reliable, $\chi^2(1) = 3.23$, $p<.05$. For the other three categories, there were also differences, but they were not significant, probably because there were too few cases for the test to be reliable.

The expressions of strong and weak gratitude suggest that there are two sources for the caller's judgment of personalization. The stronger the gratitude that callers feel for the information they have received, the more likely they are to feel personally acquainted and to offer *goodbye*. At the same time, the more they have asked the operator to go beyond the call of duty and to provide them with special information, the more likely they are to feel personally acquainted and to offer *goodbye*. These two sources are to some extent independent, since their consequences on *goodbye* are, at least partly, additive.

As for the sex differences, there were reliable differences between male and female callers. On one-number calls, males offered *goodbye* 8% less often than females, $\chi^2(1) = 2.92$, $p<.05$. On the remaining calls, this difference disappeared, with male callers offering *goodbye* 63% of the time and female callers doing so 62% of the time. This change to no difference is itself reliable, $\chi^2(1) = 14.91$, $p<.001$. In this experiment, of course, the operator was male (and not one of the three male operators who participated in Experiment 1). On the

one-number calls he was offered *goodbye* by only 25% of the callers. This figure is fairly close to the 31% figure for the three male callers in Experiment 1 and reinforces the earlier finding that all callers are reluctant to offer male operators *goodbye*.

Why should the male reluctance to offer *goodbye* disappear on inquiries for more than a single number? One might suppose that on one-number calls females are more polite pro forma than males. With increased contact, men and women may both come to have a genuine feeling of acquaintance with the operator, a feeling that prompts the high rate of *goodbye*s (around 62%). If so, men and women should offer *goodbye* about equally often on these other calls, as they did. Without further evidence, however, this explanation must remain speculation.

Operator errors. Operators, being human, make errors, and ours was no exception. On occasion he misspelled a name, misquoted a number, or made some other mistake that he or the caller had to correct. By his own reports, when he made such a mistake, he would offer a short apology, like *I'm sorry* or *My fault,* correct himself, and then go on.

How should the callers react to these mistakes? It is natural to assume that they should feel slightly irritated because of the time and energy they wasted. So on mistakes, the callers should, if anything, offer fewer expressions of strong gratitude and fewer *goodbye*s. What happened was just the reverse. The pertinent data are shown in Table 3 and Table 4 under "operator errors." Since these errors were all made on single-number calls, they can be compared directly with the one-number calls. When the operator made an error, callers were about two-and-a-half times more likely to initiate a *goodbye* (67% to 25%). This difference is highly reliable, $\chi^2(1) = 15.41$, $p<.001$. And they were about one-and-a-half times more likely to express strong gratitude (47% to 30%). This difference is also reliable, $\chi^2(1) = 6.36$, $p<.025$. As with the other four types of calls, callers were also more likely to say *goodbye* following *thank you very much* than following *thank you* (100% to 53%). This difference is reliable, $\chi^2(1) = 6.90$, $p<.01$.

How might one account for these unexpected findings? Although there are several possibilities, an account in keeping with the leave-taking view goes as follows. When operators make errors, they inadvertently reveal something personal about themselves. They show that they are capable of making errors, that they are embarrassed by their mistakes, and that they are considerate enough to apologize. These little cycles of error, apology, and repair reveal just enough about the operators to encourage many callers to feel minimally acquainted with them and therefore to include a leave-taking subsection with its *goodbye*. It is ironic that, in routine calls like this, about the only way operators can reveal enough for a caller to feel acquainted with them is by accident - by making mistakes.

Experiment 3

The purpose of Experiment 3 was to test this account of operator errors more thoroughly. To do this, we had our operator make planned mistakes. On each of many calls, he made one of two kinds of errors: a "system" error or an "operator" error. For the system error, immediately after the caller spelled out the name of the person whose number he or she wanted, the operator said, "I'm sorry. There was a loud click in my ear, and I couldn't hear you. Could you spell that name again?" This error was attributed to a malfunction in the telephone system, not to any fault of the operator. For the operator error, the operator said instead, "I'm sorry. I just jiggled my headset, and I couldn't hear you. Could you spell that name again?" Here the error was attributed to the operator himself.

If our operator sounded genuine, he should receive more *goodbye*s with either type of error than with no error. In making either error, he lets the caller in on his problem, revealing personal information that he wouldn't otherwise reveal. Yet he should be offered more *goodbye*s on operator errors than on system errors. When the system goes wrong, he apologizes for the system and explains what is wrong, but doesn't have to admit any further responsibility. When he himself does something wrong, he reveals more. He claims responsibility for the malfunction, apologizes for his inconvenience, and puts in extra effort to make up for it. He shows himself to be fallible and ready to admit his mistakes. If the operator error *does* lead to greater personal acquaintance, more callers should be willing to reaffirm acquaintance and offer *goodbye*.

Our operator in this study was the same man who participated in Experiment 2. Over six days of part-time work, he cycled through no error, a system error, and an operator error for a total of 156 calls, 52 for each type of error. Each call he recorded was for a single number – precisely the same category as the one-number calls in Experiment 2. For each call, he noted whether the expression of gratitude was strong or weak, whether or not the caller said *goodbye*, and whether the caller was male or female.

The percentages of *goodbye*s for the three types of calls, listed in Table 5, are consistent with our account. They replicate the results of Experiment 2, at least very broadly. With the two errors combined, there were more *goodbye*s for calls with errors than for calls without, 40% to 27%. This difference is reliable, $z = 1.65$, $p < .05$. Note that the percentage of *goodbye*s the operator received on one-number calls without errors was virtually the same in Experiments 2 and 3, 25% and 27%, respectively. The 25% figure, however, is much more reliable, since it is based on 346 calls instead of on 52 calls. If the calls with errors in Experiment 3 (40%) are compared with this more reliable figure (25%), the difference shows itself to be highly reliable, $z = 3.08$, $p < .001$. As in Experiment 2, then, errors with apologies lead to an increase in *goodbye*s.

According to our account, operator errors ought to elicit the most *goodbye*s, system errors the next most, and no errors the least. This predicted trend is

Table 5. *Percentages of* goodbye *exchanges for calls with no error, a system error, or an operator error (Experiment 3)*

Type of error	Male caller	Female caller	Totals
None (30; 22)*	20.0	36.4	26.9
System (33; 19)	30.3	42.1	34.6
Operator (30; 22)	43.3	50.0	46.2
Totals	31.2	42.9	35.9

*The two figures in parentheses are the number of male and female callers, respectively, with whom that type of error was made.

reliable (Snedecor & Cochran 1973), $z = 2.04$, $p<.025$. Taken alone, the 19% jump in *goodbyes* from no error to operator error is reliable, $z = 1.96$, $p<.025$; however, the 8% jump from no error to system error, and the 12% jump from system error to operator error, are not. If the 346 one-number calls from Experiment 2 are again used for the comparison, the 19% jump is highly reliable, $z = 2.97$, $p<.005$, and the 8% jump marginally reliable, $z = 1.50$, $p<.07$. So there is evidence that operator errors elicit more *goodbyes* than system errors, which in turn elicit more *goodbyes* than no errors at all.

The operator errors in Experiment 2, however, elicited many more *goodbyes* (67%) than did either the operator errors (46%) or the system errors (35%) in Experiment 3. The 67% to 46% difference is not quite reliable, $z = 1.59$, $p<.12$, but the 67% to 35% difference is, $z = 2.50$, $p<.02$. Why? The most likely reason is that the spontaneous mistakes of Experiment 2 were more serious and led to more talk and more effusive apologies than the planned mistakes of Experiment 3. Another possibility is that our operator wasn't as convincing at acting as he was at the real thing. His spontaneous errors may have sounded more sincere than his simulated errors.

As in Experiment 2, there were more expressions of *thank you very much* the more personal the call was. There were 30.8% instances of *thank you very much* when there was no error and 42.3% each when there was a system error or an operator error. The two 42.3% figures are not reliably larger than the 30.8% figure, but they are reliably larger than the 29.8% figure for the corresponding 346 single number calls from Experiment 2, $z = 1.82$, $p<.05$. As in Experiment 2, there were also more *goodbyes* following *thank you very much* than following *thank you*. This difference, shown in Table 6, was 62% to 20% and is highly reliable, $z = 5.24$, $p<.001$. The difference goes in the same direction for each type of operator error taken separately. So the more acquainted callers feel they have become with an operator, the freer they are to say *thank you very much* and to follow that up with *goodbye*.

In Experiment 3, male callers were again more reluctant than female callers to

Table 6. *Percentages of gratitude exchanges followed up by* goodbyes *for calls with no error, a system error, or an operator error (Experiment 3)*

Type of error	Gratitude expressed: Thank you	Gratitude expressed: Thank you very much	Totals
None (38; 14)*	21.1	42.9	26.9
System (30; 22)	20.0	54.5	34.6
Operator (30; 22)	20.0	81.8	46.2
Totals	20.4	62.1	35.9

*The two figures in parentheses represent the number of callers saying *Thank you* and *Thank you very much*, respectively.

offer *goodbye*, 31% to 43%. This difference, however, is not quite reliable, $z = 1.48$, $p < .10$.

THE *GOODBYE* EXCHANGE

Farewells, like greetings, are what Goffman (1971: 79) has called "access rituals": "Greetings mark the transition to a condition of increased access and farewells to a state of decreased access." These rituals generally require specialized linguistic forms that Ferguson (1976) has called "politeness formulae." The choice of formula depends on such factors as intimacy between the two participants, relative status, and length of contact or expected time apart (see also Irvine 1974). The formulae are also distinguished in child language by the fact that they tend to be explicitly taught as parts of fixed routines, as in *Say "bye-bye" to Grandma, Johnny* (Gleason & Greif 1980; Gleason & Weintraub 1976). *Bye-bye* tends to be the first such formula learned in English. Many children learn how to wave goodbye before they can talk. Later they simply add *bye-bye* to that routine.

What is the structure of these farewell rituals or routines, and what role does *goodbye* play in them? Our proposal, which is confined to urban American telephone conversations, is this. The closing section of these conversations consists of three subsections. The first is topic termination, which is accomplished by the pre-closing exchange. The second is leave-taking. The third is contact termination, which is accomplished by the closing clicks of the telephones being hung up. It is the leave-taking section where farewells are accomplished. That section is specifically designed for the two parties to reaffirm their acquaintance, and so it is optional. If the two parties need no such reaffirmation, the section will be omitted entirely. If the two parties need only a minimum or pro forma reaffirmation, the section will be minimal too, consisting only of an exchange of *goodbyes*. If the two parties are well acquainted, and if the break is to last long, the section will consist of more elaborate preparations before ending with a

goodbye exchange. The *goodbye* exchange (or a suitable substitute, perhaps an exchange of *so long*s or *see you*s) is therefore the only obligatory part of leave-taking, and it ordinarily completes it. When the *goodbye* exchange appears alone, it serves as the minimal indication that the two parties have engaged in a reaffirmation process.

There are several lines of evidence for this view, much of it from routine inquiries.

1. The topics that can be brought up in the leave-taking section all appear to be concerned with the reaffirmation of acquaintance. In this section, the two parties may summarize their conversation, justify ending it, express pleasure in each other, plan for the future, and wish each other well, all of which are part of the reaffirmation process (Albert & Kessler 1976, 1978; Knapp, Hart, Friedrich, & Schulman 1973). If they introduce other topics, they must mark them with such expressions as *I forgot to tell you* or *by the way* to show that they are breaking away from the closing section proper (Schegloff & Sacks 1973).

2. The *goodbye*s that end this section are historically derived from *God be with you,* which was later assimilated into such expressions as *good day* and *good night.* That is, *goodbye* once literally expressed the final part of the reaffirmation process, the well wishing, and it still echoes the well wishing in its parallels with *good day* and *good night.*

3. The conversations that don't require reaffirmation, such as continuation calls and routine inquiries, are just the ones that often lack a leave-taking section. In our sample, 61% of the basic routine inquiries ended with no leave-taking section, with no *goodbye* exchange.

4. Before two parties can reaffirm acquaintance, they must be minimally acquainted. And to feel acquainted, we have been assuming, they must mutually know something about the beliefs and desires of at least one of them. The more beliefs and desires one party reveals, the more acquainted the two should feel, and the more likely the caller should be to offer *goodbye*. This we found in Experiment 2, where *goodbye* was more frequent the more revealing the information the caller asked for – from one number to two numbers to simple information to complex information. We also found this in Experiments 2 and 3, where *goodbye* was more frequent the more the operator revealed about his beliefs and desires – from no error to a system error to an operator error.

For the last finding, one might suggest an alternative explanation: the longer the conversation, the more likely it is that the caller will offer *goodbye*. This explanation has two defects. First, longer conversations don't always lead to more *goodbye*s. In Experiment 2, the two-number calls, which required two full exchanges of information with the operator, lasted longer on the average than the simple information calls, yet elicited slightly fewer *goodbye*s. In Experiment 3, the system errors lengthened the conversations by as many words as did the operator errors, yet led to fewer *goodbye*s. And continuation calls can be very

long and still end without *goodbyes*. Second, and more fundamentally, length itself is no explanation. It may be that the longer the conversation, the more the two parties *perceive* themselves as being acquainted, since, generally, the longer the conversation, the more likely it is that each of them will in fact have learned something about the other's beliefs and desires. If this is so, the explanation is not length but perceived acquaintance.

5. For personal reasons, callers vary a good deal in how much they appreciate the operator's help. When callers show appreciation, they should feel that they and the operator have become more acquainted, since the operator now knows more about the callers' desires. Callers should then be more likely to offer *goodbye*. This we found in Experiments 2 and 3. Callers who said *thank you very much* offered many more *goodbyes* than callers who said just *thank you*. Another way to view this is that the callers who said *thank you very much* were more polite, and as polite people, they were also more likely to offer *goodbye* as a pro forma signal of minimal acquaintance. But being polite is really showing concern for the other, which comes down to much the same thing as showing appreciation.

6. According to one common stereotype, women are more supportive, polite, and expressive than men, and there is some evidence that the stereotype may be based on fact. If so, female callers ought to be more willing than male callers to become acquainted with an operator. In all three experiments, female callers were more willing, offering *goodbye* more often than male callers, though by only a small margin.

7. According to another common stereotype, being an operator is a woman's job. If so, male operators should be seen as out of place, as people one should be reluctant to become acquainted with, and they were. In Experiment 1, they were offered *goodbye* less often than were female operators, and by a wide margin. They were shunned by callers of both sexes.

The *goodbye* exchange, then, isn't simply a device for terminating telephone calls, as is often assumed. If it were, there would be no explanation for why it is used more often the more acquainted the caller and operator become. Rather, it signals the presence of, and it completes, the leave-taking subsection of the closing section of the conversation. Insofar as all ordinary calls need a closing section, and insofar as many calls also require leave-taking, the *goodbye* exchange is certainly part of closing a telephone conversation. Yet its specific function is really to complete the process of reaffirming acquaintance, which is only one part of the closing process.

The more general lesson here is that the meaning of *goodbye* inheres in its use, and its use is tied to certain socially and culturally defined routines (cf. Godard 1977; Hymes 1972). Its meaning cannot be described for isolated utterances, or even for isolated exchanges of *goodbye*. It can only be described in relation to the larger routines of which *goodbye* is a part.

NOTES

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2. We are indebted to Erving Goffman for these observations.

3. For a characterization of acquaintance that is close to what we mean here, see Goffman (1963 Ch. 7).

4. How are the operators' unexpected *goodbyes* perceived? If they are heard as part of the leave-taking process with its reaffirmation of acquaintance, they should be construed as mild attempts to form a relationship with the callers. For some callers, this may be perceived as friendliness, and for others, mild ingratiation. Since the callers tended to reciprocate with more *goodbyes* than otherwise, we can assume that the more common perception was that of friendliness.

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