

JO ANN GOLDBERG*

A SYSTEM FOR THE TRANSFER OF INSTRUCTIONS IN NATURAL SETTINGS

This paper is one of a collection of concerted efforts to locate the systematically regular features of conversation in natural settings. Conversation is serial. For example, amongst two parties, party A will talk first, then party B, then A, then B, etc. In two party conversations, turns at talk constitute a series of alternately produced utterances: ABABAB. Overlaying this serial arrangement of parties utterances are discretely characterizable conversational *Sequences*. One research tactic for the discovery of systematically regular features of conversation has consisted of locating such conversational Sequences embedded in the ongoing interaction. In this paper, we shall inspect a Sequence commonly used for the transfer of Instructions in natural settings. We shall eventually characterize the Sequential features as comprising an *Instructional Structure*. **

A common event in verbal encounters is the delivery of Instructions of various kinds by one party to another. Commonly, such Instructions have to do with the transfer of telephone numbers, driving directions, recipe cooking directions, orders at a restaurant, and the like. They are usually delivered over a grouping of serially connected turns, joined like links of a *chain*. Some Instructional chains are quite short. For example,¹

1.

C: ... what is your phone number.

L: Seven-four-five.

C: Seven-four-five. =

L: Six-seven-eight-nine.

C: Six-seven-eight-nine. =

L: M//hm.

C: 'hh

Or,

C: 'hh But anyway give me your name.

L: Alright. It's Louise.

C: 'hhh Louise.

L: A:nduh my last name is pretty long.

C: Okay.

L: I'll spell that // for you.

C: Alrightie.

L: B-i-l

C: B-i-l

L: e-z

C: e-z

L: i-k

C: i-k

L: j-i-a-n

C: j:-i:-a:-n.

L: That's right.

C: O:kay.

Other Instructional chains, depending in part on the character of the Instructional material, are more extensive. An example of such is taken from the radio talk show cooking instructions. In this fragment, a listener has called for Instructions to cook a cheese cake.

2.

S: I need it fer a party t'morrow night. ((Quiet laugh)) eh.

D: 'hhhh U: :h One half cup a melted butter.

S: Yes sir. hh: One half cup a melted butter.

D: One an one half cups – graham cracker cru: :mbs.=

S: One an one half cups uv graham cracker crumbs/

D: One half cup – plus one tablespoon – of sugar.

S: One half cup plus one tablespoon a sug/=

D: Yeah.=Right.=

Y'have the half a cup a sug,=an then yer gunna need a tablespoon a sug.

S: I: see.

D: Tsk Four large eggs.

S: Yes sir.=Four large eggs.

(.5)

D: 'ow thirty-two ounces a cream cheese, // Thadiz * four eight ounce packages 'ill do fine.

- S: ()
- S: That's what I wuz concerned about.=It seemed like a lo:t hh 'hh
Thirty-two ounces cream chee:se.
- D: Mhm.
- (.5)
- D: One tablespoon vanilla.
- S: One tablespoon vanilla.
- D: :hT'hhh Three quarters of a cup a buttermilk.
- S: Three fourths cup a buttermilk.
- D: ((Intoned 'second' to last, f₀ up)) One quarter teaspoon uv cinnamon.
- S: ((Intoned 'second' to last, f₀ up)) One quarter teaspoon a cinnamon.
- D: ((Intoned 'last', f₀ down)) An one anna half pints uv sour cream.
- S: One an *one half* pints uv sour cream. // Oka:y.
- D: (Right)
- D: Now ya *place* the graham cracker crumbs,
- S: Mhm
- D: An the tablespoon uv sugar.
- S: Yes=
- D: An the cinnamon.
- S: An the cinnamon
- D: Inna mixer. Tho:se three ingredients // on *ŝ*lo:ŵ* speed.
- S: Yes sir.
- D: Mhm.
- D: 'hhh An while it's slowly whirrin, you drizzle in, the *quarter* cup uv melted butter.
- S: :hT'hhh Oka:y
- D: Now that's yur *crust*, an then you press it into a *ten* inch spring pan t'form the crust.
- S: Oka:y.
- D: ((dB up)) Now intuh a large mixing bowl y'beat those four e:ggs,=
- S: Beat eggs.
- D: Until they're *light* n fluffy
- S: Mhm
- D: An now you *break* in the cream chee:se -- //bit
- S: Break* in the cream // cheese*
- D: by bit*, Y'know little mouthful atta time.
- S: Ye:s.
- D: An when that mixture is *creamy*, (.6) you add the *vanilla*,
- S: Add the vanilla
- D: Sour cream, =
- S: Sour cream,
- D: An a *half* a *cup* uv *sugar*.

- S: One half cup a sug hhh
 D: An you mix that 'ntil it's nice 'n smooth 'n creamy.
 S: Oka:y
 D: Now the buttermilk is the question mark here.= You have up to three quarters uv a cup a buttermilk. Right/
 S: Up to three qua//rters.
 D: Yeah.= That's the most you're going to u:se.
 S: I see.
 D: Now ya start adding the buttermilk.
 (S): (hhhh)
 (1.6)
 D: Until the mixture is the consistency uv pancake batter.
 S: hhh 'hhhh // iz that * thick or th-h-in ba-h-//tter.
 D: An then.
 We:*ll medium. It's not a heavy batter.
 S: It's medium batter.
 D: Yeah it's a kinnuv a l'uh uhm-hhh y'know it's not 'hhh or a laik about heavy cream I // guess.
 S: Jus * medium. O//kay. Fine.
 D: An you màÿ use only a ²quarter cup a that buttermilk¹.= // It depends on the day an the humidity in the air.
 S: ()
 S: Oh I see. Ah hah
 D: Ay now that's the 'X' factor in all this.= An that's where people have goofed up this- this cheese cake.= They throw in three ²quarters uv a cup a buttermilk, // an say aw t'heck with it.
 S: I see.
 S: Ah hah.= // Okay
 D: () You start adding it y'know begin with a quarter uv cup n when it gets t'that pancake consistency, stop. — Jist ferget the rest a the buttermilk.
 S: Oka: ://y.
 D: 'hh*hh Now. Now j've got all that t'gether, 'hhh you pour that int' the crust.
 S: Uh huh.
 D: An you bake it thirty minutes.
 S: Thirty minutes.
 D: At three hundred degrees.
 S: Three hundred degrees.
 D: An y'remove it from the oven an immediately — int' the refrigerator.
 S: ((Surprise)) O: :h.// That's-
 D: Ya ch*ll it fer eight hours.

- S: That's really different. // Remove from refrig // and uh from oven an pudinto refrig immediately.
- D: Now.
- D: ()
- D: Right.=
- D: Now you c'n make it a chocolate cheese cake, or a strawberry cheese cake, or a chestnut cheese cake 'hhh an all you do ('hhh) iz you take if it's the chocolate fer example y take bar uv uv German Chocolate, Bakers Chocolate (1.) 'hhh an you melt it inna top uv your double boiler.
- S: I see. // Uh huh.
- D: An y*ou a:dd that t'the basic mixture // jist before ya pour everything intuh the crust the lasta thing, after the buttermilk
- S: Uh hhh
- S: O Okay.= N iz it okay/ t'make this like eu- = the day befo:re the pa:r//ty.

A gross inspection of these Instructional fragments leads us to make some general observations. A first thing we notice is that the set of Instructions such as 'How to spell my last name' or 'How to cook a cheese cake' is commonly broken down into its smaller component parts each of which is delivered one-at-a-time over a series of sequentially placed turns. We also notice that the *Recipient* of the Instructions is far from inactive in the Instructional exchange. Commonly, a Recipient will repeat the Instruction or utter an 'okay' or 'mhm'. So, upon the delivery of each Instructional portion, a Recipient will produce some Instruction-related utterance.

We might say that besides producing an Instructional portion in uttering the Instruction, the Instructor's utterance stands as an *Action*. That Instructional Action selects some *Next Action* for its Recipient, a Recipient utterance. In that the Instruction Action can *trigger* a Recipient Action, there is a methodic relationship between the two utterances. In this sense, each Instruction and its Receipt forms an *Utterance Pair*.

The notion of an Utterance Pair does not stand as a casual characterization. As we shall see, the non-occurrence of a Receipt marking of an Instructional utterance is consequential to the course of the interaction.

Actually, many such two party produced Utterance Pairs have been found to occur in conversation. Examples of common Pair types are: Question/Answer, Apology/Apology Acceptance or Rejection, Invitation/Invitation Acceptance or Rejection, Greeting/Greeting Return, etc. Such Pairs are a pervasively used unit in the construction of conversation. Such Pairs form what has been called an *Adjacency Pair* relationship with formally characterizable properties common to all.² Examples of such properties include: Pair

parts are relatively ordered into first and second Pair parts and, as we've noticed about Instruction/Receipt Pairs, a first Pair part will select a Next Action for its Recipient, a second Pair part.

For notational convenience, we shall call the Instructor's utterance an *Instruct* and the Recipient's utterance a *Receipt*. To make more visible the alternating³ occurrence of Instruct and Receipt turns, we might have marked our fragments not according to who produced the utterance but according to the Action they produced. For example,

2.

Instruct: `hhh U: :h One half cup a melted butter.

Receipt: Yes sir. hh: One half cup a melted butter.

Instruct: One an one half cups – graham cracker – cru:mbs.=

Receipt: One an one half cups uv graham cracker crumbs/

Instruct: One half cup – plus one tablespoon – of sugar.

Receipt: One half cup plus one tablespoon a sug/=

The Recipient's utterance both completes the utterance Pair as well as signals occasion for generating a next Instruct and Receipt Pair. A further Instruct will not be offered until a Recipient has marked Receipt of the present Instruct. The absence of a Recipient's utterance is consequential to the ongoing course of the Instructions.

Although Recipients rarely fail to produce a Receipt response, when such is the case, Instructors will explicitly *urge* a Recipient to 'echo along' or, in our terms, produce a Receipt marking upon the completion of the Instruct. For example, in the fragment below, the Receipt utterance is finally solicited by the Instructor after what he considered to be sufficient time for the Recipient to write the Instruct.

3.

M: Three fourths of a cup of that strawberry juice that you've drained, an water. Enough water added t'the juice t'make three fourths of a cup.

(2.)

M: Dig/ ←

C: Okay.

M: Al-h-ri-h-h-die.

M: `hhh A package a white cake mix.

Such a call for a Receipt is not an idiosyncratic desire on the part of some parties who give Instructions to encourage Recipient participation. Rather,

in that Receipt's occasion the delivery of the next Instruct, the non-occurrence of a Receipt leaves the Instructing party unable to proceed.⁴

Clearly, a Receipt response can be at least temporarily suspended in the Instructional setting where Recipients will often be writing down the Instructions in the course of their delivery. Not uncommonly unusually extensive *Pauses*⁵ of two or three seconds will occur between the presentation of the Instruct and its Receipt response as the Recipient writes the Instruct material. But upon completion of the writing, a Recipient will typically produce a Receipt response. Aside from the sample presented below see also fragments 4 and 5, p. 277, and 9, p. 281.

3.

M: :hT'hhh A three ounce, that's a small package of strawberry jello.
(3.) ←

C: Okay

M: Four eggs
(2.) ←

C: Okay

Alternatively, a Receipt type that operates simultaneously as a speech resource to fill such potentially extended Pauses is found in a *Repeat* of Instructs in a stretched or elongated pronunciation of each item. Stretched Repeats extend the length of time taken to utter each item and are distributed such that the length of the uttering corresponds to the length of time utilized to write down the Instruct material. Or a Repeat of an Instruct Item is often done such that each lexical item is not uttered in a usual conversational tempo but with large gaps between each uttered Item. The fragment below displays the use of both resources to inflate the Repeat to correspond to writing time.

4.

M: Now you 'hhh add two cloves of garlic crush.
(.5)

Y: Two – crushed (1.) cloves of *garlic*. ←

M: A: large spanish onion, *sliced*.

Y: Large – spanish -- onion – sliced.=

M: About a cup of tomato paste.= Er one can a tomato paste.

Y: Cup – tomato *pæ:ste*. ←

M: Cupa hot water.

Y: Cup hot water.

Our point has been that the Instruct and the Receipt that immediately follows display a special relationship to one another such that the operation of *both* is consequential to the Instructional course. Clearly, Receipts do not occur independent of their Instructs.

It is this which leads us to suggest a formal relationship between each Instruct and the Receipt that follows: Each Instruct and Receipt utterance, alternately produced, form an *Instruct/Receipt Pair*, an I/R Pair. The order of the Pair members consists of an Instruct followed by a Receipt utterance. This two party produced I/R Pair operates as a *Minimal Conversational Unit* for the passage of Instructions in natural talk.⁶

We now propose that the previously noted sequential contiguity between I/R Pairs is neither casual nor incidental. We've already noticed that upon the offering of any Instruct part, a Recipient marks the Instruct item as Received. In so doing, not only is the material so marked but the marking closes the sequence. Completion of any I/R Pair triggers a position for initiation of a next I/R Pair. Instructional materials of varying sizes and orders are broken down into their component parts and passed through the serially linked I/R Pairs. The I/R Pair comprises a Minimal Conversational Unit that is used again and again, strung one after another, back to back until all the parts of the set of Instructions have been exhausted. It is the serial juxtapositioning of such units which operates as the sequential bridge in the passing of Instructional material. Linked I/R Pairs operate as an *Instructional Format* for the delivery of Instructions.

So, one general feature of this Instructional Format is the alternation of turns between Instructor and Recipient for any size set of Instructions. Although the Instructor has extended rights to the floor for the Instructional delivery, the Recipient has regular and systematic access to any portion of the ongoing Instruction.

Recipients require formatted access in that Instruct Items are *non-recurrent*. Instructs, once uttered, will not be uttered again. The system might be said to compensate the Recipient for the potential troubles non-recurrence may occasion by providing a formatted locus, the Receipt, to deal with Instructs, each in their turn, be they troublesome or otherwise. We shall soon see (below, 278-280) that when an Instruct Item is in some way problematic for a Recipient, as when he may find it inaudible, ambiguous, etc., he has available technical resources for its Repair. We wish to point out here that the feature of non-recurrence along with a systematically placed problem sensitive locus, a Receipt after each Instruct, establishes for the Recipient a site to settle Instruct related problems on the occasion of their occurrence in a stronger way than we regularly find in other sorts of exchanges where a hearer may chance later 'picking up the thread' or the 'train of thought' of the speaker. Here are some typical Receipt responses.

*Continuation Markers*⁷ operate as a type of Receipt response. They consist of lexical items such as 'uh huh', 'okay', or 'alright'. As such, they signal to the Instructor that no issue is to be taken with the Instruct utterance. In that way they operate as an *acceptance* by the Recipient of the Instruct. We might consider the acceptance to be a preferred treatment of the Instruct. What might be said to be a less preferred response would attend issues of mishearing, misunderstanding, etc. Such occasions where issue is taken with an Instruct are less preferred in that the accompanying expansions provide a locus for the placement of complaints, chiding, etc., for both the Instructor and Recipient alike. Here are some typical Receipt responses:

5.

M: An now you soften the yeast in a half a cup a warm wa:ter.

(1.1)

P: Mhm. ←

M: 'hh An you heat the mīlk — hone:y — 'n bu:tter 'hhh an a *teaspoon* a salt (1.3) 'ntil the butter melts.

P: Alright. ←

M: 'hhh Cool it t'lukewarm.

P: Mhm. ←

Repetitions also mark Receipt of the Instruct and as such conclude the Pair. For example,

4.

A: But you'd make a- a mixture of a fourth teaspoon of crushed *thy:me*.

Y: A quarter *teaspoo:n* — crushed — thyme. ←

A: A fourth of a cup of flour.

(.5)

Y: Quarter — cup — flour.

A: A:nduhh oh I'd say about salt 'n pepper t'taste.

Y: Salt — an — pepper — to — taste.

End Partial Repetitions similarly terminate the I/R Pair. SB 1:4:4.

D: D'you want th' phone number

A: Yes, please.

D: 5-6-3, 1-8

A: 6-3-, 1-8 ←

A: Uh//h

D: That's uh two s- two, seventy or two..

4.

M: Mix those all t'gether an you pound that mixture into your steak
(.8)

Y: Pound intuh steak.= ←

M: 'N you have a:- a iron skillet or a real heavy skillet.

6.

M: 'hhh Now you sift it.= Then y' you mix a half a cup a that mixture with two cups each of chopped nuts 'n raisins.

S: Two cups::: — each — nuts (1.2) raisins. ←

M: An one cupa chopped dates.

Pre-Partial Repetitions, however, signal initiation of a Repair sequence to the Instructor.⁸ A Pre-Partial signals to the Instructor to produce a Repetition of some portion of his own Instruct not Repeated by the Recipient. A Pre-Partial has multiple uses: It signals a *fault* of the prior Instruct, it specifies that portion of the Instruct implicated in the fault, the non-uttered portion, and it specifies the sort of operation needed to achieve the *Repair*: a Repetition of the non-uttered portion as opposed to a clarification, an explanation, or a translation.

7.

D: A quarter cup// white wine vinegar	1
:	
C: One (1.) quarter (1.) uhh (1.) cup, — Wine vinegar/	2
D: White wine vinegar	3
C: White (1.5) wine	4
(2.3)	5
D: Vinegar	6

8.

S: Now tell me thit number.

T: 'hh Nine four o//hh	} ←
S: 'hh Nine	
T: Four oh	
S: Fou:r oh	

T: Four four

S: Four four

T: Two, two

S: Two, two:. Oka:y.

Only to be mentioned are the variety of ways that may be available for a Recipient to flag a Repair issue in the portion of the Instruct that he does not Repeat. One way may be suggested in fragment 7, lines 2 and 4 where it seems a Pause pacing is established in each Receipt such that any time over that Pause pace may become hearable as a Pre-Partial, a signal for Repair, as we see in line 6 after the 2.3 second Pause. In fragment 8, placement of the Repeat may be another resource to signal Repair. Here, the Repeat is placed prior to the projectable utterance completion point of the Instructor. Here, unlike what we most commonly find elsewhere, the overlap of talk is treated by the Instructor, the floor owner, not as a violative move but a Repair flag.

So a Recipient has a collection of alternative moves available to him that are characterized by their sequential consequentiality for the course of the interaction. Receipt moves such as Continuation Markers, Repetitions, and End Partial Repeats upon their completion terminate the I/R Pair and signal occasion for initiation of a next I/R Pair. In that sense, they stand as *Close Relevant Moves* for the sequence. Pre-Partial Repetitions operate as a type of *Insertion*⁹ in the ongoing Sequence between the Instruct and Receipt Close of the I/R Pair. In this case, the termination of the Repair Insertion concurrently closes the I/R Pair it attends. Pre-Partial Repetitions are *Repair Relevant Moves*.

Actually, we usually find that Insertions between the Instruct and the Receipt involve issues of Repair. Here are a few examples of Repairs generated in ways other than by Pre-Partial Repetition.

9.

- M: An stir in two slices of onion an you cook that a couple a minutes.
 R: Wha- what kind of onions, scallions/ or the // big onions. ←
 M: ()
 M: No. The big onions.=
 R: Mhm.

4.

- M: 'N you have a:- a iron skillet or a real heavy skillet.=
 Y: Right. Yeah.=
 M: Anu:h put duhh 'nuf olive oil in it y'know/ – t'cover it (.5) n you brown the // steak
 Y: () Cover the whole *steak*/ ←
 M: Nono. Jist t'cover the bottom. You're gonna pan broil it.
 Y: Okay.

A Recipient Repair move stands as an alternative to a Continuation Marker, a Repeat, and an End Partial. A Recipient Repair Move is targeted at no Instruct other than that in the I/R Pair in which it is embedded. For notation, we shall call this locus for Repair initiation within the I/R Pair a *Repair Slot*.

We might ask, if a Repair fails to be initiated in the Repair Slot, is it the case that it can never be initiated? It seems not. The regularly alternative locus for a Repair targeted at an Instruct of an I/R Pair of which it is not a member is found at *Instructional End*.¹⁰

10.

M: An just stick em under the broiler.

R: I see.

M: An that's all that- f'r that type of thing. ← *END*

R: Now how much would ju (dilute) uh delete some a the ← *REPAIR*
wa:ter from the gra:vy (or) an an add the wine t'the brown sauce.

M: Nonononono you want the whole brown sauce reconstituted.

7.

D: Now ya* shake all the ingredients t'gether y'know an you refrigerate it.

C: Yeah.

D: That'll make a quart uv honey salad dressing.= Oh it's ← *END*
good

C: Yeah. Wasn't there any – supposed to be any mustard in ← *REPAIR*
that.

D: Yeah there was. A teaspoon a mustard. You marked that down earlier.

C: Oh.

11.

D: An whad I'd do es jest 'hhh mix a little cinnamon int' it.

K: Mhhmmmmmm (.4) Cinnamon into it. Oka:y.

D: Yeah. It d'um- it kinna sticks. Y'know you c'n mound it t'half an inch
or an inch hi:gh // on :hT'h'h * on top uv whatever it iz you're sweeten-
ing up 'hhh An 'nen jest duh 'hhh before you sprinkle it on mix a little
(uv) cinnamon int' the confectioner's sugar n 'hhh O: :h that sounds
good. ← *END*

K: Well uh wouldju add duh – butte:rt/ an water/ to i//t= ← *REPAIR*

D: Nono no no jest the pure sugar an the cinnamo//n

K: I see.

So, we find more than one locus for Repair standing in alternative relationships to one another both positionally and substantively. Instructional End Repairs show a tendency to collect issues of different sorts from those placed immediately subsequent to the Instruct at issue. End Repairs can attend issues of Recipe alteration, modification, etc. as well as target back on a particular prior Instruct. Within I/R Pairs, Repairs are topically restricted to the locality in which they are initiated. We shall distinguish between Repairs within the I/R Pair and Repairs initiated at Instructional End by calling the former's locus *Repair Slot A* and that of the latter *Repair Slot B*.

Insofar as the Instructional Format provides such loci for Repair, a Repair of an Instruct not so placed is structurally a violative move. The fragment below is offered as an instance of a violative placement of a Repair.

9.

M: An you thicken it with two, three tablespoons of flour 'hh mixed with a little cold water (en) milk.

R: Mhm. :h'hhh A:nd // you don't puta lotta cream or milk in this thing.

M: ()

M: Not at the time.= Just — wait till I get t'the end. ←

R: Oh pardon me. ←

D: He has only just begun. // Heh.

M: Yeah. Mix two an a half cups a corn.=

R: Uh huh.

M: With two cups of scalded milk.

(.5)

R: Uh huh.

Goffman has proposed that upon the occurrence of an interactive violation a party to the event will commonly make reference to the violated rule.¹¹ Such references serve as a resource for making the violation noticed or public as well as setting up its *Remediation*. We see just such an operation in fragment 9 marking the misplaced Repair. 'Oh pardon me' acknowledges the accusation of misplacement, 'Just wait till I get to the end' which stands as reference to the violated rule: Repairs are to be located in one of two alternative loci: Repair Slots A or B. Such noticing operates in the same way that 'Sorry I'm late' or 'Pardon my boarding-house reach' marks acknowledgement of the rules they stand in violation of. In the fragment above, it's not the case that the End will bring the milk but that the End is the place to locate such Repair issues.

Having noted the variable length of the Instructional Format and having

located Repair Slot B at Instructional End, we are left with the problem of rigorously specifying what constitutes an Instructional End. End, the intended last Instruct, is not signalled by termination of speech by the Instructor such that after some extended period of Silence a Recipient could eventually decide the Instructions must be over, since talk placed after Instruction End is routinely not preceded by Silence. In fact, Instructional End is not an intuitively apparent locus.

Consider first that we empirically find the length of the Instructional event is not determinable from the organization of the Instructional Format. As we've repeatedly noted, the I/R Pair is specifically serviceable as a reusable object, available for Instructions of any duration. Consider second, Instructional material comes in varying size packages. Obviously, telephone numbers are delivered over shorter sequences than directions on how to make a turkey dinner. Even similarly packaged materials such as seven digit telephone numbers take different numbers of I/R Pairs for their transmission depending on how they are parsed on the occasion of their use. Finally, beyond some clearly formatted types such as telephone numbers, the intended last Instruct is not determinable from the character of the Instructional object. For example, in the case of Recipe Instructions, one might imagine that an End would sound something like, 'And cook it at 350° for 35 minutes'. But there are no such intuitively derivable terminators. There can always be one or more Instructs such as 'Allow to cool before serving' or 'Serve with a red wine'. In this sense, neither the character of the Instructional Format nor Instructed objects makes Instructional End a determinable locus prior to the occasion of its occurrence.

We typically find that End is an achieved position as opposed to a natural or logically findable position, accomplished on each occasion by use of standardized lexical items or phrases. Lexically marked Ends are either placed in the turn holding the last Instruct or directly subsequent to it. For example,

12.

A: Yes. 'hh//h An you add the brandy last an set a flame when it's o:n an that's it. Serve it. ←

F: (Oka-)

F: That's- the brandy is *last*.

M: Right.

(.7)

F: :hT'hh Thank you very much.

10.

A: An then uh you put em in a- in your scallops or your ramkins (1.) You know/

R: Mhm.

A: An just stick em under the broiler.

R: I see.

A: An that's all that- fr that type of thing. ←

R: Now how much would ju dilute...

5.

M: N then coolit on racks. N that's it. ←

P: That sounds fan-tas-t//ic.

M: Yeah.

To briefly return to the point that the length of the Instructional event is not determinable from the organization of the I/R Pair Format, if we found the Format to be altered in some way according to the size of the member constituents it accommodated on any particular occasion of use, we might then consider the Instructional Format to be determined by the shape of the Instructional material it passes. The Format would be a mere byproduct of other issues. The strongest support of the notion of organizational independence from specific Instructional types would come from showing that the Format remains intact no matter what sorts of objects it may transmit.

We have noticed in fragment 2 that the Format is operable for quite extended instructions, but is it operative on the smallest possible portion of Instructional material fitted into a single I/R Pair? As we can see in the fragment below, we have all the features of an Instructional Format operative in a single I/R Pair exchange.

13.

D: Uhh Miziz Burns. Hi:= If it's a real quickie, we'll answer it.=

B: Well I'd like t'know how t'freeze citrus juices.

A: :hT'h'h We:ll it's pretty difficult problem. The only thing you do iz uh the only way you c'n do it iz iz 'hhh not too good. 'hhh But jist pudit in ice cube trays an freeze it that way.= |←

B: Y'don't add anything to it.

M: No: there's noth- no reason f'r that.

Incorporated into this single Instruct we have a marked Instructional Beginning (yet to be formally considered) and End encased in a single grammatical

unit, 'But jist pudit in ice cube trays an freeze it that way'. In this particular case, Repair Slots A and B coincide sequentially insofar as there is only a single I/R Pair employed in the accomplishment of the Instruction. Dual Repair Slots anticipate, are capable of accommodating, more than one I/R Pair but can be used for single I/R exchanges as well. Similarly, Instructional Formats can accommodate more than one I/R Pair as well as a single I/R Pair Instructional exchange.

Initially, we proposed that the standard unit for the passage of Instructions in conversation was the sequentially organized I/R Pair. We noticed that I/R Pairs were strung back-to-back, used again and again until the Instructional material was exhausted. A unit so used could accommodate rather extensive or brief Instructional episodes.

We have since begun to notice some features of Instructional events that are not organized with respect to the organization of the I/R Pair such as Repair Slot B and Instructional End. It is the emergence of such overall features of the organization of Instructions that leads us to suggest an *Instructional Structure* built off of the serially tied I/R Pairs but with components placed in a way we can see as being attentive to the overall Instructional episode.

Having noticed Instructional End, a further overall feature of the Instructional Structure is found in lexically marked *Beginnings*. For example,

14.

- J: 'hhh Mel plea:se 'hh // I would like t'know how t'cook some hard//
cooked eggs f'r ticking f'r Ea:ster (.3) without them cracking.
M: ((dB down, to D)) ()
D: ((Low laugh)) huh
M: Ahh yes I surely do. Startem in cold water. ←

15.

- P: Umm – Hello. I was wonnering if uh – if Mel would have a candied
kumquat recipe.
M: ((Jovial teasing)) : hT'hh Now whaddaya gonna do with candied kum-
quats.
P: Eadem ((Voiceless laugh)) hh // hh
M: Ah hah 'right.=
D: ((As in 'yuck')) Eu=
M: Now wash em 'n soak em first. ←

So, Instructional Beginnings are commonly specially marked loci. Com-

monly, but not always, Beginnings are embedded in initial position Instructs. Here is one example of one not so embedded.

5.

M: This is a very nice light bread. 'hhh They also have the Panatoni, they do it at Christmas time.= But it does- it's a delightful thing. 'hhh ((dB up)) Alright le- le- lemme give you this, I think ←
it might be what you, wa:nt.=

P: Thank you very much.

M: Two packages of dry yeast, active, y'know.

In the environment of Instructions, such markings as 'start' and 'first' are simultaneously operative as projections of the extensiveness of the Instructions; they project an Instructional event that will be built off of at least more than one I/R Pair. As might be expected, in the case of determinate size Instructions such as phone numbers, such projections are absent.

A final organization that operates relative to the boundaries of the chain of I/R Pairs is found in the internal arrangement of the Instruct materials for their delivery. There seem to be commonly used principles for the parsing of Instructional material into component units.

Different sorts of commonly Instructed objects evidence delivery under different arrangement formats. For example, seven digit telephone numbers can be delivered in a single Instruct but when parsed to fit into two separate I/R Pairs, the first Instruct gets the first three digits and the second Instruct contains the remaining four. If the second four digits of the number are further parsed into two more Instructs, each will carry two of the digits.

The major data resource for this writer has been cooking Instructions. That being the case, I shall indicate some of the standardly used principles for the arrangement of cooking directions over the course of the Instructional Structure.

In the case of Recipes, we can distinguish two orders of materials: there is the collection of *Ingredient Items* and the collection of *Actions* performed on the Ingredient Items. Examples of Ingredient Items are flour, sugar, and milk. Examples of Actions are stir, chill, and bake.

In the case of *Complicated Instructions*, we find that ingredient Items are presented serially and sequentially prior to the Actions performed on them. Also, within that Ingredient Item grouping we find an orderly Internal arrangement of Ingredient components. Ingredients Items tend to be arranged according to the order of their later appearance in the Action Section. When Ingredient Items are serially arranged and placed sequentially prior to the Action Section, they tend to consist of no less than four Items

placed in the same number of I/R Pair Instructs. Alternatively, Recipe Instructions consisting of more than three Ingredient Items will tend to be grouped prior to and independent of those Actions performed on them. Finally, there is a tendency for the *last* Ingredient Item member of such a series to be pre-marked by such lexical items as 'and' and/or prosodically marked as final. The three fragments below display the organization we've considered.

16.

M: ... N this is- this because this is a 'hhh been a favorite of mine f'r some ti:me.

()

M: Uhh 'hhh It is a large- a fifteen ounce sweeten ← *INGREDIENTS*
condensed Eagle Bran milk.

G: Uh huh.

M: Teaspoon a grated lemon rind.

()

G: Right

M: Half a cup a lemon juice.

()

G: Uh huh.

M: Two egg yokes.

()

G: Uh huh.

M: A teaspoon uv vanilla :hT'hh Now, you you wanna color that ← *ACTION*
you ca:n but chu put the egg yokes in a large bowl 'ith a mixer 'n beat em.

3.

M: ... No I'll give her the Cinderella Cake.= ((dB up)) It's a package of
frozen strawberries, defrosted 'n drained. ← *INGREDIENTS*

⋮

M: Three fourths of a cup of that strawberry juice that you drained an
water. Enough water added t'the juice t'make three fourths of a cup.

(2.)

M: Dig/

C: Okay.

M: Al(h) ri-h-h-die. 'hhh A package a white cake mix.

C: () Yes.

M: :hT'hhh A three ounce, that's a small package a strawberry jello.

(3.)

C: Okay.

M: Four eggs.

(2.)

C: Okay.

M: Half a cup of oil.

C: Uh huh.

M: :hT'hhh An then you'll need whipped cream 'n red food coloring an
additional strawberries 'r stangles fer decorating you know ← *LAST*

⋮

M: Now you drain the berries, then you measure the juice... ← *ACTION*

5.

M: Alright le- le- lemme give you this, I think it might be what you want.=

P: Thank you very much.

M: Two packages of dry yeast, active, y'know. ← *INGREDIENTS*

P: Ye:s

M: Half a cup a milk.

P: Half a cup/

M: Uh huh.=

P: Mhm.

M: Half a cup a honey.

(.5)

P: Half a cup honey.

M: Half a cup a butter or marjorine.

(1.3)

P: Mhm.

M: :hT'hh About five 'n a half t'six cups of all purpose flour.

P: Five t'six cups ((Dog bark)) Oka:y.

M: Three eggs.

P: Mhm.

M: 'hhh A half a cup a light raisins.

(2.2)

P: Hmm

M: ('hhh) Half a cup a currants.

(1.6)

P: Mhm.

M: :hT'hhh An ¹² a fourth of a cup a chopped duhh candied fruit y'know
citron whatever

P: Alrightie.

M: 'hhh If you want you may use a couple a teaspoons of crushed aniseed.

'hhh But that gives it that kind of a licorice flavor.= You may not

wanna do that.

P: No= I wouldn't *h//h hh 'hh 'hh*

M: Alright leave that out,

(.7)

M: An an egg.

← *LAST*

(.7)

P: An one e:gg.

M: Ah now you soften the yeast in a half a cup a warm wa:ter. ← *ACTION*

As we've seen, the Ingredient-Action Format overlays the I/R Format for the orderly arrangement of Instructional material. In this case, such a Format does not carry the force of a rule such that its violation is a consequential interactive event as in the case of the Repair misplacement (fragment 9, p. 281). In fact, not uncommonly, Ingredient Items which we would expect to be located in the Ingredient Item Section are first introduced in the Action Section. But generally, such items are as a class distinguishable from those introduced in the Ingredient Item Section. It may be that such Items as 'butter for the bottom of the pan' or 'half a cup of warm water to dissolve the yeast' are not grouped in the Ingredient Item Section because they are classified as specific to the recipe. However, it should be indicated that, having no data for such a determination, the suggested classification principle is based on a member's intuition and therefore derived independently from an assessment of the data.

We offer a final observation on the Ingredient-Action Format concerning lexically marked transition points. Specifically, upon the completion of the Ingredient Section, Action Sections are standardly presignalled with 'now'. For sample fragments see nos. 5, 3, and 16, pps. 286-287.

Initially, I referred to the Ingredient-Action Format as being operative for Complicated Instructions. We're now in a position to provide a clear-cutting sense of what we mean by Complicated Instructions. A format that seems to operate alternatively to the Ingredient-Action Format is one that collapses those two operations such that Ingredients and Actions are introduced on the basis of their temporally arranged appearance in the cooking sequence. We generally see a tendency for recipes with a smaller number of components (Ingredients and Actions) to be embedded in such a collapsed Format. In such cases, Instruct components are lexically pre-signalled with 'and then', 'and', and 'then'.

14.

M: Startem in cold water.

J: Cold water.

M: An puta big handful a salt inna water. ←

(1.)

J: Ha:ndful a salt.

M: ((As in 'uh huh')) Ah ha. An then you turn 'na firs on — 'hhh An bring it to a simmer.= Don't bring it to a rolling boil. ←

J: Mhm.

M: Jist to a simmer. N let em simmer about twelve minutes. ←

J: Twe:lve minutes.

M: N then run cold water on em n you'll have hard cooked eggs. ←

17.

M: Uh*h Bu:tuh uzually () y'know a 'hhh couple a tablespoons of Coleman's or dry mustard.

(.5)

O: Two tablespoons.=

M: About that a:nduh. 'hhh Maybe about a half a teaspoon a ←
tumeric.= This gives a- see the dry mustart itself has a kinnuv a pale yellow color not too a (dih- ih) 'hh // not too appetizing budih 'hh bout half a teaspoon or more of tumeric 'hh // it won't affect * it won't affect the flavor.

:

M: An then just enough stale beer t'moisten it. ←

(1.2)

O: Stale beer t'moisten.

M: T'the consistency you want.

O: That's *all*/

So, Complicated Instructions are such by virtue of their using a serially arranged Ingredient-Action Format. They display gross partitioning between Ingredient Items and Actions. Simple Instructions are such by virtue of their using a collapsed Ingredient-Action Format.

An orderliness that we are beginning to see more and more hints of has been found in the syntactic patterning of the serially arranged Instructs over the course of the Structure. The sorts of things we notice include phrasal patterns such as the following:

5.

M: 'hh An you heat the mīlk — hone:y — 'n bu:tter 'hhh an a *teaspoon* a salt (1.3) 'ntil the butter melts.

P: Alright.

M: Cool it t'lukewarm. ←

P: Mhm.

M: Stir in two cups of the flour 'n beat it well. ←
(1.5)

P: Mhm.

M: Add the softened yeast and the three eggs (1.) and beat it well again. ←

P: Mhm.

M: Stir in the fruits. ←

Here, each new Instruct is built on parallel phrasal components. In the next fragment we find 'You put', 'You brush', and 'You put' pre-marking each Instruct component.

15.

M: When you start out, you put chur pie:- yur pastry dough onna pie shell.= Y'kn//ow :hT'hh ←

P: Uh huh.

P: Yeah.=

M: You brush it with egg white. ←

P: Egg white. O//kay.

M: 'hhh

M: An you put it in a hu- four hunerd degree oven... ←

Notice in these next two fragments the alternation between 'And you' and 'And then you' and second, the alternation between 'This' and 'That' in the Instructor's utterances.

16.

M: :hT'hh an you put that in a three hunner n twenny-five degree oven, twenny minutes. () 'hhh An then you take the uh the two egg whites 'n beat that with uh 'hh four tablespoons a sugar inna merangue. ←

G: I see. Uh huh.=

M: An you put the merangue on toppa that after twenny minutes uv cooking// ← 'hhh

G: I see.

M: An then you put it back in the oven again for ohh about five minutes, jist ← t'brown the merangue.

G: Uh huh

M: Or you may use a sour cream topping or Emu topping which I like 'hh which is a half pint a cup a sour cream, a tablespoon a sugar.

G: Uh huh.

M: An you mix that t'gether an spread that on top, 'hh An then uh if you wannu you sprinkle... ←

6.

M: An then you beat in that nutty fruit mixture. ←

S: Okay.

M: An turn this into buttered loaf pans an bake in a moderate oven. 'hhh Thirty-five t'fardy minutes 'r 'ntil done. ←

S: Okay.=

M: An this'll keep moist f'r several days. ←

S: Mhm.

M: 'hhh An that's as good a one as I got. ←

We've been considering the organizational features of a collection of serially adjacent turns constructed for the transfer of Instructions in interaction. What we have yet to do is to inspect the ways the Instructional Structure provides interactants with systematically available loci to perform interactionally sensitive maneuvers. One such locus, the Receipt Slot, is commonly operative for Recipient displays of *Competence*. A sense of what we mean will be clearer if we briefly review one kind of Receipt move, the Repeat.

Initially, we noticed Recipients commonly Repeated Instructs. Repeats provided writing time and upon their completion closed the Receipt turn. For example,

2.

D: One an one half cups – graham – cracker – cru: :mbs.=

S: One an one half cups uv graham cracker crumbs/

D: One half cup – plus one tablespoon – of sugar.

S: One half cup plus one tablespoon a sug/=

But we find Repeats that seem to perform certain *Transformations* on the Instruct. In these next two fragments, you'll notice 'a quarter teaspoon' becomes 'a fourth teaspoon', 'a fourth cup' becomes 'a quarter cup', etc. It would seem that the Transformation neither adds nor detracts from the character of the Instruct but stands as *another way of saying* the Instruct.

4.

M: But you'd make a- a mixture of a fourth teaspoon of crushed thy:me.

Y: A quarter teaspo:n – crushed – thy:me.

M: A fourth of a cup of flour.

(.9)

Y: Quarter – cup – flour.

18.

S: One tablespoon uv shortening

D: One big T shortening.

One way in which such Transformations are interactively sensitive is as a Recipient resource for the display of technical *Competence*. At issue is the sorts of resources a (recipe) Recipient can amass to *show* rather than merely *claim* technical competence. Continuation Markers such as 'uh huh' or 'okay' as a Receipt move signal little else than a Pass by the Recipient of the Instruct. In contrast, a Repeat might be said to be a stronger display of Competence relative to the Instruct at least insofar as a Recipient is able to reproduce it. In light of this, a Transformed Repeat stands as an even stronger show of Competence insofar as a Recipient can independently produce another way of saying the Instruct. It is in this sense that Transformations of Instructs in the Receipt Pair part operate as a technical resource for the display of Competence.

But certain Transformations such as those performed on *approximated* Ingredients are standardly problematic. In the fragment below the approximated 'couple a tablespoons' is not another way of saying 'two tablespoons' but rather an alternatively delivered characterization of an otherwise precisely characterizable *Ingredient quantity*. In such cases, *approximations* establish the range over which individual taste may then vary. The approximation then intentionally marks an Ingredient Item as variable relative to its quantity.

17.

M: Uh*h Bu:tuh uzually () y'know a 'hhh couple a tablespoons of Coleman's or dry mustard.

(.5)

O: Two tablespoons.=

M: About that. A:nduh...

In this fragment, the Recipient treating the 'couple a tablespoons' as another

version of a precise Ingredient quantity, 'two tablespoons', Transforms the Instruct into the latter. To this, the Instructor produces a Repair on the Transformation with 'About that.' returning the Ingredient quantity to the initial approximated version.

In this next fragment, we find another exchange built off of the issue of Recipient Competence but needing a more elaborated characterization.

12.

M: :hT'h A:ndu:h 'hh As you *cook* it you kinduv uhh 'hhh ruh roll it up
() less. 'hhh Andu:h 'hhh s'ya have the four rolls.= In otherwords,
you'd be doing *four* steaks there.

(.5)

F: You'd roll it like- like more 'r less like you'd roll a br- a brajo:le/

M: Yeah well more like a: : : – crepe.

(.5)

F: Like a crepe.// Okay

M: Uh huh.

First, we notice that the Instructor characterizes what's to be done with the steak by offering an analogized Action, 'kinduv roll it up'. In return, the Recipient offers a sort of understanding test of the analogy by offering her own candidate analogy as a possible matching pair to that of the Instructor, '... more 'r less like you'd roll a br- brajo:le/'. Finally, the Instructor produces a mitigated version of the Recipient's offer with '... well more like a crepe'.

So we have an initially least technical analogized Action, 'kinduv roll it up' transformed into a highly technical analogized Action 'like a brajole' finally reduced to an intermediately technical 'like a crepe'.

In light of the issue of Competence displays, we can motivate the Recipient's selection of brajole as an item with strong interactive sensitivity. Not only has she displayed another possible way of characterizing the Action on the meat, but the display is one that only a technically competent party could produce. It is in this sense that brajole stands as a token of Competence and/or a resource for the display of Competence by the Recipient. So, we might say that the Recipient has upped the ante on technical talk and likewise raised her claim to technical Competence.

It is possible that the Instructor, in replacing brajole with crepe is sensitive to just such a move and for that reason reduces the technical ante. At issue in the reduction is the following: In a sense, although it might be argued that the Recipient is talking only with the Chef in her call, the reverse is not the case. The Chef is not only Instructing the caller but is

specifically attentive to the matter of making the Instructions accessible to the general radio audience. Insofar as that might be the case, we have interactional grounds for the Chef's replacing a highly technical characterization of the Action perhaps understandable to a limited portion of the audience with a less technical characterization understandable to a larger population.

In summary, we have offered an initial report on a sequentially organized conversational Structure operative for the oral transfer of Instructions in natural settings.¹³ We have found to be built into the Structure a distribution of tasks for Instructor and Recipient located in alternating turns at talk and realized in utterances. The aim has been to produce a technical description of the Instructional Structure's features as a multiparty conversational phenomenon. For example, along these lines, we have found Instructions to be built off of smaller, two party produced components comprising utterance Pairs, the Instruct and Receipt, whose combination formed a Minimal Instructional Format for the transfer of Instructions. Among other things, we have examined some of the principles of arrangement of Instructional material over the course of the Instructional Structure. And, we have located fixed Structural positions ripe for party and setting sensitive exhibitions such as we have discussed under the auspices or resources of Competence displays.

NOTES

* Appreciation is extended to Harvey Sacks who has generously offered his time in research training and who has made innumerable helpful comments. The influence of his teaching on this work is pervasive. Appreciation is further extended to Emanuel Schegloff whose careful and critical comments on an earlier version of this paper were quite helpful.

** The data on which this analysis is based is derived from transcripts of the following types of *Instructional encounters*: 39 *recipe exchanges that occurred on a radio talk show* (on this program, listeners would call the station to request of the chef/moderator cooking instructions of varying sorts); 20 *telephone number exchanges that were often accompanied by name and address transfers*; 2 *driving directions*. Where relevant, fragments from these encounters will be taken from the corpus and included in the body of the paper.

¹ Symbols used in Transcripts:

- / indicates question intonation
- , indicates continuation intonation
- (#) indicates pause time in second units
- // indicates simultaneous talk
- * indicates termination of simultaneous talk
- = indicates a continuous flow from prior talk
- :: indicates stretching of sound immediately preceding, in proportion to the number of colons inserted
- hhh indicates inbreath, in proportion to number of hs inserted
- hhh indicates exhalation, in proportion to the number of hs inserted

:hh indicates nasal inbreath

hh: indicates nasal exhalation

:hT'h indicates nasal inbreath transformed into oral inbreath

² For a detailed consideration of Adjacency Pairs and their formal properties, see Harvey Sacks, unpublished lectures, Spring 1972, nos. 1 and 2.

³ In that all our Instructional exchanges occur in two party settings, we cannot specify with finality whether Instructional turns alternate by virtue of their being built for two parties or by virtue of their solely occurring in two party settings where the alternation of turns is in the nature of such exchanges. Multiparty Instructions will be enlightening with respect to this question. Of course, we might expect as one possibility for the organization of multiparty Instructions that interactants organize categorically into Instructor and Recipient to produce a two party, multi-person Instruction.

⁴ There are instances where Instructors will continue to present Instruct Items after some generally briefer Pause without a Receipt marking. Such noticings would suggest counter-evidence to the idea that Receipts trigger Instructs. But such occurrences seem to be a by-product of a different issue: Instruct utterance delivery is characterized by careful, slow articulation, and with stress on key lexical items. Often, brief pauses are placed between component Items.

⁵ Harvey Sacks has noticed that periods of non-speech in conversation have an interactively identifiable operation and distribution. Periods of non-speech where no party has the floor are identified as *Silences*. Periods of non-speech during a party's floor time are Pauses. Unlike the case of Silence, another party's talk during a speaker's Pause time would be heard and treated as interruptive. Pauses and Silences are two distinctly interactively usable objects by and for parties.

⁶ Clearly my data does not include the whole universe of items that get instructed. So, I should not be read as making claims as to the Structure of Instructions generically. Someday such a claim may be possible. But, for now, when I speak of Instructions, reference is to those of which my corpus is composed and subject to further modification. At this point, my claim is that the I/R Pair stands independent of anything that it's operative upon. Open to further consideration is the domain of Instructables for which this is so.

⁷ 'Continuation Marker' is a term coined by Emanuel Schegloff to point out, among other things, that class of lexical items commonly used by listeners to signal to speakers in structurally identifiable loci in the course of their ongoing talk an acceptance where issues of understanding and/or possibly floor shift might otherwise have occurred. Continuation Markers are pervasively used items in conversation.

⁸ Inspection of any transcript will reveal a collection of conversational occurrences that are treated by interactants as being in some way faulted. Their occurrence commonly occasions one of a collection of devices put into operation as their Repair. A Pre-Partial Repeat stands as one sort of Repair operation on some utterance it appears subsequent to.

⁹ For a systematic consideration of two sorts of Insertion Sequences in interaction see Emanuel Schegloff and Gail Jefferson in *Studies in Social Interaction*, D. Sudnow (ed.) (New York: Free Press).

¹⁰ For some Repairs, there seem to be conflicting sorts of considerations as to their best placement. A preferred place is clearly directly subsequent to the Item under consideration. If the preferred locus has been passed then Instructional End is the alternative locus. But consider a Repair that cannot find a locus as in the case where some particular Instruct Item is expected by a Recipient but not offered by the Instructor. In such cases, there is suggestion of pressure to place the Repair in the general area of the expected Instruct rather than wait for Instructional End. But, the danger of that placement is that if a Recipient errs as to the strategic placement, he stands subject to reprimand. See fragment 9, below.

¹¹ For his systematic treatment of Remediation Sequences see "Remedial Interchanges" in E. Goffman, *Relations in Public* (New York: Basic Books, Inc., 1971), 95-187.