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Movement Synchrony as a Topic of Empirical Social Interaction Research

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Abstract
In this chapter, we consider movement synchrony from two different perspectives. On the one hand, we report a small-scale empirical study to test the hypothesis that movement synchrony is a sequential phenomenon, which serves as a demonstration of how conversation analytically informed research on participants' unconscious tendencies to synchronize their body movements could proceed in practice. On the other hand, we consider movement synchrony through three closely related, yet essentially different, conceptual lenses: conditional relevance, dialogic resonance, and affordance. We suggest that a specific combination of the insights provided by these three conceptual tools would make conversation analytically informed study of movement synchrony both possible and fruitful.

Keywords: movement synchrony, joint decision-making, conditional relevance, dialogic resonance, affordance

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1 Introduction

As an indication of a specific form of human intersubjectivity, numerous studies have pointed to the deep pre-reflective tendency of humans to imitate each other's gestural behaviors and synchronize their body postures and movements when interacting (LaFrance 1982; Kimbara 2006). Such spontaneous synchrony has been observed when pairs of people walk (Zivotofsky & Hausdorff 2007), swing pendulums (Schmidt & O'Brien 1997), or sit in rocking chairs (Richardson et al. 2007). The tendencies of movement synchrony can be observed at many different levels, building a continuum of behaviors ranging from automatic to intentional (Shockley, Richardson, & Dale 2009; Chartrand & Bargh 1999; Ramseyer & Tschacher 2008; Hari et al. 2013), and they have been shown to exist already very early in infancy (e.g., Condon & Sander 1974).

The term 'synchrony' generally refers to the idea of the temporal coupling of independent oscillators that enter into a phase relationship (e.g., Miles et al. 2010), and in behavioral synchrony, two or more individuals perform similar movements simultaneously. Behavioral synchrony is thus separate from mimicry or behavioral matching or imitation, where an individual observes and replicates another's behavior (Louwerse et al. 2012) either intentionally or subconsciously. Behavioral synchrony also ranges from automatic imitation or mirror effects, which are understood as covert forms of synchronous movement (Heyes 2011), to intentional synchrony, as when playing music or dancing together. Furthermore, the broad idea

about the similarity of behavior between participants in interaction encompasses also intentional behaviors such as "gestural rephrasing" (Tabensky 2001), "bodily quoting" (Keevallik 2010), and "achieved synchrony" (Lerner 2002), where behaviors are designed to be seen as the same (Arnold 2012; Warner-Garcia 2013).

In this chapter, we focus specifically on synchronous body movements that seem not to be part of intentional communication. While empirical interaction research in the domain of conversation analysis (CA) has widely embraced the intentional similarity of movement as a topic of investigation and discussed its possible functions in interaction, such as indicating understanding, agreement, and appreciation (Warner-Garcia 2013), the participants' more unconscious tendencies to synchronize their movements have been largely excluded from the scope of CA inquiry (see e.g., Arnold 2012). There may be various reasons for such an omission—something that we will discuss in the latter part of the chapter. Notably, however, CA researchers generally emphasize that any feature of the participants' conduct may be relevant for the course of the interaction. Even if CA researchers seek to ground their analysis in the participants' publicly observable orientations to their own and each other's behaviors, the analysis usually contains no claims about the presence or absence of the participants' communicative intentionality in the given instance. For this reason, there seems to be no a priori reason to treat the spontaneous, pre-reflective type of movement synchrony as irrelevant for the CA-informed analysis of social interaction. In this paper, we explore some theoretical possibilities to enrich CA-informed studies with analyses of spontaneous movement synchrony. In addition, we report a small-scale empirical study, which serves as a demonstration of how this could proceed in practice.

In line with the hybrid aim of the chapter, the first two sections are empirically oriented, while the last section is more theoretical. First, we will draw on recent literature in empirical social interaction research, introducing the hypothesis that movement synchrony is a sequential phenomenon. Then, for the purposes of investigating our hypothesis, we will report the preliminary results of a study on the use of movement synchrony during dyadic decision-making. Finally, we will consider the topic of movement synchrony through three closely related, yet essentially different, conceptual lenses: conditional relevance (Schegloff 2007), dialogic resonance (Du Bois, Hobson, & Hobson 2014), and affordance (Gibson 1979). We suggest that a specific combination of the insights provided by these three conceptual tools would make possible the fruitful CA-informed analysis of movement synchrony.

2 Movement Synchrony as a (Sequential) Contextual Phenomenon

Even as an unintentional, pre-reflective phenomenon, extensive literature points to the social meaningfulness of movement synchrony. Moving in synchrony has been theorized to play a significant role in the degree to which individuals are perceived as a social unit or entity (Campbell 1958; Condon 1980; LaFrance 1985; Kendon 1990; Hamilton & Sherman 1996; Marsh, Richardson, & Schmidt 2009). Moving in synchrony has also been suggested to facilitate communication by helping the alignment of mental and affective states (Cross 2005; Frith & Frith 2006). Being in synchrony has positive social and affective outcomes: it has been shown to increase compassion (Valdesolo & DeSteno 2011), trust (Launay, Dean, & Bailes 2012), rapport (Miles, Nind, & Macrae 2009), affiliation (Hove & Risen 2009) cooperation (Reddish, Fisher, & Bulbulia 2013; Valdesolo, Ouyang, & DeSteno 2010; Wiltermuth & Heath 2009), and generalized prosociality (Reddish, Bulbulia, & Fischer 2014), as well as empathy in children (Rabinowitch 2013). According to the communication-accommodation theory (see e.g., Giles, Coupland, & Coupland 1991), the degree of similarity in the behaviors of two individuals serves as a means for achieving a desired social distance between them, with more similarity leading to a smaller social distance, and less similarity to a larger social distance (for a review on the social aspects of behavioral similarity in terms of temporal and

rhythmic entrainment in spoken interaction, see Beňuš 2014).

Movement synchrony is also influenced by task requirements. In their study on body movement synchrony during conversational interaction, Paxton and Dale (2013) found significantly less synchronicity between the participants in a dyad during argumentative conversational settings when compared to affiliative ones. Fusaroli and Tylén (2012) found that when dyads were making joint decisions in a psychophysical task, the degree to which the participants matched each other's task-relevant expressions correlated positively with their task performance, whereas the indiscriminate matching of all expressions had the opposite effect. In a seminal study, Shockley, Santana, and Fowler (2003) showed that two participants synchronized their body sways more when they worked together on a puzzle task than when the same participants were still in the same space but each performed the same task with a different partner. Quite surprisingly, the body sway patterns were similar irrespective of whether or not the two participants could see each other during the task, which led the researchers to conclude that, at least to some extent, body sway synchrony could be an epiphenomenon of the convergence of the participants' speaking patterns (see also Shockley et al. 2007).

Hence, people seem to be sensitive to what to match, and when. In the above-reviewed studies in cognitive science and experimental psychology, participants' behaviors have mostly been examined with reference to the qualities of the entire interactional episodes. From the point of view of CA, however, the timescales used in these studies are too coarse. CA is about describing the moment-by-moment dynamics of interactional events in a high level of detail and about considering each behavior with respect to the very action that it implements in its immediate sequential environment. Indeed, studies in CA have shown that the interactional import of embodied behaviors of identical content can differ drastically depending on what has been said and done in the interaction before (see e.g., Sorjonen 2001; Rossano 2012). This insight arising from CA suggests that we might attain a deeper understanding of the social significance of movement synchrony by taking the local, sequential context of interaction into consideration.

In our recent study (Stevanovic et al. 2017), we investigated movement synchrony with reference to significantly smaller units of social interaction than has been done previously. We asked whether sequential continuations and sequential transitions would exhibit different degrees of synchronicity in the body sways of two participants engaged in joint decision-making. Our results showed that participants' body sway synchrony was higher during sequential transitions than during sequential continuations. Further, we asked whether the participants' mutual visibility would influence their body sway synchrony. Here, in contrast to the findings of Shockley and colleagues reviewed above (Shockley et al. 2003; Shockley, Baker et al. 2007), we found the participants' body sways to be significantly more synchronized when they could see each other compared to when they could not. However, our main finding here was that the positive relation between the participants' mutual visibility and increased body sway synchrony was significantly more prominent during sequential transitions when compared to sequential continuations.

These findings suggest that, instead of being just an automatic reaction to the visible cues provided by the co-participant or a result of the participants generally having positive affects towards each other, the similarity in the participants' body sway patterns may function as an interactional resource at those moments of interaction when a close between-participant coordination of behavior and the maintenance of affiliative bonds become particularly critical, as is the case during sequential transitions. In what comes next, we will consider another locus in the sequential unfolding of interaction where such concerns may become critical, which is the non-acceptance of proposals.

3 An Empirical Case: Synchronization of Body Movement During Joint Decision-Making

Joint decision-making typically consists of sequences that start by one participant making a *proposal* on what could be done (Stevanovic 2012a; 2012b). A proposal in turn makes relevant an *acceptance* by the other participant. From this point of view, the two actions—proposal and acceptance—form the adjacency pair that constitutes the core of a decision-making sequence (cf. Houtkoop 1987). Proposals, however, may also have other outcomes: they may be rejected or silently ignored, or their ultimate outcome may be left pending after the recipient has expressed some reception of the content of the proposal. While the range of responses that constitute non-acceptance can thus be varied, our previous work on joint decision-making in a dyad has suggested that, in practice, the majority of non-acceptances are accomplished in relatively similar ways, which involve the participants "coordinately" abandoning the proposals simply by not pursuing them anymore (Stevanovic 2012a; Himberg et al. 2017).

In this study, we ask: (1) is the degree of movement synchrony during joint decision-making sequences affected by whether the proposals are accepted or not, and (2) how does the participants' mutual visibility (or lack of it) influence the pattern?

3.1 Data and Method

Two Finnish-speaking participants at a time engaged in joint decision-making tasks while we recorded their body movements with an optical motion-capture system and their voices with portable head-worn microphones. The dyads were asked to discuss, negotiate, and decide on descriptions of fictional characters while either facing or not facing each other. These immersive and engaging tasks were developed to afford naturalistic dynamics of joint decision-making interaction, while the task structure provided the repeatability and comparability of the data across all dyads.

3.1.1 Participants

Altogether 24 healthy participants (7 female–female and 5 male–male dyads; mean ± SD age 27.0 ± 6.6 years) were recruited via email lists. Four dyads knew each other very well, four not at all, and four were somewhere in-between. Their identity was revealed only to the members of the research group, who needed to sign a confidentiality contract. The study had prior approval by the Aalto University Research Ethics Committee. All participants were informed about the use of the data and signed a consent form.

3.1.2 Measurements

The body-movement data were collected with a 20-camera OptiTrack motion-capture system and by each participant wearing a whole-body suit with 37 optical reflectors attached to it. The motion-capture system measured the locations of the reflectors on the suits at intervals of 10 ms. Each participant's voice was recorded using a DPA d:fine portable head-worn condenser microphone that has a frequency response from 20 Hz to 20 kHz. HD video recordings of the trials were used as a reference and to illustrate the patterns identified in the quantitative statistical data analysis. We also measured the participants' gaze direction using portable eye-tracking glasses, but these data will not be reported here.

3.1.3 Procedure

A single dyad was studied at a time. At the beginning of each session, the two participants put on the motion capture suits, head-worn microphones, and eye-tracking glasses, which were then calibrated. The participants carried out three warm-up tasks aimed to help them forget the

measuring equipment, relax, and get acquainted with interacting with each other.

The participants were asked to choose together an adjective that best describes a fictional target. The adjective needed to start with a given letter, and once a decision was reached, the dyad had to move on to the next letter in the alphabet, deciding altogether on eight adjectives. As a motivation for the task, the participants were told to imagine themselves as editors of a children's book whose aim was to teach children the alphabet by featuring the target character, and they needed to choose suitable adjectives for that purpose. The task was performed twice. In one trial (consisting of eight decisions), the adjective target was Donald Duck, and in the other, Scrooge McDuck. The series of letters were based on the alphabet: either directly [H, I, J, K, L, M, N, O] or with one "non-Finnish" letter (Q) skipped in between [N, O, P, R, S, T, U, V]. In one condition, the participants could see each other, in the other they could not.

The order of the two visibility conditions (mutual visibility, no mutual visibility), the target type (Donald Duck or Scrooge McDuck), and the alphabet list, as well as the order of this task in relation to another task not reported here, were counterbalanced across pairs. At the end of each session, the participants filled in a questionnaire about their experiences with the task requirements and their collaboration partner.

3.1.4 Data Processing

Out of the 24 trials carried out (12 dyads x 2 visibility conditions), we obtained audio, video, and motion data from 21 trials. We then had 9 successful trials for mutual visibility and 12 for no mutual visibility. As the tasks were self-paced, the duration of the trials varied from 2 min to more than 7 min, with most trials lasting about 3–4 min. The audio analyses were primarily carried out using recordings from the head-worn microphones. However, in 4 trials, the data from the microphone were so noisy that the audio recorded by the eye-tracking glasses was used instead.

We used Praat (Boersma & Weenink 2015) to annotate all proposals from the interactions on the basis of the audio recordings. In all, we identified 323 proposals from all the trials used in the study: 162 in the mutual visibility condition and 161 in the no mutual visibility condition. The recipients' responses to the proposals were then divided into two categories, depending on whether the proposal was *accepted* (148 proposals) or *not accepted* (rejected, ignored, or left pending; a total of 175 proposals).

The movement data from the optical motion capture system were processed to enable the analysis of movement synchrony in participant pairs. From the raw position data of the 37 markers on each motion capture suit, 21 body-joint positions for each participant were calculated. From these 21-point skeletons we picked the chest marker to represent body sway. To eliminate the effects of movement direction and the participants' different bodily orientations in space, we calculated the accelerations of these markers along their trajectories of movement. This is a standard procedure in the analysis of barely-visible cyclical movements such as body sway, where the synchronicity of oscillations is assumed to be of greater social significance than the direction of movement at each point in the cycle. This procedure gave us only one statistically stationary time-series per marker, which allowed a straightforward cross-correlation analysis to be conducted and compared across pairs. We calculated the cross-correlations for time-lags of up to three seconds, so as to be able to detect matches between the time-series even if they occurred at a delay.

To consider the changes in movement synchrony over time, the cross-correlation analysis was carried out in a 6-second moving window (600 samples) through each entire trial. From the resulting time-series, we picked the maximum correlation coefficients for each time-point and averaged across a window of six seconds around each proposal to obtain the average maximum correlations used in the statistical analysis. We then conducted a two-way analysis of variance (ANOVA) to see if movement synchrony was different when participants were facing each

other vs. when they were facing away (effect of mutual visibility), and whether accepted and not accepted proposals led to different levels of synchrony (effect of proposal type).

3.2 Results

Body sway synchrony exhibits a trendwise sensitivity to the different proposal outcomes and visibility conditions (Figure 1). Neither main effect is statistically significant alone, but the interaction effect just skirts the boundary of significance (p=0.0503). Post-hoc analysis shows the difference between the two not accepting conditions to be significant (p=0.03). In other words, when facing each other, non-acceptance of proposals led to the participants moving more in sync, while when not seeing each other, non-acceptance led to the participants moving less in sync.

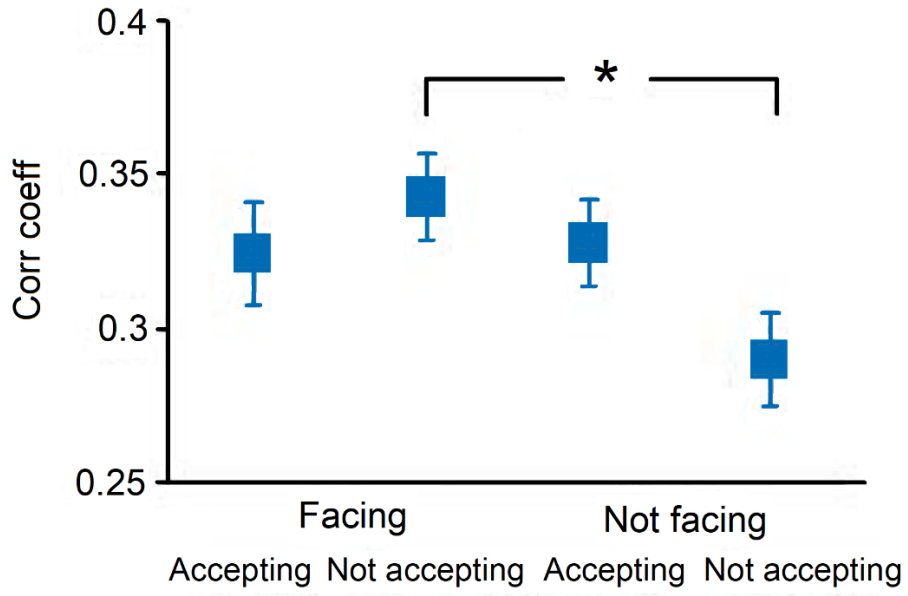

Figure 1. Maximum cross-correlation coefficients of chest markers (body-sway synchrony) in proposal time windows, by mutual visibility and proposal type.

3.3 Discussion of the Results

Joint decision-making is a complex endeavor where participants draw on a great variety of resources in different modalities, including words and prosody, and material artifacts (Stevanovic 2012a; 2012b; Stevanovic et al. 2017). Our results show that more subtle body movements can also play a role in this regard. However, instead of considering movement patterns of one participant as to their interactional import, we considered clustering patterns across our whole data set to compare two different sequential environments with reference to how synchronous the participants' body movements were in relation to each other.

Our findings give mixed evidence to support the idea of movement synchrony as a sequential phenomenon. Visibility as a phenomenon as such has little to do with sequentiality. From this point of view, given that our results attribute significance to visibility as an enhancer of synchrony, they could be related to earlier studies in the field of psychology (Shockley et al. 2003), while falling out of the scope of CA research. Notably, however, in our analysis, the main effect of visibility as such was not statistically significant, but our results were obtained only when considering the sequential distinction between accepting and non-accepting responses to proposals. Thus, our findings highlight visibility as a precondition for the participants to make effective use of body sway synchrony as a resource to deal with specific sequential challenges—in this case, the challenges related to the maintenance of affiliative

bonds and close behavioral coordination during the non-acceptance of proposals. Indeed, the idea of visibility enabling the use of a wider range of interactional resources, compared to conditions of invisibility (e.g., telephone conversations), is intuitively quite obvious. In addition, the idea is also in line with our previous study on sequential transitions (Stevanovic et al. 2017), where we specifically suggested that, during invisibility, a decreased level of body sway synchrony may be compensated for by an increased level of pitch register matching. Notably, however, our empirical results only skirted the boundary of statistical significance and must therefore be treated with corresponding caution.

Unlike some CA studies, which scrutinize single instances of participants' behaviors at the level of the turn-by-turn unfolding of interaction, in our quantitative analysis, we have summarized interactional phenomena in general metrics that represent some characteristics of behavior in different types of sequences. From the perspective of CA, the analysis may come across as too coarse and unable to capture all the information that participants might use in communication. While a case-by-case analysis of individual decision-making sequences might encourage the consideration of more precise movement correspondences, such as those between the participants' hand movements, we have not yet been able to generalize such findings across the participants within all the dyads in our data. However, compared with the previous studies on behavioral synchrony where entire interaction episodes are summarized as single data points (see e.g., Hove & Risen 2009; Valdesolo et al. 2010), our approach is relatively detailed, given that our focus is on local sequences of interaction.

4 How Should One Account for the Interactional Functions of Movement Synchrony?

From the perspective of CA, movement synchrony is a challenging phenomenon to account for. Inasmuch as there are two fundamentally different frameworks for interactional coordination, sequential and concurrent (see Stevanovic & Peräkylä 2015; Deppermann & Streeck 2018), CA has largely been concerned with the former. In spoken conversation, joint action is primarily organized in successive turns at talk, which makes stable trajectories of initiative action (e.g., proposals, offers, and invitations) and responsive action (e.g., acceptances and rejections) possible (Schegloff 2007). The sequential framework of interactional coordination involves participants imposing constraints on the next speakers in their following utterances by making specific response options "conditionally relevant" (Schegloff & Sacks 1973). As a result, spoken conversation is permeated by constantly alternating asymmetries, one speaker at the time occupying the role of a powerful agent who controls the course of joint action, and others being accountable for producing expected responsive actions (Enfield 2013; Enfield & Kockelman 2017).

One "home environment" for the concurrent framework of interactional coordination, which is recognizable to everyone, is the collective production of sound and movement through singing, playing, and dance (Durkheim 2001[1912]; McNeill 1995; Heider & Warner 2010; Himberg & Thompson 2011; Phillips-Silver & Keller 2012). However, the concurrent framework of interactional coordination is not absent from spoken conversations, either. Mother-infant interaction is characterized by simultaneous vocalizations, these frequently coinciding with positive affective expressions (Beebe, Stern, & Jaffe 1979). Women engaged in single-sex talk with friends have been shown to produce a lot of overlapping talk (Coates 1994), with the overlap often characterizing instances of agreement (Goodwin & Goodwin 1987; Vatanen 2014). A classic example of the concurrent framework entering the sequential world of conversation is laughing together (Jefferson, Sacks, & Schegloff 1987). Synchronous moments of interaction are likely to be part of "shared intentionality" (Tomasello & Carpenter 2007; Ford & Fox 2010), which has been argued to be a unique characteristic of *human* intersubjectivity. However, this aspect of shared intentionality is difficult to account for when

taking the CA notion of conditional relevance as the analytic starting point.

Besides CA, another approach to the study of sequential relations between utterances and other behaviors is provided by the dialogic perspective (Vološinov 1973[1929]; Bakhtin 1981[1934]; Du Bois 2007; 2014; Linell 2009; see also Goodwin 2018). This approach has been influential in the emerging field of sociocultural linguistics (Bucholtz & Hall 2005) and in associated fields, such as anthropology, philosophy, and literature. It deals with the ways in which participants reuse materials created by each other (Goodwin 2018), such engagement yielding to "the catalytic activation of affinities across utterances" (Du Bois 2014). This phenomenon, called "dialogic resonance" (Du Bois 2007; 2014), is considered to be a matter of dynamic coupling between two distinct but coordinated systems so as to create a new, intersubjective system (Du Bois et al. 2014). The dialogical approach is particularly well suited to the analysis of how participants in interaction constantly take a stance both toward the content of talk and toward each other (Du Bois 2007; Du Bois & Kärkkäinen 2012). This implicit relational dimension of interaction may sometimes be even more important to the participants than the actual contents of the spoken interaction (Jensen & Pedersen 2016: 91; for an analogous idea of "phatic communion," see Malinowski 1946[1923]).

According to some recent suggestions, dialogic resonance may also be realized by body movements (see e.g., Arnold 2012; Warner-Garcia 2013). For example, holding hands can be considered as a dialogical act that connects individuals and implies mutual care (Linell 2009; Hodges 2009; Jensen & Pedersen 2016). Thus, even if verbal social interaction, which has traditionally constituted the focus of the dialogical approach, most often takes place within the sequential framework of interactional coordination, the dialogical approach can be seen to encompass concurrent interactional phenomena just as naturally as sequential ones. When analyzing behaviors that hardly reach participants' conscious awareness, it is necessary to find ways to conceptualize interaction without having to take a stance with regard to the relative degree of intentionality that underlies the participants' behaviors. From this point of view, the advantages of the dialogic perspective stand out. The perspective allows the analyst to focus on the social and affective *outcomes* of the participants' mutually coupled behaviors without necessarily having to specify the roles that individual participants play in the achievement of these outcomes. From this point of view, the social and affective outcomes of synchronous communicative patterns may also be oriented to as interactionally meaningful. These patterns may therefore also be *studied* as meaningful, even if some details of these patterns, such as who imitates whom, would not be available to the researcher.

What is then concretely meant by suggesting that the social and affective outcomes of synchronous communicative patterns may be oriented to as interactionally meaningful? Here, we argue that these patterns are interactionally meaningful inasmuch as they may be considered to provide the participants with new action possibilities, or "affordances" (Gibson 1979[1986]), with regard to their next actions. From an ecological perspective, the core idea in the theory of affordances is that an organism directly perceives the possibilities for action within an environment on the basis of values that it attaches to the different aspects of the world. In this type of perception, affect plays a crucial role, influencing the intrinsic attractiveness or aversiveness of an action in relation to the future direction of interaction (Jensen & Pedersen 2016; Himberg et al. 2018). As pointed out by Slaby and colleagues (2013: 42), "emotions disclose what a situation affords in terms of potential doings, and the specific efforts required in these doings, and potential happenings affecting me that I have to put up with or otherwise respond to adequately." On this basis, we may interpret the results of our study in two somewhat different ways. On the one hand, we may argue that visibility allows the participants to use movement synchrony as a way to manage the implementation of delicate and potentially non-affiliative actions such as non-acceptance of proposals in an affiliative way. On the other hand, we could think that the positive social and affective outcomes of movement synchrony provide

the participants with an affective basis to maintain solidarity in the face of behaviors that might appear problematic. Whichever direction of reasoning one prefers, our findings highlight the deep interwovenness of movement synchrony and the management of sociality and affectivity in interaction.

The above insights may be brought to bear on some recent ideas about the constitutive role of affect in action formation. Stevanovic and Peräkylä (2014) suggested that human social action is organized with reference to three orders of social relations: the emotional order, the deontic order, and the epistemic order. The emotional order was defined to consist of "the socio-cultural, personal, and local expectations concerning the expression of affect within a momentary relationship of interacting participants" (Stevanovic & Peräkylä 2014: 192). This definition highlights the multiple timescales where human interpersonal coordination happens. The timescales range from fast automatic reactions to interpersonal cues, across the behavioral and gestural coordination of action within sequences of action during single encounters, to the long-term interactional patterns associated with interaction histories and personal relationships (De Jaegher, Peräkylä, & Stevanovic 2016). From this point of view, we may consider movement synchrony as one of those resources by which participants may negotiate their relative emotional statuses at the most local level of interaction (along with a range of other resources; see e.g., Ochs & Schieffelin 1989), which in turn has consequences for the range of actions that can be accomplished as they rely on these statuses (see Stevanovic & Peräkylä 2014).

In sum, we have considered the topic of movement synchrony through the conceptual lenses of "conditional relevance" (Schegloff 2007), "dialogic resonance" (Du Bois et al. 2014), and "affordance" (Gibson 1979). As a point of departure for the analysis of movement synchrony, each of these three concepts may be considered inadequate. However, we argue that a specific combination of the insights provided by these approaches together makes the fruitful CA-informed analysis of movement synchrony possible. First, the dialogical perspective allows us to surpass the questions of sequentiality vs. synchronicity and intentionality vs. unintentionality of behavior in favor of a focus on the social and affective outcomes of behavior. Second, the notion of affordance enables us to link a high/low level of movement synchrony to specific interactional consequences. Finally, the notion of specific interactional consequences leads us back to the CA notions of conditional relevance: it is only in relationships with a sufficient degree of closeness and intimacy that certain ostensibly ambiguous actions can be perceived as affectionate, the relationships thus having implications for the degree of synchrony that various responsive actions are expected to exhibit. Hence, while further research is needed to unravel the empirical details of movement synchrony as a sequential phenomenon, this paper has discussed how this could happen with reference to a CA approach to intersubjectivity.

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