

# The Making of the World in Co-Operative Action

## From Sentence Construction to Cultural Evolution<sup>1</sup>

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### Introduction

Although it is of paramount importance to conversation analysis (CA) and he may well have been the greatest conversation analyst since Harvey Sacks<sup>2</sup>, the work of Charles Goodwin (or Chuck, as he was known) stands in a tenuous relationship with this school. His early work was unequivocally framed as a contribution to CA, as is evidenced by the title of his first book (based on his Ph.D. dissertation), *Conversational Organization. Interaction between Speakers and Hearers* (1981). But from the beginning, Chuck realised that talk in co-present interaction is a bodily affair, that bodily actions contribute to the structuring and intelligibility of turns at talk. Moreover, focussing his attention on the parties' gaze during the production of single turns at talk, Goodwin realised that utterances emerge as products of *ongoing* interaction between speaker and hearer, rather than interaction clustering only at 'transition places' (Sacks, Schegloff & Jefferson 1974) between turns or during repair sequences when understanding is in question (Hayashi et al. 2013). The turn-taking model in CA had generally been understood as suggesting that turns fall under the sole responsibility of their initial speakers— whoever gets a turn to talk has the right to talk it to completion. Thus, in two important respects, his work began outside the mainstream of CA, and perhaps his decision to film mundane human interaction when video technology became available was ultimately most consequential. He bought an early-generation video camera and he and his wife Candy

Goodwin filmed family dinners, picnics, people on chairs watching a Fourth of July parade, as well as family therapy sessions which he observed through a Batesonian lense (Bateson 1972). Chuck's other collaborator and most significant teacher was Gail Jefferson, who taught at the University of Pennsylvania at the time Chuck and Candy Goodwin were doctoral students there. Candy's dissertation supervisor was Erving Goffman, and Chuck attended his seminars as well.<sup>3</sup>

But later, the themes and data for Goodwin's research expanded far beyond conversational interaction. In 1989, the Goodwin's were invited by Lucy Suchman and Brigitte Jordan at XEROX Parc to study complex workplaces such as airline control rooms and the organisation of work in them through moment-by-moment multimodal communication. In many workplaces, it is imperative that workers share perceptions and are able to agree on how these are to be 'read'; in today's workplaces, these perceptions are often mediated by technologies, that is, they are perceptions of representations, not of the phenomena themselves. Goodwin's publications on professional perception among lawyers, police officers, archaeologists, geologists, and others have become his most influential ones, reaching far beyond fields principally concerned with human interaction.<sup>4</sup>

Perception, cognition, speech, gesture, and instrumental action all became folded into a single 'domain of scrutiny', and by making the unusual move of re-reading his entire work in light of his most recent insights, he was able to transform his life's work, just months before his life ended, into a single, coherent, empirical theory of human action, but one that is also at the same time a theory of human sense-making and intersubjectivity as it is a theory of human cultural evolution. My aim in this paper is to bring out, in a nutshell, the integrity of Chuck Goodwin's vision, to explain how to him, the emergence of a single sentence is a moment of interaction and the evolution of human sociality and culture are part and parcel of the same process. Chuck Goodwin possessed a fearless, curious, and wide-open mind. This disposition did

not only make him a voracious reader in multiple fields, but also gave him the courage to study what life brought before him: archaeological digs, oceanographers, family bedtime routines. He followed this jagged path of induction in a rigorous, methodical fashion, never losing his bearings, and always with disciplined attention to the facts of the single case. Perhaps this latter disposition of the mind was inherited from his father, known as Chil, a lawyer.

### Sentence construction

Charles Goodwin came on the scene with a paper (Goodwin 1979:98) in which he demonstrated that a single sentence, fluidly uttered by a single speaker during a dinner conversation involving two couples and two children, can upon analysis turn out to be the product of incessant, yet structured, interaction between the speaker and different others, each component of what is at the surface unbroken syntax designed for the particular knowledge state of the listener who at the time happens to look at them.

John: I gave, I gave up smoking  
           cigarettes::: =  
 Don: = Yea:h,  
           (0.4)  
 John: I-uh: one-one week ago t'da:y.  
           acshilly,

The sentence “I gave up smoking cigarettes one week ago today actually” is first addressed to the male guest, Don: “I gave up smoking cigarettes”, but while Don perfunctorily acknowledges it, he turns his gaze away at the same time from the speaker, John, who then scans the circle and finds his wife to be looking at him. To her, however, her husband’s having given up smoking is not news, and by changing the projected trajectory of his turn (‘last week’) and appending “one week ago today”, he transforms his ongoing sentence into an announcement that today is ‘a first anniversary’ of his accomplishment, which she may not

have been aware of. But he also loses his wife's gaze but finds that of the female guest and appends "actually" and thus transforms the sentence again, this time into a display of his own present realisation that he has reached that first milestone today. The sentence, during the course of its production, is continuously adjusted to the knowledge state of its current recipient.

Goodwin's analysis of this *naturally occurring sentence* was informed by his and his wife's already extensive research on the gaze behaviour of speakers and listeners<sup>5</sup>. This work had demonstrated that speakers seek the gaze of their intended listeners<sup>6</sup> and try to establish a state of mutual gaze at the beginning of their turns. The Goodwins identified a number of turn-construction devices—syntactic breaks, repair-initiation tokens, hesitations—by which speakers actively solicit the gaze of listeners. While these devices of a 'grammar-for-conversation' (Schegloff 1979) primarily and methodically serve to make speakers' difficulties in completing their turn at talk known, they are also performed in the service of broader interactional issues such as managing attention. Here, too, linguistic forms and embodied practices are tightly coupled, and the structure of the talk can consequently not be explained without reference to embodied interactional states and acts.

The impact that the appearance of *Sentence Construction* made on linguists at the time, including the present author, is difficult to appreciate today, when it is not uncommon at all anymore to understand spoken-language structure in connection with gesture, gaze, and so on. This paper was the most effective and consequential attack on Chomskyan linguistics: it showed that (a) what appears to be a single sentence, its syntactic structure generated 'top down' and ordered by transformation rules, is in fact produced in increments; the first sentential unit ("I gave up smoking") is succeeded by components<sup>7</sup> that cannot occur alone, but rather *re-complete* the sentence-thus-far. The insight that turns at talk are frequently produced in increments is such that it has since become a hallmark of research into interactional approaches to

grammar.<sup>8</sup> It means that only some utterances typically have the form of ‘complete packages’, such as complete sentences, and can stand on their own. These are typically sequence-initial utterances. Everything that comes after them in the sequence is in some way *built onto* the first, full form. It is an increment. From the perspective of Goodwin’s later work, we see in this analysis of a single sentence the first stage in the development of his theory of human action, namely that actions, including those performed by turns at talk, are produced by the *lamination* and successive *transformation* of materials provided by different interaction participants (in this case only the movements of their gaze).

The Goodwins subsequently showed that talk in interaction is not just a bi-modal, but at least a tri-modal process: they demonstrated that hand gestures can also be ‘official’—attended-to and ratified—components of turns at ‘talk’, for example when a speaker searches for a word. Conversation analysts showed that word-searches are overwhelmingly completed by speakers themselves. The Goodwins (Goodwin & Goodwin 1986), analysing the participants’ bodily actions during word-searches that are not solved ‘on the next beat’, found that speakers who have trouble finding a word (usually the next), turn their gaze away from the listener, looking to the side or up, thus displaying their status as a non-listener and thereby discouraging talk (including cooperation in the search) by the interlocutor. When they cannot find the word on their own, they return gaze to the interlocutor and make one or several (literally or metaphorically) depictive gestures that in some way embody (or allude to) the meaning of the searched-for word. As they make the gesture, they briefly shift their gaze to their gesture, thus alerting the listener to it. Recognising what is conveyed by the gestures, the listener may be able to propose a word as a ‘candidate solution’, and the primary speaker accepts, modifies, or rejects it.

When *Gesture and Co-Participation in the Activity of Searching for a Word*, together with its companion piece *Gesture as a Resource for the Organization of Mutual Orientation*<sup>9</sup>, appeared in a special issue of

*Semiotica*, edited by Adam Kendon in 1986, these two papers constituted the only published research on hand gestures in naturally occurring interaction, with the exception of a study by Heath (1982, 1986) on the role of gestures in the sequencing of doctor-patient interaction and a couple of ground-breaking papers by Adam Kendon (1972, 1983), which however (and in contrast to much of his other work) considered gestures as components of the production of *utterances* (see also Kendon 2004), not interactions. Co-operatively organised word-searches constitute moments during which the listener's *understanding* of a gesture is made overt and formulated in words: the word provided as a 'candidate solution' by the listener displays his or her reading of the speaker's hand gesture. Such moments are fairly rare in everyday interaction, rare moments that give us a 'proof procedure' for how a hearer understands a gesture (in talk, every next turn is a 'proof procedure' that demonstrates how someone has understood the prior turn). Distinct responses to gestures occur much less frequently: one can frequently and easily identify the addressee's uptake of *pointing* gestures—the addressee turns their gaze to the indicated target—but how a hearer decodes, say, a conceptual or pragmatic hand gesture (see Streeck 2009: Chs.7, 8) is rarely made public. This makes it difficult to apply CA methodology to gesture research. The roles of gestures in the production of intersubjectivity are therefore exceedingly difficult to ascertain.

### **Co-Operative Transformation**

It was in the context of an analysis of a word-search that Goodwin for the first time noticed the mechanism of *co-operative transformation* that later became the central part of his theory of human action and cultural evolution. Below is the sequence in question. We see that a speaker (Martha) and a non-addressed listener (Susi) complete a single sentence together.

- 1 Kathy Was 'er **dress** right o:n,
- 2 Martha u-Her: dress was white, (.)
- 3 Susi eyelet
- 4 (o:3)
- 5 Martha emb**roid**ered eyelet

It is worth quoting Goodwin's observations about this sequence at length:

In line 1 Kathy asks about the bride's dress. In line 2, after pronouncing the word "white" Martha displays entry into a word search both prosodically and by interrupting the progression of her ongoing talk (Goodwin and Goodwin 1986). Seeing this, Susi, who also saw the dress, produces "eyelet" with a falling prosodic contour to complete Martha's interrupted description. Susi intimately inhabits the action Martha is producing by claiming the ability to independently see what she is trying to say. The word "eyelet" builds upon the emerging grammatical structure of the talk it is tied to both co-operatively and accumulatively by bringing Martha's unfinished noun phrase and sentence to completion. However, Martha does not ratify this as an appropriate completion to the unit she was in the process of constructing. It may well be that "eyelet," though accurate, was not the precise word she was seeking. Martha and Susi attended the wedding together, but Martha saw something special in the bride's dress that Susi did not. In line 5 Martha claims the primacy of her epistemic rights [...] by placing the word "embroidered" before "eyelet." Both what the noun phrase eventually comes to be, and the phenomenal object emerging through time within it (the relevant character of the bride's dress as something to be assessed and appreciated in a specific way), are the outcome of an accumulative, temporally unfolding co-operative process within which different actors successively contributed dif-

ferent materials. [...] Susi grasps in a relevant fashion not only the grammatical organization of Martha's talk, but precisely what Martha is thinking about, what she is attempting to tell Kathy, through that talk, i.e. that she is attempting to construct a description of the dress they saw together. (Goodwin 2017: 50-2).

Until the late 1980s, Goodwin, like almost everyone who studied human interaction *in the wild* (Hutchins 1995) up to and at this time, studied *face-to-face* interaction, that is, interaction in which the parties are one another's objects of attention. But this mode of interacting, in which the parties turn away from the world around them and orient fully to one another is only one among at least two fundamental *participation frameworks*. The other has been called *joint attention* (Moore & Dunham 1995), '*with*' (Goffman 1963), and *Mitsein* (Heidegger, 1962 [1926]): the interaction participants together are focussed on an object, a 'third', available to them either in the world at hand or the world in sight. In research on human development, the infant's ability to focus away from the human caretaker and join her in attending to an object at hand has been recognised to be an essential prerequisite for the acquisition of referential language (Baldwin 1995; Tomasello 1995). In the context of interaction studies, turning to interactions in which the parties are turned to, and involved with, the material world had profound implications (see Streeck, Goodwin/LeBaron 2011). Put simply, it dissolves the boundary between communication and the material world altogether, where, before, 'the world' had only appeared as the universe that is being talked about, as object, not fabric of communication. Consequently, it is also no longer possible to distinguish human acts *about the world* and acts *of the world*, that is, direct physical manipulations of objects at hand (Streeck 1996). Jointly understanding an object at hand is frequently the very point of an interaction in scientific practice. Goodwin first studied 'seeing as a situated activity' in an airline control room where airplanes appear as dots on radar screens, grainy images on closed-circuit tele-



vision, and so on, and subsequently in a whole series of scientific disciplines, each endowed with its own history of instruments, categories, and practices of perception: archaeology, chemistry, oceanography, surgery, and geology. Citing both Heidegger (1962) and Wittgenstein (1953), he noted “that human cognitive activity is inextricably lodged within the activities and settings of the lived social world” (Goodwin 1996: 115). Scientific contexts are not different from the interactions of lay people in that there are always historical, shared practices and criteria by which the validity of some perception is *publicly* assessed.

### **Co-Operative Action**

Chuck Goodwin devoted much time during the last years of his life to fundamentally reworking *all* of his prior studies into a single coherent body of empirical theory. The book is the product of an unusual production history: invited to combine some of his most important papers into a single volume and make some editorial revisions or write commentary on the occasion, he revisited and reworked his entire life’s work into a single ‘narrative’, the discovery of one ‘great pattern that connects’, that is apparent in almost any interaction and yet ties the whole of human cultural and social history together, and that Goodwin came to call ‘co-operative transformation’ and, finally, ‘co-operative action’. The basic conception of Co-Operative Action is straightforward and simple:

New action is built by decomposing and reusing with transformation the resources made available by the earlier actions of others. (1)

We have already seen this mechanism at play in the construction of spoken utterances, for example when Martha in the ‘wedding dress’ sequence transforms Susi’s noun phrase by inserting a modifier so that the ultimate description is the “outcome of an accumulative, temporally unfolding co-operative process within which different actors successively contributed different materials” (52). But *Co-Operative Action*

reveals in chapter after chapter the pervasiveness of this social form across many domains of human action and socially shared cognition.

Co-operative action in Goodwin's sense must be distinguished from cooperation: "co-operative action differs from cooperation in that it is not restricted to mutual aid; more crucially it provides, in the midst of action itself, a systematic mechanism for progressive accumulation with modification on all scales" (1)

Thus, a boy who during an argument takes the sentence thrown at him—"Why don't you get off my yard?"—and expands it to "Why don't you make me get off your yard?" does not engage in cooperation, but rather builds a new (agonistic) action by re-using a resource provided by his adversary's prior agonistic act. Such simple expansions (cumulative transformations) can alter the nature of the linguistic action sequence under way and the 'participation framework' that the parties maintain from moment to moment. And yet, such un-cooperative co-operation also constitutes a specific form of sociality in which the parties 'inhabit' each other's acts: "Building action by accumulatively incorporating resources provided by others creates a distinctive form of sociality: it is one of the ways in which we inhabit each other's actions, including those of no longer present predecessors." (31)

Goodwin continues,

The substrate on which new action is built does not have to be provided by a co-participant; resources provided from tradition are also used, and co-operative action therefore constitutes a form of sociality that comprises both our relationships with consociates as with our predecessors. Simply by using words and constructions that the common language provides we engage with the cognitive practices and cumulative problem solutions of ancestors. Goodwin calls this 'the consequential presence of absent predecessors within local face-to-face interaction. (246)

Goodwin often uses Goffman's term *lamination* to refer to the structure of this accumulation. An example is his use of the term in the treatment of prosody. Goodwin takes intonation contours as quasi-independent semiotic resources that are laminated onto spoken texts to create different interactional effects and contextual configurations. He gives the example of a contemporary actor producing hesitations, repetitions, and pauses as he utters the words 'no fair princess' from Shakespeare's *As You Like It*. He writes that

the action that must happen here, Orlando's suddenly falling in love on encountering Rosalind, is made visible entirely through the actor's skillful prosody as he [...] inhabits the line. The laminated organization of human action makes it possible for a single action to be constructed through the intertwined activities of people living four hundred years apart from each other (130).

Even when the participants rely on what appears to be a single modality or resource such as speech, in fact "participants build action by laminating *different kinds* of meaning-making resources together" (238, *emph.* JS). Even talk is inherently multimodal. When the parties talk during face-to-face interaction, multiple 'complementary semiotic fields' are relevant, including

- 1) the mutual orientation of the participants' bodies toward both each other and the materials they are working with, which creates a public focus of attention and a locus for shared work;
- 2) language, including relevant deictic terms, organized within sequences of action within human interaction;
- 3) hands making environmentally coupled gestures;
- 4) consequential phenomena in the surround that is being intensely scrutinized by the participants as part of the work they are doing together. (238)

This is the contextual configuration that Goodwin calls the ‘co-operative transformation zone’. It is realised, for example, in the interaction of senior and apprentice geologists in which rocks are handled and annotated by gestures so that sediments become visible to novices, who thereby not only acquire new perceptual standards and categories, but also learn the embodied practices and stances (postures) that make geological perception possible and visible as a socially shared, managed endeavour. Co-operative transformation takes place also when chemists make normative perceptual distinctions between black and jet black (the latter being laminated onto the former) and expand ordinary usage by finer distinctions such as ‘gorilla fur’/‘orangutan hair’ to identify the certain shades fibres go through as they are being heated (Goodwin 1997). Cooperative transformation—“decomposing, and reusing with transformation the resources made available by the earlier actions of others” (1)—is also the mechanism by which we display how we understand one another’s turns at talk (cf. the ‘next-turn-proof-procedure’, Sacks/Schegloff/Jefferson 1974)<sup>10</sup>, and it appears when we examine how certain basic human hand tools are made. These tools, known as *polyoliths* (Reynolds 1994), are made from different constitutive parts which transform one another by being joined together. Co-operative transformation, in other words, defines both human actions and their results: “[H]uman tools manifest the same co-operative organization as human action in general (...)” (136).

(...) [A]ction is built by performing accumulative transformations on materials composed of parts that can be decomposed, rearranged, and added to create something new (including strong opposition to what was created through the arrangement of the earlier materials), which also visibly displays its inheritance from what occurred before. Human tools, as demonstrated most simply in the stone ax (...), have this same organization. The ax is constructed from discrete parts drawn from diverse materials that, like prosody and discrete

language structure, have complementary properties. The stone, the leather thongs, and the wood handle are placed in an arrangement where they can operate on each other to create something that cannot be found in any of these parts in isolation. The tool comes into existence through the creation of a web of relationships that organize unlike materials. (136)

Goodwin's argument is not that there is homology between core mechanisms in each of the different domains of human action—"the locus for human action is not lodged within a particular modality, such as talk, or language" (136), but that each of these domains is itself constituted by the same basic procedures.

While the basic mechanism of co-operative action may be simple and straightforward, Goodwin shows that is involved in and to a great extent explains the existence and functioning of a broad domain of human action and cognition and, by the same token, areas of cultural evolution. One such domain is sensory perception, to which Goodwin has devoted much—and his most influential—work (Goodwin 1994; 1997). Like all ethnomethodologists, he refuted the notion that perception is an 'internal' and strictly physiological process. What can be seen is a matter of social consensus and shared perceptual categories as much as it is a function of the structure of the human eye, and perceptions are best studied as agreeable (and contestable) perceptual *judgments* in a community of practice.<sup>11</sup> Agreed-upon categories of perception and the tools and technology that support and augment sensory perception in the modern age are the products of cultural accumulation, driven by problem solving in co-operative action. New perceptual categories are brought into being in professional communities when members in need of perceptual or conceptual refinement produce new categories and labels. Thus, everyone's being and competence as a perceiver is lodged in histories of co-operative action.

The procedural logic of co-operative action, which enables agreement on perceptual judgments via the situated production of new perceptual categories, governs the production of science and scientific observations quite generally, as Goodwin revealed in his studies of chemists, oceanographers, and geologists. And to the extent to which it enables, governs, and explains innovation (as transformative re-use and re-assembly—recycling—of prefabricated parts), it also explains *differentiation*, that is, the appearance of autonomous evolutionary ‘sub-paths’ not shared by the culture at large. The more specialised the perceptual categories and skills, the more the community is in need of some form of institutional pedagogy (Gergely & Csibra 2006).

Each community is ... faced with the ongoing task of building both the objects and tools that populate its environment (e.g., archaeological maps, measuring cups in kitchens, surgical tools, and classifications of structures within the bodies being operated on) and skilled, knowing actors capable of not only recognizing these objects, but knowing in fine detail how to use them to constitute the activities that sustain the community. Simultaneously the co-operative organization of action provides the resources required to construct such actors. (Goodwin 2017:320)

### **Conclusion: The Unity of Mind and Nature**

‘Rethinking context’ (cf. Duranti & Goodwin 1992) is something that occupied Goodwin throughout much of his life. In *Co-Operative Action*, he aligned his ethnomethodological understanding of context as an ongoing accomplishment of the parties’ actions with Uexküll’s concept of *Umwelt* (Uexküll 1957) and thereby transcended the nature-culture divide that ethnomethodology and related ‘humanistic’ approaches had steadfastly maintained. Goodwin saw human sense-making as a continuation of those primary acts of sensation and sense-making by

which primitive organisms such as amoeba propel themselves through the world: by discriminating between toxic and non-toxic or nutritional molecules in their surround. By enacting that distinction, amoebae structure their environment—they make an *Umwelt*, a perceptual world subjectively structured according to their purposes, i.e., their relevancies of sustaining themselves in the situation and the world, just like humans make an *Umwelt* by implicitly or explicitly agreeing on a definition of the situation. Although Chuck Goodwin did not often refer to Gregory Bateson's ideas in his work, he was deeply influenced by them, and his oeuvre can be read as an implementation of Bateson's dictum that mind and nature constitute a necessary unity (Bateson 1979).

## Notes

- 1 I thank Candy Goodwin for providing me with important information and corrections.
- 2 Reading Sacks' lectures was an important impetus for Goodwin's initial research and video-data gathering. Harvey Sacks died in a car accident at the age of 40. Chuck Goodwin had far more time to implement Sacks' vision and go and make discoveries wherever 'the work' took him. One could speculate where in the field Sacks would have found himself being taken, had he had more time to be carried away.
- 3 Other supportive presences at the University of Pennsylvania were William Labov and, to a lesser extent and more remotely, Dell Hymes. The present author first heard about the work of the Goodwins when Labov pointed him to Candy's dissertation, *He-Said-She-Said* (1990) during a visit to the Freie Universität Berlin.
- 4 'Professional vision' (Goodwin 1994) is the most cited article that has appeared in the 130 years of *American Anthropologist's* history.
- 5 See C. Goodwin 1980; M.H. Goodwin 1980.
- 6 Rossano (2012) has qualified this finding by showing that the need for mutual gaze is dependent on the activity that the parties are engaged in: not all types of action sequence appear to require mutual gaze; gaze is thus organised at the level of *action sequences*, not turns at talk. Streeck (2014) argues that mutual gaze is a matter of *recognition*, not attention; it displays the need for the recipient's recognition of the type of action or

the content of the talk *ratified* by the addressee.

- 7 Notice also that Goodwin placed “cigarettes” in the transcript in recognition of the fact that “I gave up smoking” is a complete sentence; by appending “cigarettes” as a re-completer, the speaker may have intended to indicate that his decision to give up smoking does not extend to pot. Goodwin only showed this in the transcript, but did not refer to it in his analysis, in apparent respect for the privacy of the ‘subject’.
- 8 See Schegloff 1979; Ochs / Schegloff / Thompson 1986; Deppermann / Günthner 2015.
- 9 In that paper, C. Goodwin showed that movements of the hand can organise the interlocutor’s gaze: while gestures often attract the gaze of the listener, self-touch, in particular touch to the face, ‘drives gaze away’. During word-searches, it can sometimes

be observed that speakers perform self-touching actions while trying to find the word on their own and direct their hands to their own gesturing hands when they invite co-participation in the search; Streeck 1988, 1993.)

- 10 Goodwin describes conversational participation as “a temporally unfolding process through which separate parties demonstrate to each other their ongoing understanding of the events they are engaged in by building actions that contribute to the further progression of these very same events. Participation [...] encompass[es] the practices used by rich, feeling bodies to perform relevant operations on a public substrate provided by others. (135)
- 11 The conception of perceptions as public judgments according to shared criteria goes back to Ryle (1949) and Wittgenstein (1953).

## References

- Bateson, G. (1972):** Steps to an Ecology of Mind. New York: Ballantine.
- Bateson, G. (1979):** Mind and Nature: A Necessary Unity. London: Wildwood House.
- Deppermann, A. / Günthner, S. (Hg.) (2015):** Temporality in Interaction. Amsterdam: Benjamins B.V.
- Duranti, A. / Goodwin, C. (Hg.) (1992):** Rethinking Context: Language as an

Interactive Phenomenon. Cambridge: Cambridge University Press.

**Gergely, G. / Gergely, C. (2006):** “Sylvia’s Recipe: The Role of Imitation and Pedagogy in the Transmission of Cultural Knowledge”, in: Enfield, N.J. / Levinson, S.C. (Hg.): The Roots of Human Sociality. London: Berg, pp. 229-255.

**Goffman, E. (1963):** Behavior in Public Places. New York: The Free Press.



- Goodwin, Charles (1979):** "The Interactive Construction of a Sentence in Natural Conversation", in: Psathas, George (Hg.): *Everyday Language: Studies in Ethnomethodology*. New York: Irvington Publishers, pp. 97–121.
- Goodwin, Charles (1980):** "Restarts, Pauses, and the Achievement of a State of Mutual Gaze at Turn-Beginning", in: *Sociological Inquiry*, 50 (3-4), pp. 272–302.
- Goodwin, Charles (1981):** *Conversational Organization: Interaction between Speakers and Hearers*. London: Academic Press.
- Goodwin, C. (1986):** "Gesture as a Resource for the Organization of Mutual Orientation", in: *Semiotica*, 62 (1-2), pp. 29-49.
- Goodwin, C. (1993):** *The Blackness of Black: Color Categories as Situated Practice*. November 2-7, 1993.
- Goodwin, C. (1994):** "Professional Vision", in: *American Anthropologist* 96 (3), pp. 606-633.
- Goodwin, C. (2017):** *Co-Operative Action*. Cambridge: Cambridge University Press.
- Goodwin, C. / Goodwin, M. (1996):** "Seeing as Situated Activity: Formulating Planes", in: Engeström, Y./Middleton, D. (Hg.): *Cognition and Communication at Work*. Cambridge: Cambridge University Press, pp. 61-95.
- Goodwin, C. / Goodwin, M. H. (1986):** *Gesture and Coparticipation in the Activity of Searching for a Word*", in: *Semiotica* 62 (1-2), pp. 51-75.
- Goodwin, M. H. (1980):** "Processes of Mutual Monitoring Implicated in the Production of Description Sequences", in: *Sociological Inquiry* 50 (3-4), pp. 303-317.
- Goodwin, M. H. (1990):** *He-Said-She-Said*. Bloomington and Indianapolis: Indiana University Press.
- Hayashi, M. / Raymond, G. / Sidnell, J. (Hg.). (2013):** *Conversational Repair and Human Understanding*. Cambridge: Cambridge University Press.
- Heath, C. (1982):** "The Display of Reciprocity: An Instance of a Sequential Relationship in Speech and Body Movement", in: *Semiotica*, 42 (2-4), pp. 147-167.
- Heath, C. (1986):** *Body Movement and Speech in Medical Interaction*. Cambridge: Cambridge University Press.
- Heidegger, M. (1962 (1926)):** *Being and Time*. New York: Harper and Row.
- Kendon, A. (1972):** "Some Relationships Between Body Motion and Speech", in: Seigmann, A. (Hg.): *Studies in Dyadic Communication*. Elmsford, N.Y.: Pergamon Press, pp. 177-210.
- Kendon, A. (1983):** "Gesture and Speech: How They Interact", in: Wiemann, J.M. / Harrison, R.P. (Hg.): *Nonverbal Interaction*. Beverly Hills: Sage, pp. 13-45.
- Kendon, A. (2004):** *Gesture: Visible Action as Utterance*. Cambridge: Cambridge University Press.
- Moore, C. / Dunham, P.J. (Hg.) (1995):** *Joint Attention. Its Origins and Role in Development*. Hillsdale, N.J.: Lawrence Erlbaum.

**Ochs, E. / Schegloff, E.A. / Thompson, S. (Hg.) (1996):** *Grammar and Interaction*. Cambridge: Cambridge University Press.

**Reynolds, P. C. (1994):** "The Complementary Theory of Language and Tool Use", in: Gibson, K.R./Ingold, T. (Hg.): *Tools, Language and Cognition in Human Evolution*. Cambridge: Cambridge University Press, pp. 407-428.

**Rossano, F. (2012):** *Gaze Behavior in Face-to-Face Interaction*. Ph.D. Dissertation: Max-Planck Institut for Psycholinguistics, Nijmegen.

**Ryle, G. (1949):** *The Concept of Mind*. Chicago: University of Chicago Press.

**Sacks, H. / Schegloff, E.A. / Jefferson, G. (1974):** "A Simplest Systematics for the Organization of Turn-Taking for Conversation", in: *Language* 50, pp. 696-735.

**Schegloff, E. A. (1979):** "On the Relevance of Repair to Syntax-for-Conversation", in: Givon, T. (Hg.): *Discourse and Syntax*, Vol. 12. New York: Academic Press, pp. 261-288.

**Streeck, J. (1988):** "The Significance of Gesture: How it is Established", in: *Papers in Pragmatics* 2 (1/2), pp. 60-83.

**Streeck, J. (1993):** "Gesture as Communication I: Its Coordination with Gaze and Speech", in: *Communication Monographs* 60, pp. 275-299.

**Streeck, J. (1996):** "How to Do Things With Things: Objets Trouvés and Sym-

bolization", in: *Human Studies* 19, pp. 365-384.

**Streeck, J. (2009):** *Gesturecraft. The Manu-facture of Meaning*. Amsterdam: Benjamins.

**Streeck, J. (2014):** "Mutual Gaze and Recognition. Revisiting Gaze Direction in Two-Person Interaction", in: Gullberg, M./Seyfeddinipur, M. (Hg.): *From Gesture in Conversation to Visible Action as Utterance*. Festschrift for Adam Kendon. Amsterdam: Benjamins, pp. 35-55.

**Streeck, J./Goodwin, C./LeBaron, C. (Hg.) (2011):** *Embodied Interaction. Language and Body in the Material World*. New York: Cambridge University Press.

**Tomasello, M. (1995):** "Joint Attention As Social Cognition", in: Moore, C./Dunham, P.J. (Hg.): *Joint Attention. Its Origins and Role in Development*. Hillsdale, N.J.: Lawrence Erlbaum, pp. 103-130.

**Uexküll, J. v. (1957):** "A Stroll Through the Worlds of Animals and Men: A Picture Book of Invisible Worlds", in: Schiller, C.H. (Hg.): *Instinctive Behavior: The Development of a Modern Concept*. New York: International Universities Press, pp. 5-80.

**Wittgenstein, L. (1953):** *Philosophical Investigations*. London: Blackwell.