

ORIGINAL ARTICLE

Embodying intimacy in everyday interaction: A biolinguistic study of long-term partners in the Southeastern United States

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Abstract

Drawing on linguistic and biocultural anthropological perspectives on embodiment, this paper advances a “biolinguistic” approach to ethnographic research on intimacy, attending simultaneously to the co-constitutive interactive, psychophysiological, and phenomenological processes that emerge in everyday embodied interaction between long-term, cohabitating romantic partners. Through concurrent attention to natural interactions captured during video ethnography and moment-to-moment shifts in heart-rate variability, this study complements and complicates existing psychological, communication, and anthropological research on intimacy. Three case-studies of long-term couples residing in the Southeastern United States demonstrate how neither pure psychophysiology nor pure linguistic analysis fully encapsulates potential patterns of intimacy among them. Rather, this microanalytical, biolinguistic approach to the complexities of body and language interplay, in treating embodiment and interaction as bidirectional phenomena, emphasizes that meanings and enactments of intimacy might look different for each couple and can change over time in complex ways that index couples’ enduring orientations towards various cultural and relational norms.

KEYWORDS

biolinguistic anthropology, embodiment, intimacy, relationships

INTRODUCTION

Understanding how human bodies are impacted by the world, including how the body is shaped by broad social processes as well as the dynamics of particular relationships, is one of the central goals of biocultural medical anthropology (see e.g., DeCaro, 2008, 2016; Dressler, 2005; Gravlee, 2009; Worthman &

Costello, 2009). Biocultural researchers are thus attuned to the ways in which the world becomes embodied. They further emphasize how people “body the world,” so to speak, or how—in Carol Worthman’s terms, “embodiment exerts phenomenological force and represents a force *on*, as well as a force *in*, culture” (1999, 53; emphasis added). Linguistic anthropologists, in turn, have attended to the multimodal ways in which talk-in-interaction constitutes an embodied process comprised of words as well as prosody, touch, gaze, gesture, and positioning in space (see e.g., Goodwin, 2018; Goodwin & Cekaite, 2018; Streeck et al., 2011).

Although both perspectives underscore the body-world relationship as it dynamically emerges in everyday life, these two approaches emphasize distinct aspects of human experience and have rarely, if ever, been integrated in ethnographic research. The present paper, however, is based on research that brings biocultural and linguistic anthropology into direct conversation, specifically in the study of *intimacy* within the context of long-term romantic partnerships. Drawing upon a cross-subfield approach to studying emotion in interaction that integrates theory and methods from biocultural medical anthropology and linguistic anthropology, we argue that a “biolinguistic approach” complements and complicates existing research on intimacy and embodiment in anthropology and beyond. Such cross-subfield engagement, we conclude, constitutes a *methodological* endeavor that ultimately contributes to the advancement of *theoretical* perspectives on human relationality and embodiment.

As detailed further below, the research on which our discussion is based included multiple days of simultaneous video-recording and physiological monitoring of heart-rate variability (HRV) in the homes of consented couples in the southeastern United States (DeCaro & Pritzker, 2017; Pritzker et al., 2020). The present paper thus specifically examines the multiple ways in which particular interactions between partners both shape and are shaped by real-time psychophysiological processes. The relationships between interaction and physiology, we demonstrate, are neither straightforward nor direct but rather constitute one aspect of a much more complex whole as people variably orient to being co-present with one another in a given environment. Though we focus here on intimate, enduring relationships between cohabiting partners, we also discuss how the emerging theories and methods of biolinguistic anthropology might be applied to human interaction beyond the home.

BACKGROUND

Scholars across multiple disciplines have centered intimacy as a complex and dynamic process that occurs at multiple, simultaneous scales far beyond particular individuals and relationships. The intimate relationship between individuals and the nation-state, for example, has constituted the focus of anthropological and sociological research on identity and citizenship across a range of cultural contexts (e.g., Perrino & Pritzker, 2019; Povinelli, 2006; Pritzker, 2023; Roseneil et al., 2020; Wong et al., 2021; Zelizer, 2005). Scholars have also attended to the ways in which intimacy characterizes broad systems of exclusion and structures of power (e.g., Beliso-de Jesús, 2019; Perrino, 2018, 2020). Studies in cultural anthropology have likewise underscored how globalization, urban development, and other political and socioeconomic processes have contributed to changes in dominant ideals with regards to marriage and intimacy (see, e.g., Jankowiak & Li, 2017; Nanda, 2019; Yan, 2003, 2016). Psychological anthropologists, meanwhile, have attended to the ways in which such ideals take shape as *cultural models* that individuals variably aspire to or contest (Dunn, 2004; Quinn, 1987; Swidler, 2001, 1996, 2018). Merav Shohet’s research at the intersection of psychological and linguistic anthropology, for example, has investigated how particular individuals and couples variably engage with such ideals as they navigate “the world of affective ties with others” (2017, 557–58). Linguistic anthropologists, finally, have examined how the interactive and textual co-construction of intimacy emerges as both a product and producer of cultural meaning (Ahearn, 2001; de León, 2017; Gershon, 2010; Manning, 2015).

Although such studies deeply inform our analysis, the present study emphasizes intimacy-in-interaction as simultaneously a biological and a communicative process that, we contest, is constantly occurring in *all* bodies as well as *all* interactions. Our research nevertheless centers dyadic interactions between long-term

partners. This is not because such relationships constitute the only site where physiology co-emerges alongside interaction, but because the sustained and enduring nature of these relationships presents a helpful starting point from which to begin seriously considering the theoretical and methodological implications of a biolinguistic ethnographic approach.

To this end, our discussion seeks to build upon research in psychology, neuroscience, sociolinguistics, and communication studies, where it has notably been argued that “all interpersonal communication acts are biological acts” (Floyd & Afifi, 2011, 87). Researchers in psychology and communication studies who have examined relationships, for example, have conducted detailed observations of how interaction regulates intimate partners’ physiological arousal patterns, and predicts relationship longevity and the health of individuals in a partnership (e.g., Afifi et al., 2015; Floyd et al., 2007; Gottman & Driver, 2005; Gottman & Notarius, 2002; Kiecolt-Glaser et al., 1987, 2003; Planalp, 1985). Investigators have further examined “brain coupling” as a social process of embodied co-regulation and counter-regulation between interlocutors (see e.g., Hasson et al., 2012; Konvalinka & Roepstorff, 2012; Konvalinka et al., 2011). Other research, similarly, has examined moment-to-moment shifts in interlocutors’ breathing patterns during interaction (Fusaroli et al., 2016; Rochet-Capellan & Fuchs, 2013).

A number of studies have also measured heart rate variability (HRV) in interacting couples. For instance, several studies have examined the correlation between relationship quality and individuals’ resting or “baseline” HRV, with results often suggesting that greater baseline HRV in the high frequency band associated with respiration correlates with higher relationship satisfaction (see e.g., Cribbet, 2013; Donoho et al., 2015). A growing body of this research has specifically focused on partners’ shifting *respiratory sinus arrhythmia* (RSA) as they interact, often in short, prompted encounters within a laboratory setting. RSA, as described further below, is a physiological measure of parasympathetic nervous system activity that evaluates fluctuations in heart rate variability in correspondence with breathing. As a reflection of cardiac-vagal function, RSA measures activity in the arm of the autonomic nervous system that serves as a physiological “brake,” down-regulating what is commonly recognized as arousal or the stress response (Seery, 2011). Increased parasympathetic activity as measured by greater RSA, in other words, is indicative of *de-arousal* and provides psychophysiological support for positive, affiliative social engagement (Cacioppo et al., 1994; DeCaro, 2016; Porges, 2011). High RSA, accordingly, has come to be seen as an index of availability for intimacy (Cacioppo et al., 1994; Cribbet, 2013; Gates et al., 2015; Han et al., 2021; Porges, 2011).

Researchers examining the linkage between each partner’s fluctuating RSA levels as they interact—similar to brain coupling studies described above—have further investigated the ways couples’ RSA falls in and out of synchrony in various patterns of co- and counter-regulation. Some findings suggest that higher rates of synchronous or *in-phase* RSA patterns, in which each partner’s RSA levels rise and fall in tandem in a coregulatory pattern, are associated with higher relationship quality (Helm et al., 2014). Other studies, conversely, have demonstrated that higher rates of counter-regulatory or *anti-phase* patterns of RSA fluctuations, in which one partner’s RSA increases as the other’s decreases and vice versa, are associated with increased relationship satisfaction (Gates et al., 2015, 1064). Meanwhile, physiological synchronization of both types has been associated with “liking, cooperative behavior, and further prosocial effects” (Tschacher et al., 2014), while other studies find no correlation between relationship quality and RSA synchronization at all (Phan et al., 2019).

The current study—which also investigates couples’ RSA linkage patterns—refrains from assessing the relative “health” of particular relationships and thus is not designed to resolve such discrepancies. Although we do take couples’ self-assessments of relationship quality into account, we take such literature as just a starting point for the task of interpreting simultaneously emerging streams of changing RSA levels in individuals engaged in interaction. Moreover, as the bulk of the prior literature is based on brief, laboratory-based observations and/or self-report surveys (Robles et al., 2014), the present study seeks to complement existing findings by incorporating a longer-term, ethnographic approach. To this end, we also seek to build upon research that has adopted ambulatory methods to study the physiological correlates of intimate relationships outside of the laboratory (see e.g., Repetti et al., 2015; Saxbe et al., 2008; Slatcher et al., 2010; Wang et al., 2011). Such research, from the outset of the current study, has provided

a critical methodological as well as theoretical framework for conducting multi-disciplinary investigations of relationships in a setting considerably more naturalistic than the laboratory.

In order to increase both ecological and ethnographic validity of our research, we ground the current discussion in anthropological and sociolinguistic scholarship that has employed video-recording inside of the home (see e.g., Capps & Ochs, 1995; Goodwin & Cekaite, 2018; Ochs et al., 2006; Ochs & Kremer-Sadlik, 2007). We likewise rely on research that has demonstrated the dynamic and fluid ways that intimacy emerges as a process of *co-operative action* (Goodwin, 2018) as people variably orient to being co-present with one another over time in specific environments. Research on intimacy in the family, for example, has demonstrated that intimacy often involves a near-constant *negotiation*, including fluctuations in closeness and distance as family members interact with one another (Goodwin & Cekaite, 2018; Katila, 2018). Based on research in Senegal and the United States, Perrino and Pritzker (2019) thus conclude that intimacy must be considered as an emergent process that is “constantly made and remade in specific contexts and interactional moments” (2). Conversation analysts, similarly, have attended to the ways in which micro-interactional processes—such as “facial pursuits” in which interlocutors appeal to one another for recognition and/or empathy—serve as a co-regulative mechanism by which people seek to regulate emotion and thus the very possibility of intimacy (Peräkylä & Ruusuvuori, 2012; see also Ruusuvuori, 2013). In addition to tracking moment-to-moment shifts in physiology as couples interact, the present study therefore equally emphasizes a close evaluation of communicative signals and responses.

Rather than emphasizing talk-in-interaction as a verbal or referential process, this approach emphasizes the ways in which communication constitutes an intersubjectively and multi-modally realized “achievement” that involves prosody, indexicality, stance-taking, and the moral negotiation of epistemic terrains, among others (see e.g., Farnell & Graham, 2015; Ochs, 2012; Pritzker & Perrino, 2021; Sidnell & Stivers, 2013). This approach centers interaction as a complex “interactive sensorium that encompasses not only diverse attributes of the stream of speech, such as prosody and voice quality, but also gaze and gesture as well as the bodies of people interacting with each other” (Goodwin & Cekaite, 2018, 122). The “meaning” of particular sounds, gestures, or verbal utterances here, importantly, can only be assessed in the context of the broader interaction, for example, the responses of other co-present individuals and the progression of the conversation towards mutual understanding and/or lack of understanding (Lindström & Sorjonen, 2013). Finally, although we do focus on one interaction per couple in what follows, our overall approach to analyzing each encounter eschews the notion that couples have a singular or normative pattern of interaction that applies across situations. Instead, we ground our investigation in relationship studies scholarship emphasizing that relationships continually shift in terms of meaning, closeness, depth, and emotional connection, especially as they are embedded in socio-cultural environmental conditions and norms for expected and appropriate behavior (Duck, 2011; Duck & Silver, 1990).

METHODS AND ANALYTIC APPROACH

The research on which the current study is based was conducted by an interdisciplinary team consisting of scholars and student-researchers in biological and linguistic anthropology as well as communication studies. The study, specifically, consisted of intensive in-home research with a total of 24 couples in the Southeastern United States, all of whom were recruited via word of mouth, flyers, and on social media. Data collection (2017–2019) took place over 3 to 5 days of intensive, multi-method ethnography in each couple’s home. After each couple was consented, research began with collecting individuals’ responses to a composite survey consisting of adapted standardized scales measuring marital adjustment, relationship satisfaction, and emotional expressivity (e.g., Gross & John, 1995; Locke & Wallace, 1959). Each couple then participated in a 30–90-min video-recorded couple’s interview in which we inquired about how the couple met, their daily interactions, causes of stress and relief in their relationship, ideals regarding intimacy, and anything else that came up in conversation.

We then returned to the couple’s home for a period of 3 to 4 h for the following 3 days, primarily in the evenings. During this time, we instructed each couple to carry on with their daily routines as naturally

as possible. Data thus includes couples cooking, eating dinner, discussing their day or negotiating future plans, doing chores, helping children with homework or preparing for bedtime, and watching television or working/playing on various devices. This method of video-recording in participants' homes, including camera placement, avoidance of private areas, and protocols for reducing obstruction, has been developed by anthropologists over many years of studying dinner-time interactions and other family activities (see e.g., Goodwin & Cekaite, 2018; Ochs et al., 2006). Given that the entire study took place within their home, our sense with most couples was that they remained both comfortable and focused on the immediate tasks at hand, often forgetting about the video cameras and observers as they prioritized meals, bedtimes, and urgent discussions regarding plans for the following days. Over the course of the research, finally, each individual partner was given a daily diary to record their experience (Totenhagen et al., 2012) and individual exit interviews were conducted separately with each partner at the end of our visit on the 4th day.

During both interviews and video-recording, we further acquired real-time physiology, using a mobile impedance cardiography device called MindWare Mobile (MindWare Technologies, Inc.). Our Mindware Mobile configuration relied on seven disposable spot electrodes placed on the participant's chest, neck and back to afford the close monitoring of subtle shifts in respiration and heart rate required to generate our index of RSA. HRV is a complex signal generated through multiple overlapping physiological processes, not all of which are of equal interest. As described above, the current study focused specifically on investigating fluctuations in each partner's RSA, a reflection of activity in the parasympathetic arm of the autonomic nervous system (Cacioppo et al., 1994). RSA, in other words, is derived from HRV, but captures a component of the moment-to-moment regulation of arousal that serves as a particularly useful index of availability for affiliation and social intimacy (Cacioppo et al., 1994; Cribbit, 2013; DeCaro, 2016; Gates et al., 2015; Han et al., 2021; Porges, 2011).

The current paper, specifically, focuses on an analysis of RSA and video data from one 10-min segment of unprompted interaction among three couples. We selected 10-min windows for RSA, even though the focal interactions we portray are shorter, for two reasons. First, because RSA is computed based on cyclical *changes* in heart rate that unfold in conjunction with respiration (DeCaro, 2016), 60 s of heart rate data are required to reliably compute a single RSA value. We generate one RSA value for every 15 s through overlapping epochs (i.e., separate RSA computations using seconds 0–60, 15–75, 30–90, etc.), but to meaningfully observe patterns of synchrony among couples we need as many data points as possible. Moreover, the focal interactions are not events with hard boundaries as in experimental psychophysiology, but rather snapshots drawn from a continual stream of interaction occurring in conjunction with equally continuous physiological co-regulation. A 10-min RSA window thus allows us to discern the physiological context within which the focal interaction occurs.

CASE STUDIES: COUPLES IN INTERACTION

This section introduces each of our three focal couples: Gloria and Wesley; Jocelyn and Tag; and Ilene and Vlad. After offering a brief background based on our initial interview with each couple, we provide a narrativized description of one roughly 1-min focal interaction, each of which was chosen as representative of a significant moment of intimacy as assessed by members of the research team most familiar with each couple. In order to facilitate a more robust cross-subfield and cross-couple discussion, we refrain from offering any detailed analysis until after describing findings for all couples. To facilitate easy reference back to each interaction during our discussion, however, we further present detailed transcripts in Tables 1–3.

Gloria and Wesley

Our first example comes from Gloria and Wesley, a Black, middle-class, Christian couple in their late 30s who had been together for 5 years when the study was conducted. Having both grown up locally, however, they had known one another far longer. Indeed, Wesley had fallen in love with Gloria when he

TABLE 1 Gloria and Wesley[Throughout clip: “A Whole New World” plays in background].

1	G:	(chchchchchch°)
2	W:	((watching TV))
3		wha:::t (4.0)
4		((turns head to Gloria))
5		This is gonna allow me to make (unclear)
6		=Mufahs::ah owh::o:: (3.0) ((Gloria continues interacting with phone))
7		((lifts hand and places it back down on thigh))
8		What is that (2.1)
9	G:	(.hhh) (.) ((deep sigh, rolls eyes towards Wes))
10	W:	@@ [@@@@@]
11	G:	[@@@@@] sumthun
12	W:	((looks away)) You shouldn't have been like that (.hh)
13		((turns head back to G))
14	G:	(.hh) I have <u>got</u> (.) to start workin on what I'm wearin to work=
15		You know it takes me about two ho:urs° (0.3)
16		((reaches hand to Wes' face))
17		I know I don't look like it every::day=
18		=But it takes me foreva:: ((rubbing hand on Wes' forehead)) (.2)
19		<WH Hi:: ° WH> ((massages W's nose with thumb))
20	W:	mm:: °°
21	G:	@@ (.) (heathen) [@@@@] ((removes hand from Wes' face))
22	W:	[mm::] [mm::: @@ °]
23	G:	[@@@@] [@@@@@@@]
24		@ (.hh) We gotta turn <u>some</u> li:ghts on (0.5)
25	W:	(.hhh)

*Key
(.) audible micropause
(.#) audible pause measured by tenths of a second
= speakers words latched, for example, no pause between one speaker and next
Text stressed word, increased pitch or loudness
? Rising intonation
@ laughter
- word cut off
:: prolongation of speech
> faster speech <
< slower speech >
TEXT IN CAPS louder speech
° quieter speech
((movement, gestures))

first encountered her in high school. Gloria, who had been a year ahead, had not paid much attention to the young Wesley until they were in college and began dating. At that point, they dated exclusively for several years and had even planned their wedding. Wesley got cold feet, however, and they split up suddenly. After this, despite the fact that they both remained in the area, they did not speak to one another for almost a decade. When they finally ran into each other at a social event, however, Wesley described how time had seemed to stand still. They began talking again, and had been together ever since, finally marrying exactly 15 years (to the day) after their original wedding had been planned. They had no biological children

TABLE 2 Jocelyn and Tag.

1	J:	we celebrated Rihanna's birthday today (.1)
2		((takes carrot and swirls it in dip))
3	T:	(.) the ↑singer ((smirks))
4	J:	(.2) no:oo
5	T:	=I was gonna say
6		cuz I didn't think ya'll were that big of fans ((smirks))
7	J:	(.2) ((shakes head)) you just ruined the whole part of the conversation
8		(.) I'm done now
9		((leans back in chair))
10	T:	y'all ha--ave a coworker named ↑Rihanna
11	J:	mhm
12		she's been there for over a year
13	T:	↑really
14	J:	((nodding)) I travelled with her a bit this summer
15	T:	((sniffles))
16		I--I I've heard you talk about Lisa a:and
17		(.1) the girl's what's house we went to
18	J:	what's her name
19	T:	Susan (.)
20		Shannon (.)
21		Judy (.2)
22		Juu::udy @@ that's it ((nods))
23		I keep naming rahndhom names (to get there)
24	J:	↑Shannon ((nodding sarcastically))
25	T:	@@ ((laughter))
26		her husband's name is (.) <u>Mike</u>
27		(.1) I've heard you talk about Judy, Lisa, and (.) Jenny.
28		those are all the one's I've heard you talk about ((shakes head, hand))
29		I've ne:eever heard you say Rihanna's name <u>ever</u>
30	J:	hhh-yes you ↓have
31		(.2) cuz I > typically get < (.) the singer?
32	T:	((sniffles))
33		(.3) Ooh na na what's my name, ooh na na ((singing, swaying torso))
34	J:	she's rea:al tall
35		and she doesn't dance like that
36	T:	((shakes head))
37	T:	I think I have been inside your office one time and you [introduced]
38	J:	[twice]
39	T:	me to everyone > at the < [same time]
40	J:	[twice]
41	T:	so there's no [way that] ((rolls eyes)) I could remember who they are

(Continues)

TABLE 2 (Continued)

42	J:	[twice]
43	T:	(.4) So you're going to where tomorrow?

*Key
(.) audible micropause
(.#) audible pause measured by tenths of a second
= speakers words latched, for example, no pause between one speaker and next
Text stressed word, increased pitch or loudness
? Rising intonation
@ laughter
- word cut off
:: prolongation of speech
> faster speech <
< slower speech >
TEXT IN CAPS louder speech
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together, but Wesley had quickly stepped into a fathering role with Gloria’s two teenage children from her previous marriage.

In general, both Gloria and Wesley reported being moderately to highly satisfied with their relationship, and their scores on the marital adjustment test (MAT) (Locke & Wallace, 1959) indicated a fairly well-adjusted relationship. In their interview, it became clear that both Gloria and Wesley highly prioritized their marriage, and frequently took steps to learn how to deepen their connection through the cultivation of vulnerability, patience, compassion, and (for Wesley, especially) the development of skills in talking about feelings. Describing their everyday experience of being together as primarily relaxed and joyful, Gloria and Wesley both also mentioned how meaningful it was to maintain a continuous connection with one another. Even when forced apart due to their hectic work schedules, for example, they would often play games on their phone together or send each other random, playful messages. They were also both deeply committed to their church, and had joined several groups that were specifically focused on the maintenance of loving partnerships. Wesley described how he had been working to “better himself” as a husband, and had been reading extensively about how to become more vulnerable with Gloria. Indeed, Wesley shared an intimate practice that had been extremely helpful for him, which involved learning how to quickly recognize when conflict was imminent or when he was about to “shut down” with Gloria. The couple would then get completely undressed before proceeding with the conversation. This was helpful, Wesley noted, because neither of them could walk away or storm out of the house. “Because you’re naked,” he said, “So where you going to go?”

On the three evenings we spent with Gloria and Wesley, both of whom worked full time in demanding healthcare positions, they typically prepared and ate dinner together, and then collapsed together on the couch to watch television: usually either “The Bachelor” or HGTV. The television was also frequently on while they prepared and ate dinner, providing a kind of background noise to which they each would orient from time to time in order to comment on a particular character or the show in general. They moved fluidly, however, between moments of joint attention towards the television and more immediate, cooking-related tasks such as finding the appropriate knife or deciding how long something needed to be thawed. It was usually Wesley who did most of the cooking, checking in with Gloria from time to time regarding how she would prefer her meal. Gloria, on the other hand, was often seated at the kitchen table going over their schedule for the several church groups they attended on a weekly basis, planning their meals (they were following a strict new diet), or watching television and offering updates to Wesley, who frequently had his back turned to the screen. A similar fluidity was also observable when they were seated in the living room. Both Gloria and Wesley usually had their mobile phones with them on the couch, for example, and one or the other would frequently pick up their phone and check messages, scroll online, or play a game.

TABLE 3 Ilene and Vlad.

1	I:	Oh did I tell you AAS sent out the official call for submissions and everything= ((moves towards Vlad, who is cooking something on the stove))
3	V:	=oh yeah
4	I:	deadline is January 15th (.)
5		that's not bad actually
6		that's a few days later than normally.
7		usually it's been like the 10th or the [12th]
8	V:	[oh ↓yeah]
9	I:	(.) I mean (.)
10		that means everyone will totally fucking procrastinate [till after] New Years
11	V:	[hhhh@@@@]
12	I:	<u>and will be like</u> O:OH SHI:IT
13	V:	= well you [↓know]
14	I	[AAS]
15	I:	gott:ta do something
16	V:	= its Christmas and New Year's a:and (.)
17		((taps spoon))
18	I:	(.1) well I wrote the [um]
19	V:	<u>[Lions]</u> and <u>tigers</u> and <u>bears</u> oh my:y
20	I:	I wrote the first draft of the ETAM over Christmas
21		cuz I remember I emailed Dr. Jones on Christmas Eve (.1)
22		((V turns his back to I and walks towards sink))
23		<u>and</u> he emailed back
24	V:	((looking away, down at counter)) ↓yeah
25	I:	I think I told Craig that
26		and he informed me that we are both sick people
27		((V turns to meet I's gaze, [[Figure 3.3]] then shifts his gaze downward to the sink then points to soup on counter. I's gaze follows V's pointing finger))
28	V:	(.) hhh If you want we can just have the soup first [[Figure 3.4]]
30	I:	=let's do that—
31	V:	=or
32	I:	=cuz I think that'll be better cause we can
33	V:	we [could]
34	I:	[we] can ((glances over at counter where steaks sit))
35		just let the steaks rest (.)
36		let's have the soup—because then we can just enjoy=
37		((Vlad turns away from her to walk over to gaze at the steak on the far counter)) [[Figure 3.5]]
38	I:	=the soup and eat it while it's still hot you know
39	I:	you're not sorta doing soup and then steak and then—

(Continues)

TABLE 3 (Continued)

40		but the soup cools off [↑you know]
41	V:	[↑alright]

*Key
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Text stressed word, increased pitch or loudness
? Rising intonation
@ laughter
- word cut off
:: prolongation of speech
> faster speech <
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TEXT IN CAPS louder speech
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The interaction we examine here occurred at precisely 7:15 pm on the third evening we were with them (Table 1). At this point, they had already eaten dinner and were seated on the couch while a home renovation show played on the large screen directly across from them. Gloria, seated immediately to Wesley’s right, was thoroughly engrossed in scrolling on her phone. Wesley, on the other hand, was absorbed in the show. Seemingly without regard for what was occurring in the show or in the room, Gloria uttered a breathy noise (“chchchch”) that seemed to indicate an evaluation of something she had encountered on her phone. Though such sounds are often uttered in order to gain or make a “bid” for the attention of co-present individuals (Gottman & Driver, 2005), Gloria’s prosody and gaze here made it unclear whether her utterance was intended to communicate something explicitly to Wesley. Regardless of her intent, however, Wesley did not respond, continuing to gaze toward the television. After a long pause (about 4 s), however, he turned towards Gloria, who was still looking at her phone.

“This is gonna allow me to make some shit,” he commented, presumably referring to the show.

Gloria did not look up, nor did she offer any sign that she had registered his excitement or ambitions with regards to what, exactly, he was going to make. Wesley continued gazing at Gloria as she scrolled her phone, however, shifting quickly into a playful mode that seemed designed to get her attention.

“Mufasahhhhh,” he uttered, stretching the syllables of the name of Disney’s Lion King while enlarging his eyes and continuing to look at Gloria. Though perhaps invoking a shared background knowledge unknown to the researchers, Wesley’s utterance here might also be construed as a “phonetic gesture” or an acoustic orienting device that affords mutually coordinated forms of experience rather than communicating explicit content (Merleau-Ponty, 1962, 193).

Indeed, Gloria seemed to interpret it as such. In response, she maintained her downward-facing gaze and continued to scroll on her phone without responding to Wesley. For a full 3 s, Wesley watched her, finally moving his gaze down toward her phone screen.

“What is that?” He asked, but another two full seconds passed before Gloria responded. Rather than explaining what she was so consumed with, however, she issued another breathy noise, sighed, and rolled her eyes dramatically in Wesley’s direction. As she did so, he began

to chuckle. Gloria quickly followed suit, laughing ironically and then, finally, responding to his question with an ambiguous description.

“Sumthin,” she said, continuing to chuckle.

Rather than continuing to pursue his inquiry, however, at that point Wesley seemed to be distracted by something on television. Instead of responding to Gloria’s description, he turned his head away and issued an evaluation to someone on TV, “You shouldn’t have been like that,” he said. He then quickly turned his head back to Gloria, who immediately began to speak.

“I have *got* to start workin on what I’m wearing to work,” she said, still gazing down at her phone, “You know it takes me about two hours!”

Wesley is silent, still gazing at Gloria, who finally turns her head towards him and reaches out her hand to touch his cheek with the back of her palm. For the first time in the entire segment thus far, their gaze met and they smiled briefly before Gloria continued talking about her daily struggle to get ready for work.

“I know I don’t *look* like it every day, but it takes me forevahhhh,” she said, laughing and making a self-directed deprecating comment. Although it arguably functioned as an invitation for Wesley to respond with a refutation, it also seemed at odds with her intimate touch and concurrent smile. As she spoke, in fact, she opened her palm so that it covered Wesley’s eyes and nose as well as part of his forehead, beginning to massage Wesley’s nose with her thumb.

“Mmmmmm,” said Wesley, responding to Gloria’s touch rather than her comment about how long it takes her to get ready for work.

Gloria did not seem intent on discussing it any further however. Rather, she continued to massage his face and began to chuckle. This prompted an increase in Wesley’s volume as he continued to express pleasure in response to her touch.

“Heathen!” Gloria then said, laughing and removing her hand from Wesley’s face. He chuckled with her for a moment, before she looked around and moved to stand up.

“We gotta turn some lights on,” she said as she pushed herself up from the couch.

Jocelyn and Tag

Our second example focuses on Jocelyn and Tag, a white, Christian, working-class couple who were also native to the area and had been married for nearly 10 years at the time of the study. Having met at the church where they were still members, they both discussed the central role of religion in their relationship. They were also both intensely family-oriented, and in addition to their two young biological children, were in the process of adopting a third. Beyond religion and family, however, Jocelyn and Tag both repeatedly emphasized that they had very little in common. According to their self-reported perceptions of their relationship, moreover, they both indicated moderate to low relationship satisfaction, and their MAT scores indicated marital distress or maladjustment. In fact, across all of the couples we observed, Jocelyn reported one of the lowest scores on the MAT.

“We never agree on anything,” Tag had said during their initial interview. Jocelyn, perhaps ironically, had immediately agreed, describing how they had different taste in everything from sports to music to interior décor. We quickly recognized that there was a distinct pattern to their disagreement, however, wherein Tag

would make assertions and Jocelyn would correct him. When describing their wedding, for example, Tag's narrations were frequently interrupted by Jocelyn's corrections. A micro-dispute would then frequently follow. When they discussed their engagement, they joked about how Tag always remembers the score of the football game on the day he proposed, but not the date. Stories they told about their past and their relationship thus included frequent overlaps in speech, contradictions, and interjections that were often left unresolved. Appearing more as banter than actual dispute, this light-hearted, back-and-forth "bickering" seemed to constitute their normative, comfortable relational style.

Indeed, multiple instances of this type of back-and-forth occurred during the 3 days we were with the couple in their home, including during the interaction described here (Table 2). Emerging late in the evening of the first day of recording, Jocelyn and Tag were seated at their table in a small eating nook beside the kitchen and attached to the living room. Jocelyn sat at an angle on one of the long sides, while Tag sat on the short end of the table closest to Jocelyn. They were snacking on carrots, celery, and dip, and Jocelyn was gazing intently at a piece of paper, which she had lifted in front of her face. Without looking up, Jocelyn was also engaging in a negotiation with their young daughter who was across the room complaining about having to take a shower. When the daughter finally relented and left the room, Jocelyn put the paper down and lifted her gaze to meet Tag's.

"We celebrated Rihanna's birthday today," she told him in a flat tone, immediately looking down to swirl a carrot stick in the large tub of dip and then looking back up at Tag.

"The singer?" Tag responded, a slight smirk on his face.

"Noooo," Jocelyn said, rolling her eyes.

"I was gonna say," Tag continued, his smirk becoming more pronounced, "Cuz I didn't think ya'll were that big of fans."

Jocelyn shook her head vigorously, "You just ruined the whole part of the conversation," she said, leaning back in her chair, "I'm done now."

After a short pause, Tag spoke again, seemingly attempting to be serious, "Y'all have a coworker named Rihanna?"

"Mm," Jocelyn said abruptly, "She's been there over a year."

"Really?" Tag asked.

Jocelyn nodded, raising her eyebrows, "I travelled with her a bit this summer," she said, trying to jog Tag's memory as if it was something he should have recalled.

Tag was silent for a moment before issuing an audible sniff. He then seemed to try to defend himself, "I've heard you talk about Lisa, and—that girl what's house we we went to, what's her name?"

Jocelyn said nothing, her eyebrows raised as if she was challenging him.

"Susan," he continued. Jocelyn remained silent.

"Shannon," Tag tried another name, "Judy. Judy! That's it. I keep naming random names to get there," he said, a smile lurking.

“Shannon?” Jocelyn responded, nodding sarcastically.

Tag began to laugh. “Her husband’s name is,” he paused, searching for a name, “MIKE,” he said, definitively. Jocelyn remained silent, as if continuing to challenge him.

“I’ve heard you talk about Judy, Lisa, and,” (another pause) “Jenny. Those are all the ones I’ve heard you talk about. I’ve never heard you say Rihanna’s name. EVER.” he said, stretching out the vowel sound in “ever” and adopting an audibly louder tone of certainty as he doubled down on his lack of familiarity with Jocelyn’s coworker, Rihanna (“EVER”).

Without moving, Jocelyn spoke quietly, “Yes you have,” she said, matching his certain tone and pausing briefly.

“Cuz I typically get ‘the singer?’” Jocelyn continued, adopting a mocking tone when voicing Tag’s usual response.

Tag was quiet, sniffing loudly again before smiling broadly and beginning to sway, “Ooh na na what’s my name, ooh na na,” he sang as he swayed his torso back and forth.

Jocelyn interjected, “She’s real tall, and she doesn’t dance like that,” she said, unamused.

Tag stopped moving and shook his head, “I think I have been in your office one time and you introduced—”

Before he could finish, however, Jocelyn interjected, “Twice,” she said.

Tag seemed not to notice, continuing his line of defense where he had left off, “—you introduced me to everyone at the same time—”

“Twice,” Jocelyn said again while he continued to speak.

“So there’s no way—”

“Twice.”

“—that I could remember who they are.”

The interaction concluded here without any explicit resolution. After a short pause, Tag shifted the topic to Jocelyn’s plans for the following day.

Ilene and Vlad

Ilene and Vlad had been together for 10 years at the time of our interview. They met online when they had both been living in a large, Midwestern city and despite their age difference, they had been immediately attracted to one another. They dated for the rest of the summer, and when Vlad had to return to the Southeast for graduate school in August, they maintained a long-distance relationship for a year before Ilene relocated to live with him. They had lived together ever since, eventually moving to their current location so that he could take a job and she could begin her own graduate program. They both self-reported high relationship satisfaction and high MAT scores. These scores tended to be on the higher end for the couples we observed.

Similar to Jocelyn and Tag, Ilene and Vlad seemed to have developed a relationship narrative that centered around their differences, including their age. Rather than enacting these differences in disputes, however, Ilene and Vlad agreed on almost everything. In an inversion of expectation with regards to their age difference, Vlad laughed and explained that Ilene was “the old lady” in their relationship.

“That’s true,” Ilene said, laughing, “I’m the stick in the mud.”

Another difference that they enthusiastically agreed upon was their propensity to talk and/or interact with others. Ilene’s position as “the extroverted one” in the relationship thus came up numerous times. When Vlad shared that Ilene tended to talk about four times more than he did, she agreed, immediately grounding her role as “the talker” in purported research findings that suggest women talk at least twice as much as men do. Though multiple studies have decidedly disconfirmed this relationship between gender and language (e.g., Cameron, 1997; Hyde, 2007; Mehl et al., 2007), the popularized notion that women speak more than men seemed to constitute a “scientific” point of reference for Ilene and Vlad. Though they joked about their differences, moreover, Ilene and Vlad highlighted parallels in the way they think about politics, religion, and popular culture, including the fact they both oriented to an overall rational, scientific approach eschewing religion. Neither of them identified as particularly sentimental either, both frequently forgetting their specific anniversary date. In contrast to Jocelyn and Tag, finally, Ilene and Vlad shared numerous hobbies, including a passion for cooking and watching cooking competitions. They also highlighted their sense of intimacy and connectedness in several ways. In describing their “great chemistry,” for example, they noted that they had fun together whether they were home sitting on the couch or at a party. When they do go out, Ilene added, they are what she described as “those people”

“We’re, like, *those* people,” she said, “We’ll go to a party and he’ll make a plate and we’ll both eat off the same plate—like you know, we’re *those* people. But,” she added, “we are not so much a unit that we can’t be separate. We can also go our separate ways and it’s okay.”

On the evenings we were with them, Ilene and Vlad typically cooked dinner, ate together, and then sat side by side on the couch watching television or working on their individual laptops. The following interaction occurred on the first day we were with them, at around seven in the evening (Table 3). They were in the kitchen preparing dinner together, each engaged in separate tasks with their backs to one another. At one point, Ilene moved towards Vlad, who was facing the stove. She turned her head slightly towards his back and initiated a conversation by telling Vlad about an email she had recently received.

“Oh did I tell you AAS sent out the official call for submissions and everything,” she said, initiating a “telling” framed here as “news” that she may or may not have already mentioned to Vlad (Lindström & Sorjonen, 2013).

“Oh yeah?” Vlad responded without moving or turning towards her.

“Deadline is January 15th,” Ilene continued, “That’s not bad actually. That’s a few days later than normally—usually it’s been like the 10th or 12th.”

“Oh. Yeah.” Vlad said, still focusing on his task.

“I mean—that means everyone will totally fucking procrastinate [till after] New Years,” Ilene said. Vlad smirked and chuckled.

“And will be like OHHHH SHIT,” Ilene continued.

“Well, you know,” Vlad said.

“AAS,” Ilene said dramatically, overlapping his speech, “gotta do something.”

“It’s Christmas and New Year’s and—” Vlad said, adopting a rhythmic speech pattern from Wizard of Oz, and continuing his cooking task.

“Well, I wrote the um,” Ilene continued without waiting to hear the end of Vlad’s comment.

“Lions and tigers and bears, oh my!” Vlad continued.

“I wrote the first draft of the ETAM over Christmas,” Ilene then said, reminiscing, “Cuz I remember, I emailed Dr. Jones on Christmas Eve.”

Vlad turned away without responding, walking over to the sink and looking at something in the pot he was holding.

“And he emailed back,” Ilene continued, “I think I told Craig that, and he informs me that we are both sick people.”

Vlad turned at this point, met Ilene’s gaze, then shifted his gaze downward to the sink and then across the room. He pointed at the pot of soup that was sitting on the counter beside the stove. Ilene turned her head in the direction of the soup.

“If you want, we can just have the soup first,” Vlad then said, not responding to her narrative but rather, changing the subject to engage her in the immediate task of preparing dinner.

“Let’s do that,” Ilene replied, without missing a beat.

“Or,” Vlad began to suggest an alternative. But Ilene seemed set on his initial proposal.

“Cuz I think that’ll be better, cuz we can,” she started to articulate an argument about the soup. Vlad nevertheless persisted in trying to offer an alternative.

“We could,” he started to say. But Ilene, who glanced over at another counter where two steaks sat, kept speaking as well.

“We can just let the steaks rest. Let’s have the soup, because then we can just enjoy the soup, and eat it while it’s still hot.” Vlad, not responding, turned away from Ilene, walked towards the steaks and looked down at them intently.

Ilene, however, kept speaking “You know,” she said, “you’re not sorta doing soup and then steak and then—but the soup cools off, you know?”

“Alright,” Vlad then finally said, looking up, and they proceeded to serve the soup.

CASE STUDIES: PHYSIOLOGICAL LINKAGES IN INTERACTION

Simply reading through the interactions described above, it is perhaps clear that they were each quite different in tone as well as content. Turning to the physiological data, the apparent differences become even more distinct. The following graphic representations thus depict both partners’ RSA values for a full 10 min surrounding each of the interactions (see Methods), which are designated with vertical bars at the beginning and end of the focal interaction. In apprehending these data, however, it is relevant here to note that we also conducted a random sampling of RSA values in three 10-min periods for each couple on each of the 3 days of video-recording, which were selected using the same guidelines for each couple (e.g., the first 10 min of each hour on each day). As opposed to studies that interpret a single interaction to represent the dominant relational pattern in a specific couple (e.g., Leuchtman et al., 2019; Zhou & Davila, 2019), our study is thus considerably expanded. Though we do not conduct a detailed analysis of the randomized samples here, our expectation that each of the couples would demonstrate a range of both interactional patterns and physiological co- and/or counter-regulation in relation to multiple factors (e.g., context of the specific interaction, ongoing stressors in each individual’s life outside of the home as well as physiological factors such as sleep, movement patterns, and food/drink intake on different days) was confirmed. For all three couples, in other words, there was no single unambiguous pattern of physiological linkage. In making sense of the focal clips, then, we refrain from drawing conclusions with regards to the relative health and/or “quality” of the couples’ relationships. And while such a finding shows promise with regards to the ways that intra-couple variability over time productively complicates laboratory findings based on short, prompted interactions (Pritzker et al., 2020), the following discussion, rather, emphasizes how the combination of data streams (video and RSA values) contributed to a nuanced analysis of intimacy in interaction, suggesting that neither form of data can be reduced to providing a reliable outcome on its own.

Gloria and Wesley’s RSA values demonstrate what we are designating as a “flow” pattern wherein they were in almost perfect synchrony for the entire 10-min sample (see Figure 1). This pattern displays high in-phase psychophysiological linkage (Gates et al., 2015). As noted above, this kind of linkage has sometimes but inconsistently been associated with better relationship quality in other studies (compare Gates et al., 2015; Helm et al., 2014; Phan et al., 2019). In comparison to the random selection of 10-min RSA data from this couple, the current selection demonstrated a much higher level of in-phase synchrony than we observed at any other time. The visual representation of strong in-phase linkage between Gloria and Wesley’s RSA values immediately before, during and after the focal interaction, however, significantly contributed to our ability to make sense of their overall interaction. Specifically, while Gloria and Wesley’s interaction is perhaps the most obviously intimate in terms of the way it involved touch and sounds of pleasure (e.g., when Gloria stroked Wesley’s face and he uttered an “mmmm” sound), it is also one of the most apparently *disconnected* conversations in terms of referential content and response time. The outset of their interaction scarcely made “sense” from the point of view of seeking to find the “meaning” of utterances by focusing on lexical content. This is not to say, however, that this portion of the interaction was non-communicative. Indeed, as noted above, numerous studies have emphasized the ways that nonverbal

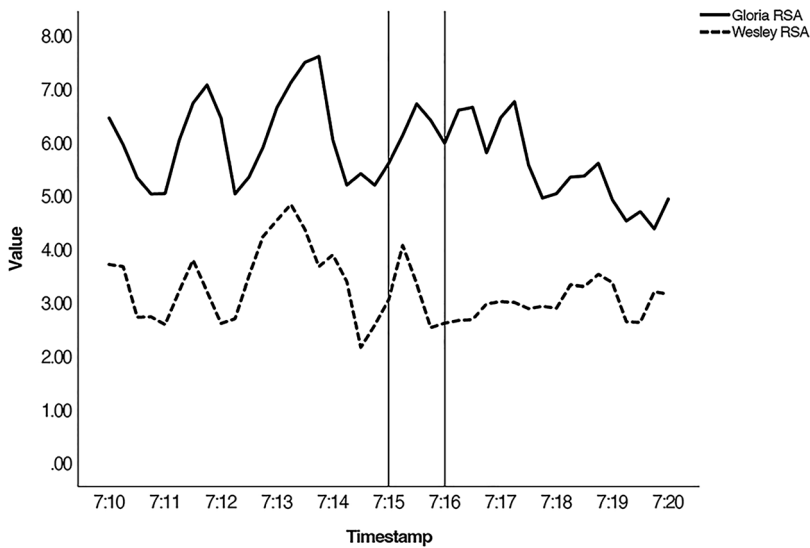


FIGURE 1 Gloria and Wesley RSA.

signals and verbal cues serve as “bids” to garner the attention of one’s partner which, if ignored, contribute to lower relationship satisfaction as well as poor health outcomes (Andersen et al., 2006; Gottman & Driver, 2005).

Adopting a co-operative action approach to analyzing this interaction, however, one might reorient to Gloria’s initial evaluative sound (“chchchch”), made as she was scrolling through her phone as the kind of “phonetic gesture” that affords mutually coordinated forms of experience rather than communicating explicit content (Merleau-Ponty, 1962, 193). Engaged from this perspective, it is possible to observe the ways in which Gloria and Wesley were engaged in a non-referential process of intimate “rhythmic attunement” throughout the interaction (Goodwin & Cekaite, 2018). Their utterances, though non-referential and seemingly non-responsive, here created an embodied “soundscape” (Kunreuther, 2018) as well as a kind of rhythmic phonetic and embodied *play*. In this case, it also involves the negotiation of multiple concurrent interactions that each of the partners is attending to, including Gloria’s interaction with her phone, Wesley’s interaction with the television, and both of their (implicit) interactions with co-present researchers. This rhythmic attunement, moreover, arguably provided the embodied, relational *ground* for more direct engagement, which emerged slowly once Wesley asked Gloria what she was looking at on her phone. Though she did not look up at him or speak, her dramatic eyeroll here served as a response that caused him to chuckle.

Laughter in conversation, Jefferson (1979) observes, is often responded to with laughter (see also Fox & Ford, 2010; Mandelbaum, 2013). As such, laughter constitutes “an important [interactional] resource for pursuing, as opposed to conveying, affiliation and intimacy” (2013, 353; see also Ekström, 2009; Glenn, 2003; Jefferson et al., 1987; Vöge & Wagner, 2010). Even without explicit content, then, the collaboratively enacted activity of “chuckling together” here functions to direct the embodied conversation away from content, instead continuing to center the interaction as a process of *intercorporeal synchrony* (Katila, 2018). The interaction between Gloria and Wes further underscores the ways in which “touch is not experienced as a single physical modality ‘but rather, affectively as emotion’” (Goodwin & Cekaite, 2018, 147, citing Montagu, 1986, 110). From this vantage point, Gloria and Wesley’s intimate moment might thus be seen as a *culmination* of what has been an increasingly intimate, though not necessarily communicatively explicit, co-operative, embodied soundscape, rather than a repair. Further pointing to the ways in which this couple embraced an understanding of intimacy that did not always require verbal interaction but *did* require a form of embodied presence and patience, the combined analysis of Gloria and Wesley’s interaction alongside

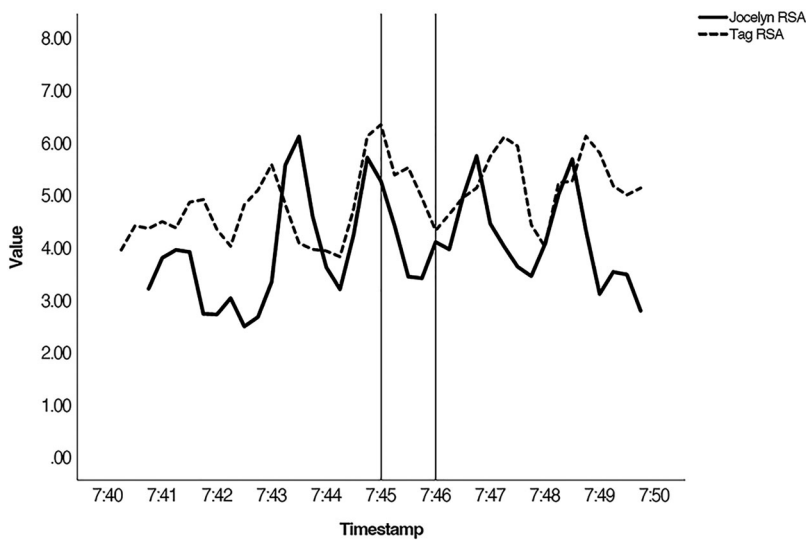


FIGURE 2 Jocelyn and Tag RSA.

their RSA values suggests how this couple oriented towards an intimate ideal of *continuous connection* that required the moment-to-moment enactment of embodied intimacy.

Jocelyn and Tag's RSA values, in contrast, demonstrate what we call a "tug-of-war" linkage pattern of time offset synchrony within which one individual's physiological arousal changed and the other followed with a similar arousal or de-arousal pattern (see Figure 2). Jocelyn and Tag here seem to demonstrate a pattern of lagged synchrony, which has not been correlated specifically to either positive or negative relational quality (Han et al., 2021). In contrast to their low relationship satisfaction scores, however, Jocelyn and Tag's linked RSA values do demonstrate a distinct pattern of anti-phase coordination, which generally has been associated with *positive* relational quality (ibid.). It is important, however, to emphasize that none of the couples' randomly selected physiological readings corresponded to this pattern, including Jocelyn and Tag's. Rather than suggesting that the physiology here mirrors the overall quality of their relationship, then, we turn to a discussion of how this physiological data contributes to an analysis of the interaction described above. This interaction, we recall, seemed to emerge as a dispute enacted in body posturing, gesture, and vocal tone. This leads us towards the observation that their physiology, rather than presenting an example of so-called "counter-regulation"—in which anti-phase synchrony is thought to represent a kind of psychophysiological complementarity with a balancing effect—seems to almost perfectly mirror the tug-of-war dynamic that emerged during their interaction (Pritzker et al., 2020). We further reviewed the interaction in light of the ways Jocelyn and Tag both oriented towards a description of their relational identity (Aron et al., 1992) that seemed to derive pleasure (if not always comfort) within a familiar pattern of interaction.

Jocelyn and Tag's interaction thus emerged as an apparent conflict, arguably reflecting their overall low levels of relationship satisfaction. It is also, we argue, important to recall that the couple seemed to orient comfortably to the everyday enactment of intimacy through various forms of dispute or "bickering." The outset of the interaction, in which Jocelyn initiated a "telling" regarding the fact that they had celebrated Rihanna's birthday at work that day, might thus be seen as a "challenge" of sorts, or a kind of initiation of what, within their relationship, had come to constitute an embodied as well as relational pattern of "doing being intimate." Jocelyn's vocal and embodied prosody here, which included a flat tone and a direct gaze at Tag, suggests that her invocation of a specific name indicated an expectation regarding the forthcoming interaction (Goodwin & Cekaite, 2018, 84; Rossano, 2013). In responding to Jocelyn by asking if she was referring to "the singer," furthermore, Tag ratified Jocelyn's interactional challenge. Though he

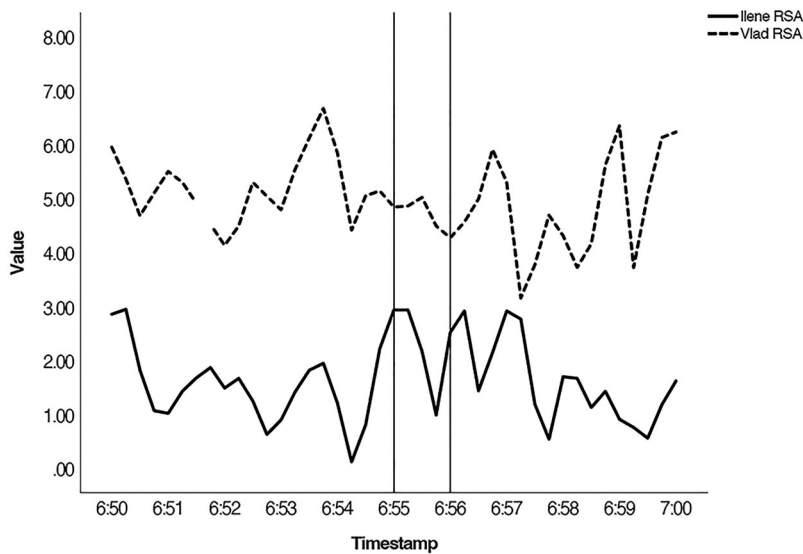


FIGURE 3 Ilene and Vlad RSA.

offered a response that indicated his lack of knowledge regarding her coworker, he nevertheless discursively aligned with the conversation as a familiar joint *activity*. That is, they enacted a back-and-forth during which Tag gets it “wrong” and is corrected by Jocelyn in numerous moral “metacommentaries” regarding Tag’s engagement with the topic at hand as well as his apparent lack of memory regarding her coworkers (Goodwin & Cekaite, 2018; Ochs & Kremer-Sadlik, 2015). As Jocelyn’s negative evaluative stance increased, however, Tag’s levity noticeably also increased. This seemingly contradicted the way Jocelyn was approaching the conversation as a serious encounter. Yet it nevertheless suggested that the couple was engaged in a familiar relational dynamic that, rather than representing a conflict, emerged as an intimate and co-operative—if not necessarily affiliative—encounter. Jocelyn’s expectation that her telling would be taken up as a challenge (as well as the fact that it *was* taken up as such) might further index a simultaneously personal and cultural pattern that the couple oriented to within their relationship. Further pointing to the ways in which the *epistemic terrain* (Heritage, 2013) within a relationship constitutes a site of continual negotiation and affective stance-taking, the different terrains of knowledge generated a certain kind of combative intimacy that was simultaneously embodied and interactive. This interaction thus demonstrates the ways in which Jocelyn and Tag’s relational style is enacting through the maintenance of a rhythmic pattern of tension that frequently mounts into forms of direct confrontation.

Ilene’s and Vlad’s RSA values, finally, appear to be entirely uncoordinated (see Figure 3). Indeed, it seems as if their physiologies were engaged in two entirely different conversations. At first blush this observation seems to mirror the focal interaction, in which each partner was continually engaged in separate tasks (e.g., working at opposite ends of the kitchen with backs to one another) (Pritzker et al., 2020). However, a close study of the nuances of the interaction led us to re-examine the meaning of the physiological linkage in terms of the way this couple normatively oriented towards certain modes of being intimate in interaction. In interpreting this, we thus foreground the fact that Ilene and Vlad were engaged in a joint activity (dinner preparation). While Ilene speaks to Vlad’s back as he is stirring the soup, he responded without turning around. Ilene’s “telling” here notably drew upon shared background knowledge or common *epistemic ground* (Heritage, 2013, 384), specifically regarding AAS and their usual practices for issuing calls for papers. Though made explicit later, when Ilene noted that the deadline is “a few days later than normally,” at the outset of the interaction, Ilene’s telling arguably oriented towards an expectation that Vlad will recognize something was out of the ordinary. As such, Ilene’s telling functioned to simultaneously constitute and sediment their relationship as an ongoing temporal event in the world. During the following interaction,

moreover, Ilene enacted the familiar and comfortable role of “talker” or “storyteller” while Vlad continuously responded, often overlapping or “latching” Ilene’s speech and offering multiple “continuers,” for example, “oh,” and “yeah,” thus ceding the floor to Ilene (Lindström & Sorjonen, 2013, 352). Although they are continually engaged in other specific tasks, the couple thus demonstrated a simultaneous awareness that they were also involved in a shared communicative activity (Heath & Luff, 2013, 287). Like Gloria and Wesley, moreover, the conversation peaks with a moment of shared chuckling in response to Ilene’s observation that “everyone will totally fucking procrastinate.” Indeed, laughter has shown to be utilized in conversation following an impropriety to offer an affiliative response and to provoke ongoing discussion (Ruusuvuori, 2013, 334). Vlad’s laughter, even though he remained standing with his back to Ilene, seemed to afford an upgrade of her “voicing” of her peers’ reaction to the deadline shift. Profanity and laughter here thus reinstated the storytelling activity, further affording his alignment with her mocking of her peers. With Vlad’s participation, Ilene enacted her identity as a “nerd” who takes work more seriously than others, an identity further developed when she shared a memory of how she was working on Christmas Eve one year.

Though this did not evoke any commentary from Vlad, he did look up and meet her gaze before shifting topics to discuss whether they should eat the soup first. This led, we recall, to a negotiation of sorts, in which Vlad tried multiple times to propose an alternative, but Ilene continually argued for eating the soup first. In doing so, she notably drew upon terminology that invoked their shared culinary interest (e.g., “we can just let the steaks rest”). Though appearing to be an instance of Ilene “railroading” Vlad, who could not seem to get a word in edgewise, it is notable here, that—in the middle of Ilene’s arguments—Vlad turned away from her to walk towards the steaks, as if to investigate her claim that letting them rest was a valid argument. That, in turn, evoked an immediate, overlapped agreement from Vlad. Rather than an instance in which Ilene dominated the conversation and forced her point of view upon Vlad, it is thus apparent that this interaction took shape as an affiliative, collaborative decision-making project that was heavily rooted in multiple familiar ways that the couple had developed of “doing being a couple” as well as shared orientations to the world. The complex simultaneity of the entire interaction reflected multiple aspects of Ilene and Vlad’s relational identity, including their shared orientation towards reasoning, their shared passion for food and cooking, their respective identities with regards to gendered norms about talk, and their assertion that even though they are very intimately connected, they have the capacity to go separate ways at a party “and it’s okay.”

Returning to the physiological asynchrony from Figure 3, we first must acknowledge a limitation: Ilene and Vlad are cooking, an activity requiring greater physical motion than those of the other couples, which may have created noise in the RSA signals. The movement was not vigorous, however, and is unlikely to fully explain their seemingly disconnected physiology. Rather, consistent with the broader theme of our analysis, this case illustrates that there is more than one way to embody intimacy. Intimacy *may* be expressed in the context of a state of “flow” (as with Gloria and Wes), or “tug-of-war” (as with Jocelyn and Tag). Correspondences between physiological patterns and interactions in those cases lead us toward a deeper understanding of both. Yet even in those couples, randomly selected clips remind us that moments of synchrony come and go. For Ilene and Vlad, the quotidian routine of preparing a meal scaffolds an intimate interaction even while, both physiologically and discursively, they appear to be in entirely separate worlds. The ability to desynchronize on one level, while simultaneously orienting toward each other on another, equally is an essential component of the rich, complex repertoire of embodied intimacy.

DISCUSSION AND CONCLUSION

Overall, the previous analyses demonstrate how multiple types of observed, video-recorded, and physiologically measured data can be productively integrated to investigate intimacy in interaction. Our data suggest, specifically, that intimacy must be understood as a simultaneously embodied and interactive phenomenon that is often patterned in ways that mirror but do not always perfectly indicate longer-term relational patterns. Although the case-study approach we have offered here is not intended to offer either

generalizable or predictive findings with regards to the designation of what constitutes “good” or “healthy” intimacy, it nevertheless complements and complicates existing laboratory-based research on intimacy and embodiment. Showing how intimacy-in-interaction is not always clearly delineated according to certain discrete emotions, these examples demonstrate instead how intimacy is negotiated as a process of continuous back-and-forth movement both towards and *away* from one’s partner as one engages with multiple other speakers (e.g., kids, researchers, television announcers) and objects (e.g., mobile phones, carrots, and steaks) in a particular environment. Intimacy, from this vantage point, constitutes a complex, embodied, rhythmic attunement through which a sense of closeness is continually co-constructed in ongoing interaction. Intimacy, in other words, must be understood as rooted in an “interactional soil that has been carefully cultivated” (Lindström & Sorjonen, 2013, 365; see also Perrino & Pritzker, 2019; Pritzker et al., 2020). Our analyses further contribute a perspective on the ways in which intimacy might emerge *differently*, in both interactional and physiological terms, in relation to couples’ enduring orientations towards various cultural and relational norms. Gloria and Wesley, for example, oriented towards an ideal of *continuous connection* that did not always require verbal interaction but *did* require a form of embodied presence, patience, and vulnerability. Jocelyn and Tag, on the other hand, oriented towards a gendered form of intimacy that was maintained through a rhythmic pattern of tension in which Tag repeatedly and expectedly got it “wrong” and was corrected by Jocelyn. Jocelyn and Tag thus arguably enacted a culturally dominant gender norm that constituted a particularly salient point of tension but also familiarity for them. Ilene and Vlad, finally, oriented towards what they embraced as a “scientific” mode of doing gender in interaction, in which Ilene’s verbosity and Vlad’s relative silence was framed as a biological reality that had been “proven” by science. Even though the science here is inaccurate, the notion that “women talk twice as much as men” provided a secure foundation for them to proceed with interactions such as the one we examined, in which Vlad is mostly silent while Ilene speaks. As we observed during their collaborative decision-making regarding the order with which they would consume their meal, moreover, it was clear that the couple also oriented towards a kind of simultaneous or “parallel” mode of interacting within which Vlad engaged actively but non-verbally in the shared intellectualized decision-making process. Demonstrating the multiple ways American cultural ideals of intimacy, for example, “lastingness, mutual benefit, sharedness, compatibility, difficulty, effort, risk, and success” (Quinn, 1996), take shape in multiple interactional as well as physiological patterns, our analyses contribute to anthropological understanding of how couples not only make conceptual sense of prevalent cultural models but translate them into divergent forms of everyday interaction.

The current study further contributes to the understanding of intimacy, however, by providing at least a brief insight how focal interactions demonstrate a form of embodied synchrony or linkage that differed considerably from any of the randomly selected 10-min periods. Alongside the extensive ethnography conducted in each couple’s home, this variability underscores the ways in which physiological processes are neither fully drivers of interaction nor entirely the result of particular interactions but rather constitute one aspect of a much more complex whole. It is possible that meanings of intimacy play out through our culturally contextualized understandings situated within particular relational histories and micro dynamics of co-physiology. Similar to interpersonal process model of intimacy (Reis & Shaver, 1998) and to how Duck (2011) describes relationships as processes of relating, our analysis points to a conceptualization of intimacy as an embodied, dynamic, never finalized process that is constructed through simultaneously influencing interplay of language and bodies. Our microanalytical approach to understanding the complexities of body and language interplay thus underscores the notion that meanings and enactments of intimacy might look different for each couple and can change interaction by interaction, day by day, and year by year. We thereby expand the interpersonal process model of intimacy (Reis & Shaver 1988) by moving beyond individual difference factors to include physiological dynamics of co-regulation and (a)synchrony as well as considerations of cultural cultivations and environmental factors.

At a broader methodological scale, finally, our analysis here has implications beyond the study of relationships, for future ethnographic studies integrating biocultural and linguistic approaches to understanding the complex, bidirectional ways embodiment and interaction co-emerge within particular encounters over time. Specifically, our discussion emphasizes the dynamic ways in which ethnographic

data gathered through observation, interviews, and video-recorded interaction complicates and deepens interpretations of physiological data and vice versa. Such a biolinguistic approach, we conclude, might contribute to the further expansion and deepening of anthropological theories of intimacy in multiple sites beyond the home.

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