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Interpersonal scaffoldings for shared emotions: how social interaction supports emotional sharing

Ida Rinne[1]

Abstract

In this article, I consider the interpersonal support, i.e., scaffolding, that agents provide to one another to share emotions. Moreover, the main target of this paper is to identify those scaffolds and their features that effectively function to boost, support, or enable emotional sharing interactions. To do so, I engage with the "multi-dimensional framework of environmental scaffolding" proposed by Sterelny (*Phenomenology and the Cognitive Sciences* 9:465–481, 2010). This framework highlights various types of environmental resources, including social and interpersonal factors, that serve as scaffolds for human cognitive agency. Furthermore, the model identifies the functional characteristics associated with these resources, which significantly contribute to scaffolding cognitive (and emotional) performance and skillfulness. Mainly concentrating on social interaction, I argue that individual, familiar social interaction behaviors, shared references, and shared bodily-affective and habitual patterns scaffold the interacting individuals allowing them to effectively share emotions. By examining the functional relationship between these particularly interpersonal scaffolds and shared emotions, I suggest that we can better understand the complex, situationally unfolding dynamics and the versatility of conditions that can boost emotional sharing. As a result, my analysis reveals that there are different types of social interactional scaffolds that vary in familiarity, predictability, robustness, individualization, and mutual adaptation. These features boost and trigger emotional sharing in degrees and different functions and different degrees of these functional features; therefore, different types of social interaction scaffolds are required depending on the situation to situation.

Keywords Interpersonal scaffolding · Emotional sharing · Social interaction · Environmental scaffolding · Familiarity · Robustness

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1 Introduction

The last two decades have brought about a multiplicity of philosophical and psychological accounts of *sharing emotions*, i.e., emotions we feel together with another person(s) (e.g., Bader, 2016; Reynolds-Kueny & Shoss, 2021; Salmela, 2012; Schmid, 2009; Taipale, 2023; Thonhauser, 2018; Zahavi, 2015). On the one hand, these theorizations examine the necessary ontological and phenomenological requirements for what constitutes a shared emotion (e.g., Krueger, 2015; León & Zahavi, 2018; Zahavi, 2023) and, on the other hand, the psychological mechanisms that *boost and trigger* shared emotions (Forlè, 2021; Salmela & Nagatsu, 2017; Von Scheve, 2012; Von Scheve & Ismer, 2013). The general consensus is that these mechanisms and conditions involve emotional alignment and communication of mutual awareness of such emotional correspondence. In this article, I complement these accounts by identifying the particular social interactional resources that effectively boost and enable these mechanisms. To do so, I employ a "multi-dimensional framework of environmental scaffolding," as proposed by Sterelny (2010, pp. 473–479). This framework highlights various types of environmental resources, including social and interpersonal factors, that serve as scaffolds for human cognitive agency. Furthermore, it identifies the functional characteristics associated with these resources, which significantly contribute to boosting, triggering, and supporting cognitive (and emotional) performance and skillfulness. By examining the functional relationship between these interpersonal scaffolds and shared emotions, I suggest that we can better understand the complex, situationally unfolding dynamics involved in this phenomenon.[1]

The paper is structured as follows. First, I will briefly introduce the phenomenon of shared emotion as I understand it. Second, I will provide a theoretical overview of the concept of interpersonal scaffoldings, complementing the previous accounts of, particularly, Sterelny (2010) and Colombetti and Krueger (2015). Third, by applying the model of interpersonal scaffoldings to the phenomenology of emotional sharing and social interaction, I argue that we can identify (social interactional) resources that are important or useful in supporting and boosting emotional sharing. More precisely, I will show that (1) gesture and expression and (2) shared bodily-affective repertoires, together with shared references, are supportive of mechanisms leading to emotional sharing, namely, emotional convergence and the communication of mutual awareness. Finally, I will briefly conclude by summing up the results and discussing the implications of this research.

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[1] Recently, some philosophers (Krueger, 2015; León et al., 2019; see also Clark & Chalmers, 1998; Colombetti & Roberts, 2015; Froese & Fuchs, 2012; Krueger, 2014; Slaby, 2014) have also engaged with a similar externalist approach to shared emotions by arguing that they are *extended* emotions, i.e., mental states of which the cognitive or affective structure extends beyond the confines of the individual brain and body since shared emotions are argued to *part and parcel* involve more than one individual.

2 Emotional sharing

We share emotions on a day-to-day basis. Emotional sharing may occur, for example, between lovers communicating their mutual desire and love for each other; friends feeling nostalgia and joy together when listening, singing, and dancing along to a song associated with a significant experience they all shared in their youth; or parents conveying their pride in their child via shared gazes and knowing smiles. In essence, emotional sharing refers to an experience in which the subjects sharing the emotion feel the same about the object of their attention and mutually communicate this awareness to one another—either explicitly or inexplicitly (e.g., by way of non-verbal bodily expressions such as knowing looks; León et al., 2019, pp. 4857–4858). Accordingly, two or more individuals share an emotion when (1) they experience an emotion of the same type (i.e., the same type of affective experience, such as joy, fear, love, happiness, hate, or excitement) with the same evaluative content (i.e., an object of intention; Salmela & Nagatsu, 2017, p. 457) and when (2) they are mutually aware of this and communicate their awareness reciprocally.

First, let me briefly clarify what I mean by "feeling the same," i.e., *emotional correspondence* or *convergence*. The former refers to experiencing the same kind of affect (e.g., joy, excitement, sadness, fear, or comfort), and the latter to a process whereby two or more individuals, due to communicative engagement and/or inter-affective processes, come to "feel the same" (Hatfield et al., 1994; Hess & Fischer, 2014; Salmela, 2022) so that their initially disparate feelings change to align with one another. In simpler terms, Forlè (2021) terms "emotional correspondence" as "emotional attunement" (p. 8), meaning "… a condition in which two or more individuals are in the same affective state with respect to a given situation" (p. 8). To achieve emotional alignment, individuals must influence and regulate each other's affect, leading to increased correspondence, similarity, and symmetry of emotional responses. This process encompasses various inter-affective mechanisms, including attentional deployment (Collins, 2004), emotional contagion (Hatfield et al., 1994), and behavioral and bodily synchronization and imitation (Forlè, 2021, pp. 7–10; see also Hari et al., 2013; Hess & Fischer, 2014; Hove & Risen, 2009). For example, when watching a horror movie together, I may register my friend's tension and fear, which can trigger similar bodily sensations within me. Essentially, this process entails an unconscious or semi-conscious adaptation whereby individuals decrease their distance from the other, allowing them to become more similar in their feeling state.[2]

Emotional sharing necessitates more than the convergence, adjustment, and correspondence of emotions between interacting individuals. As León et al., (2019, p. 4859) illustrate, emotional sharing also requires mutual awareness of this emotional correspondence. Mutual awareness is essential because, without the subject's awareness of the presence, attention, and participation of others, it would be counterintuitive to call the emotion "shared" (León et al., 2019, pp. 4859–4860). Furthermore, as Salmela (2022, p. 70) points out, there can be no mutual awareness of emotional sharing without *reciprocal communication* of the convergence of emotions, i.e., the com-

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[2] It should be noted that *mutual* adaptation is not a prerequisite for emotional alignment; individual A can attune to the affect of individual B, resulting in *both* individuals experiencing similar emotions.

mon mood or emotion must be *communicated* in a sufficient manner. Such mutual awareness of emotional convergence might be established by, for example, inexplicit gestures like a "sharing look," a meeting of eyes or smiles, or tactile contact like holding hands (Ciaunica, 2019; Liebal et al., 2011; Liszkowski et al., 2004).[3]

In addition to conditions of mutual awareness and corresponding emotions, some phenomenologists (León et al., 2019; León & Zahavi, 2018; Salmela, 2012, 2022; Zahavi, 2015)have insisted that shared emotions also qualitatively and structurally presuppose an integration condition as a third requirement, according to which shared emotions are emotions that are experienced in we-perspective, i.e., as "ours" or, as Thonhauser (2018) articulates it, as "feeling together." According to these accounts, "*strongly*" or "*robustly*" shared emotions tend to occur within social situations whereby partaking individuals are in a relatively tight, long-term relationship with one another. This is because it is assumed that people in such relationships often identify themselves as "we" (León et al., 2019, p. 4860), and such identification with others is then taken as something that ontologically and phenomenologically qualifies shared emotions.[4] In other words, proper emotional sharing is argued to occur only when there is a "robust" identification that establishes a felt sense of togetherness, i.e., identification as "us." Yet, in this paper, rather than examining whether such "robustness"-condition is a necessary qualification for sharing emotions, similar to emotional correspondence and mutual awareness (which I take to be the minimal requirements), I will discuss this issue by illustrating features of social interaction typically associated with robust, tightly-knit, long-term relationships, namely, robust/permanent/regular, reliable/familiar/predictable, and individualized/adapted forms of social interaction, and then analyzing whether and how these features assist or boost emotional convergence and communication of mutual awareness.

While previous accounts (e.g., León et al., 2019; Zahavi, 2015) highlight the role of mutual awareness in sharing emotions, less attention has been paid to exploring what *features* of emotion-expressive social interactions are important and supportive of emotional sharing. This is surprising since the perception of others' emotions, including whether their emotions correspond to ours, is delivered via their verbal or nonverbal *communication* (Eilan, 2020, pp. 4–5)—by way of bodily expressions, facial displays, vocalizations, movement, explicit and inexplicit (e.g., jokes and allegories) verbal communication, and so forth. But what makes some social interactions (styles) effective in promoting emotional sharing and others not? Are there specific features in social interactions that vary from one situation, relationship, and person to another? It seems to me that if sharing emotions can occur *only* when interacting individuals become mutually aware of their shared perceptual, emotionally imbued situation, it is of vital importance to start mapping out those communicative (bodily

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[3] Ciaunica (2019, p. 191) even argues that "in only two cases we find the simultaneous, reciprocal self-other interaction component: (a) in the case when two people touch each other—bodily contact; (b) and in the case when two people look into each other's eyes—eye contact."

[4] In short, Nagatsu and Salmela (2022) argue that full-blown we-mode intentionality requires that individual members of a certain group conceive of themselves as group members who are bound by the collective *ethos* of the group (Salmela & Nagatsu, 2022, p. 14; see also Salmela, 2012, for a thorough account on shared concerns). Similarly, Zahavi (2015) has argued that the *robust* sharing of emotions requires that individuals perceive themselves in "we-terms".

as well as verbal) social interaction elements and their functional properties and features that boost, enable, or trigger not only the corresponding emotions or the convergence of initial emotions but also the awareness of each other's mental states. I believe that the multidimensional framework of environmental scaffoldings can be especially helpful in this case because it provides us with an analytical framework and conceptual tools to identify the different resources and their functional features in relation to agents' (shared) mental states. I will introduce this analytical model in more detail in the next section.

3 Interpersonal scaffolding

The key idea of philosophical theorizations on *interpersonal* and *collective scaffolding* asserts that humans use and are aided by—both at the synchronic level of performance and at the diachronic level of individual development, social transmission, and the evolution of a cognitive/emotional phenotype— other agents and collaborative action, i.e., interpersonal and shared resources, in cognitive-emotional performance(Colombetti & Krueger, 2015; Krueger, 2014; Krueger & Osler, 2019; Nagatsu & Salmela, 2022; Ratcliffe, 2023; Sterelny, 2010; Sutton, 2006; Tribble, 2005). While the philosophy of interpersonal scaffolding has emerged in obvious dialogue with the idea of a socially extended, enacted, and embodied mind (Froese & Fuchs, 2012; Gallagher, 2013),[5] the idea of *interpersonal* scaffolding quite clearly originates from and is typically described (see, e.g., Colombetti & Krueger, 2015; Froese & Krueger, 2020; Krueger, 2011; Ratcliffe, 2023) in reference to developmental models (e.g., Stern, 1977; Wood et al., 1976) that describe the social support system through which (primarily) parents assist and regulate children's learning and development (Pea, 2004; Renshaw, 2013). In his useful review of the use of the concept of scaffolding, Renshaw (2013), in reference to Jerome Bruner (1975), defines that scaffolding occurred:

> as parents engaged their children in routinized social formats and well-rehearsed games in order to extend their language development. Such formats and routine games enabled the scaffolding of shared attention, common points of reference, coordinated interaction patterns, and calibrated forms of assistance. (p. 57)

In this paper, I will use the term "scaffolding" to denote an agent-agent-support system wherein one or both (or all) individual(s) scaffold the other(s) with their *social*

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[5] On one hand, the idea of interpersonal scaffolding can be traced to *Socially Extended Mind* and *Body*-related discussions (Froese & Fuchs, 2012; Gallagher, 2013), especially those concerning the dynamic system model of (embodied) social interaction (Froese & Gallagher, 2012; Marsh et al., 2006) and social synergies (Marsh et al., 2006, pp. 19–24), which hypothesize that through our mutual interactions with others, in some cases, we form dynamic (often dyadic) wholes. These socially or interpersonally extended bodies (see Froese & Fuchs, 2012, for a thorough argumentation for this idea) afford experiences, action possibilities, and forms of interpersonal understanding (namely, in the form of direct social perception) that cannot be methodologically appreciated from "individual," isolated systems points of view and that are, phenomenologically and psychologically speaking, not available at the individual level (Marsh et al., 2006, pp. 14–15).

interactive expression and gesture. These scaffolds could include emotion-expressive behaviors and communicative interactions (e.g., verbal or bodily expressions and gestures such as caresses, as well as facial signals, such as smiles or frowns; Brownell, 2011; Fuchs, 2016; MacLean et al., 2014; Rochat, 1999; Zahavi & Rochat, 2015) and more complex practices, such as rituals or habits of interaction (e.g., manners or a wedding ceremony Griffiths & Scarantino, 2005; Kitayama & Markus, 1994; Krueger & Szanto, 2016; Markus & Kitayama, 2010), as well as *shared references*, which are an important intentional aspect of social interaction, especially joint action (Kiverstein & Rietveld, 2021), or even the overall presence and embodied features of an individual. For example, as Brownell (2011) explains, the caregiver's "highly routinized action frames such as social games and play routines … structure the goals, content, and timing of the interaction and often direct the child how to behave in accordance" (p. 197; see also Trevarthen & Aitken, 2001; Trevarthen & Bullowa, 1979; Trevarthen & Marwick, 1986; Zahavi & Rochat, 2015, p. 8). Additionally, the caregiver's embodied features (e.g., breast, facial features, and smell) and embodied forms of social interaction, as well as their overall presence, scaffold an infant's attention and help to modify or maintain affect (Alberts et al., 1983; Froese & Fuchs, 2012; Froese & Krueger, 2020, pp. 7–8; Taipale, 2016, pp. 5–7).

As such, from these theorizations emerges an explanatory model that describes the quality, structure, and development of mental states in terms of their dependence on the interpersonal and social interactive situations in which they occur. Yet, in contrast to the developmentalists, the philosophical theorizations of scaffolding make a case for centralizing how scaffolding occurs not only to supplement basic childhood development and learning processes or to overcome disadvantages related to cognitive and emotional abilities but also as a very basic way for humans to relate to the world—to be scaffolded, enacted, and extended by it in various ways, throughout our individual lifespan, as well as at ontogenetic and phylogenetic levels. We also actively create such scaffolds by modifying and selecting our environmental resources (Coninx & Stephan, 2021; Griffiths & Scarantino, 2005; Laland et al., 2000; Saarinen, 2020; Sterelny, 2010).

According to Sterelny (2010, p. 473), different environmental resources, whether they be material objects, informational structures, or other agents, support mental states and skillfulness at different degrees of efficacy. This efficacy, in turn, can be detected in different functional features that a given resource accommodates *in relation to* the agent in question. So, for example, we can think of how a parent can be a robust scaffold for a child when their behavior is consistent, stable, and predictable, which makes them *reliable* in supporting the child's emotion regulation, attention control, and social cognitive development (Colombetti & Krueger, 2015, p. 12; Sterelny, 2010): The parent's expressive pattern of soothing the child to sleep is a scaffold for the child's attention and emotion regulation, not only because the pattern is stable and predictable, and thus reliable, but also because it is tailored to the particular child in question and, thus, individualized *in relation* to her needs, behaviors, developmental phase, situational factors, and personality.[6] In this article, I adopt

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[6] For additional examples, consider the maritime collective navigational routine to organize and direct action (Hutchins, 1995), which is reminiscent of the expressive and gestural cues provided by theatri-

this multidimensional analytical model of environmental scaffoldings to identify the functional features that are important in making social interaction a scaffold for emotional sharing. So, within this context of social interaction, what kinds of social interactional scaffolds can we identify?

3.1 Reliability

First, familiarity and predictability of social interaction, including expressions, gestures, and habitual behavioral patterns between two or more individuals, are *reliable* interactive tools for cognitive and emotional processes. When we are familiar with someone—or something—we know what kind of behavior and effect we can expect from them (Colombetti & Krueger, 2015, p. 11; Krueger & Osler, 2019, p. 216), which makes them predictable and secure (reliable) scaffolds.

3.2 Robustness

Second, and intimately related to reliability, are stable, recurrent, or immutable social interactional resources that are robustly entrenched in our mental activities precisely because of their unchanging and hence predictable (again, reliable) natures. Once again, we can think of a parent's embodied *routine* as a robust social interaction scaffold for their small child that provides a consistent and always available cognitive-emotional artifact for mentally "grasping" whenever the child needs social aid to regulate emotions or control attention in order to perform cognitive and motor tasks.

3.3 Entrenchment

Third, in the context of social interaction, I use "entrenchment" to describe how the bodily-affective style of another person's interaction becomes entrenched in one's (social) cognition in that relationship so that the other person's behavior sometimes becomes *phenomenologically transparent* (Colombetti & Krueger, 2015, p. 14), i.e., one does not have to reflectively calibrate the intention of the other's bodily-affective expression and gesture. This might, thus, result in an association where, say, one's affiliative gesturing or habit triggers arousal in their partner, or, similarly, an association between one's expression and the other's understanding of the meaning of that expression allows for social cognizing in and between the two.

3.4 Individualization and adaptation

Fourth, some social interactional resources are effective scaffolds because they are individualized—tailored and adapted to our needs. In agent-agent-scaffolding, individuals develop unique, relationship-specific styles and habits of behavior, such as ways of expressing affiliation and rapport. As such, these *mutually created bodily-*

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cal stage actors to one another (Tribble, 2005)—both can support action, joint action, decision-making, navigation, and so forth because those expressive cues, prompts, material arrangements, and directions are *reliable* and *familiar to*, as well as *adapted* and *tailored to*, those individuals' or group's expert needs.

affective styles of interaction between two (or more) individuals are composed of "distinctive ways of speaking, gesturing, and moving" (Colombetti & Krueger, 2015, p. 13); however, instead of pertaining to the subject's individual manner of self-expression and comportment, it is a feature of the mutual interactive social unit, i.e., a co-created and shared style of interaction between a dyad or group of people.

3.5 Responsiveness and mutual adaptation

Responsiveness is here understood as a form of dynamic, focused form of individualization and adaptation insofar as it denotes one's ability to actively scaffold, boost, and imbue the other's attention, feeling, and decision-making with dynamic, responsive output, socially sensitive cueing, prompting, and responding to the other in a manner that reflects attention, understanding, and encouragement to continue the interaction episode. For instance, such reciprocating interactions may involve rhythmical turn-taking actions and a *two-way mutual gaze* between mother and infant. Responsiveness requires dynamic, focused individualization and adaptation of oneself to the other to serve that interaction's individual or shared goals. For example, consider the caregiver's "running emotional commentary that is attuned to the child's expressed emotions" (Zahavi & Rochat, 2015, p. 8). When mutual, this responsive adaptation may lead to reciprocal, open-ended socio-emotional bid-building and a turn-taking process between the involved individuals, such as when the child delivers emotion-expressive feedback (such as a smile) in response to her caregiver's gestures and expressions (Rochat & Robbins, 2016, pp. 5–7).

All in all, interpersonal scaffolds can be characterized and thus analyzed along a multiplicity of different functional features, of which those I aim to put in action to analyze shared emotional interactions may construe just a part. Having described interpersonal and social scaffolding as well as the relevant functional features in the context of social interaction, let us turn now to the main focus of this paper: discussing three different social interactional resources that could be considered *scaffolds* for emotional convergence and (communication of) mutual awareness of the congruent emotions required for sharing emotions and how these resources, outfitted with specific functional features, significantly and effectively cue, boost, trigger, and drive emotional sharing.

4 Scaffoldings for emotional convergence, triggers for corresponding emotions

As noted in previous sections, emotional sharing interactions typically involve (at least) two central elements: affective convergence and communication of mutual awareness. In this section, I argue that social interaction, particularly familiar, reliable gestures and expressions, as well as individualized, co-created, shared interaction styles, scaffold emotional convergence (and trigger corresponding emotions).

4.1 Gesture, expression, and habits

First, I suggest that the robustness, familiarity, reliability, and predictability of gestures, expressions, and habits effectively boost emotional convergence. This is because emotional convergence requires attuning to each other's feelings (i.e., emotional attunement; see Forlè, 2021), and emotional attunement, in turn, is easier if you are able to read and predict the behavior of the other accurately. When aligning emotionally with someone, that is, getting closer to another's affective state, you do not just attune to their feelings and state of mind but also, often, to the qualitative aspects of their bodily expressive style[7] (Forlè, 2021, pp. 10–13). This kind of affective and behavioral attunement more or less requires that you be able to correctly read and predict behavior and, more so, the *subtle details* of, say, your partner's smile or gaze, the temporal contour of your colleague's speech, or the posture or flow of movement of your child in a given situation. If you fail to interpret the emotion-expressive signs of the other correctly—and this may not have to be reflexive—you may have a hard time adapting and attuning yourself to the felt state of the other.

Furthermore, as emotional convergence is a rather dynamic, lively process, it is important that the interactants are able to adequately respond to, and thus reciprocate, one another to achieve a convergent state of affectivity. Therefore, emotional convergence is supported by reliable, predictable gestures and expressions and by the very act of individualizing one's own behavior to be responsive, to scaffold the other's emotional state with its peaks, rises, intensities, and so forth. Compare this to Forlè's (2021) example of dynamic interdependence between co-agents in ensemble music performance: "In playing music together, indeed, musicians continuously experience how their performance depends on that of the other and how the performance of the entire group depends on the right attunement between the performances of each musician" (p. 18). Quite similarly, when engaging in focused social interaction, the emotional convergence of, say, shared amusement depends on a dynamically responsive, and thus reciprocating, attunement between the interactants. Therefore, we might individualize our own behavior to make ourselves better scaffolds for others.

Humorous interactions are good examples of how familiarity and predictability of the interactant's emotion-expressive behavior, as well as dynamic, individualized, and responsive adaptation to one another, elicits, intensifies, regulates, and maintains the interaction episode. Humorous engagements often result in "hysteric amusement"[8] and laughter, a kind of feedback loop in which each person's expressions quickly (but always reciprocally) feed on one another, causing individuals' emotions to converge and dynamically change and intensify in response to one another's humor-expressive behavior. In such cases, laughter is not merely a reaction to amusing situations but also an interactive tool that reinforces the funny character of the interaction, promotes affective convergence, and delivers awareness of the joint object of intention (e.g., laughing together at the same situation or object). Consider,

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[7] "Vitality attunement," as termed by Forlè (2021, pp. 10–11), which draws on Stern's (2010) vitality forms.

[8] This state, also known as "hyper-funniness," is especially typical of young children (Stenius et al., 2021, pp. 242, 249–250).

for instance, siblings engaging in the humorous, playful interaction of revisiting an amusing story of a shared childhood experience. As they recap the events of the story, mutually complementing each other and supplying details, making each other laugh and gradually intensifying that laughter, both siblings engage in ongoing sequences of bodily expressive and verbal feedback. They use laughter, smiling eyes, motions, tactile gestures, reactions (such as imitations, exaggerated facial displays, and touching each other), sounds, carefully chosen tempos, and vocal and verbal expressions to confirm the words of the other and emphasize the "high peaks" of the story. The familiarity with one another's emotion-expressive behavior, the fact that they know each other well, enables interactants to individualize their own style of expression to match the needs of the other, thus allowing each to be responsive—which probably aids emotional convergence in the sense that it requires (mutual) adaptation.

The same idea can be found in the *thesis of social calibration of emotional expression* (Scheve, 2012; Von Scheve & Ismer, 2013), which states that "face-to-face processes are fine-tuned to distinct social collectives, meaning that they evolve in adaptation to the cultural environment" (Von Scheve & Ismer, 2013, p. 16). Von Scheve and Ismer (2013) argue, rightly in my opinion, that different social contexts encourage the development of different "facial dialects" in expression and emotion recognition (Elfenbein et al., 2007); therefore, it is plausible that these dialects, i.e., context-dependent, collective-specific expressive styles, would also influence emotional contagion, "…which is based on rapid and non-conscious imitation of expressive behavior and thus on recognition and decoding abilities" (Von Scheve & Ismer, 2013, p. 16). If such emotional contagion—as well as behavioral and affective imitation, attunement, and synchronization— presuppose that a person is relatively familiar with a group-specific expressive behavior, and since emotional contagion is a precursor and a boosting factor for emotional convergence further supports perceiving of familiarity as a critical element for emotional sharing.

The extent to which I am familiar with my partner's behavior makes him more *predictable* for me, and vice versa. Predictability is a key factor in successful joint (inter-)actions (Pacherie, 2014, pp. 30–33, 40), including, I think, those interactions that strive for affective convergence. When you are familiar with the behavior—and the feelings and thoughts that underlie that behavior—of the other, you are also more likely able to *adapt* your own style of expression and responses to better "match" their style of interaction and affect. Suppose I am not familiar with *how* the other expresses, say, their amusement and excitement. In that case, I might not receive any "feedback" and thus will be facing a kind of wall or barrier, a break in the connection and feedback cycle, that prevents any further dynamic structuring, shaping, and creation of a (shared) experience, which can be felt as, say, awkwardness or a mood collapse. On the contrary, recognizing the excitement, amusement, or desire of the other in their expressions causes the perceiver's corresponding feeling to be modulated by these observations, and these corresponding feelings are then, again, expressed, thus feeding back onto and permeating the other, causing the two people to converge emotionally.

But how is such familiarity and predictability built between two or more agents? Through the frequent, ongoing social exchanges that often occur in long-term relationships. Via synchronic moment-to-moment instances of affective engagement

with, typically, our friends, family, partners, or colleagues, previous experiences of patterns of interactions sediment into our body-memory (Fuchs, 2016; Fuchs & De Jaegher, 2009), resulting in implicit relational knowledge (Lyons-Ruth et al., 1998). As Fuchs and Froese (2012) tell us,

> [t]his means a pre-reflective, practical knowledge of how to interact with others—e.g., how to share pleasure, elicit attention, avoid rejection, re-establish contact, etc. … As such, intercorporeal memory enables the basic formation of dyadic and more generally intersubjective patterns of interaction. (p. 9)

In other words, we build knowledge of one another and gain pre-reflexive information of "what sort of affective feedback we can expect from them" (Colombetti & Krueger, 2015, p. 12), which, consequently, enables ongoing reciprocation, as we are now able to predict and perceptually grasp the actions, intentions, and feelings of the other.

Consequently, if we admit that the functional relation between familiar and predictable resources and one's ability to attune oneself to the other develops over repetitive interactions with the other, then it might also feel attractive to suggest that the more immutable, stable, permanent, unchanged, and routine, (therefore *robust*) the other's gestures, expressions, and habits, the easier it is to become familiar with them—the more likely they become predictable to us. *Robustness*, therefore, in the sense of *permanence*, *stability*, and *immutability*, might be a contingent boosting or enabling factor for emotional convergence, as it increases the predictability of other's behavior. I think this especially applies to parent-child interactions, where the child, to a greater degree than the parent, relies on the provision of support and, more precisely, on the routinely occurring, stable, familiar, predictable, and reliable forms of the adult's expressions and gestures. When you are familiar with the emotional life and mannerisms of the other person, you can more reliably and accurately *predict* both the meaning of your interactant partner's expression and their *future* actions and reactions, which is something that eases this kind of joint action *qua* reciprocal interaction of emotional sharing episodes (inter alia) by way of enabling joint action, joint attention, and emotion sharing, especially for children.[9]

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[9] However, while these findings support that a tight relationship or underlying we-identity creates background conditions that are especially favorable for and boost emotional convergence (emotional sharing), it is not always so—quite the contrary. Not all robustly integrated, mutually created relationships support emotional sharing or a we-experience: Tight, long-term, and closely integrated or established relationships are, unfortunately, often forcefully tight and bound together. Consider coercive relationships between the abuser and the abused, which can be absolutely robust and involve frequent and permanent social interaction patterns but are not fruitful environments for emotional sharing. Or consider the affective character and interpersonal dynamics of an estranged couple whose shared commitment to one another as parents and a married couple makes them robustly integrated and who have, over years or decades, mutually developed an individualized affective style of communicating with one another; at the same time, they may resent one another or have settled into an interaction style that does not encourage responsiveness or sharing feelings, nor reflection or expressions of understanding, respect, and attention—thus allowing no space for the possibility of emotional sharing interactions. The robustness of a resource does not necessarily make that resource effective in scaffolding complex emotional phenomena such as emotional sharing; other functional features also need to take the stage. Additionally, the varying effectiveness of robust resources may support the view of shared emotions as a multi-dimensional

4.2 Shared repertoires and references

In addition to familiar, predictable, robust, and reliable expressions and gestures, as well as individualization of one's own behavior to create a temporal scaffold, we also create shared repertoires of social interaction. So, let us consider how *mutually adapted*, *shared* social interaction styles contribute to emotional convergence. Consider how, typically in long-term, habitual relationships, by way of *mutually adapting* to one another, we end up *co-creating* mutually *individualized* and specialized *shared repertoires* of affective responsiveness that are uniquely designed to express and bring about feelings of affiliation, closeness, intimacy, love, togetherness, rapport, and connectedness that are typically highly valued, pleasureful, and beneficial. These shared repertoires of social interaction include shared phrases, recurring verbal and tactile reactions to particular situations, and habitual patterns of showing affection ("habits of intimacy," per Krueger & Osler, 2022, pp. 15–18). For example, notice how different relationships have distinct ways of expressing and communicating feelings of love: Some are more explicit in their verbal communications of love, while others use affiliative gestures to show love. A couple may use specific nicknames for one another or a distinct, gentle tone when wishing to express and elicit rapport and affiliation; siblings may come up with their own co-created "language."

But these shared, individualized interaction patterns also often include a complex array of shared intentional objects, i.e., *shared references* and *representations*: significant memories of specific situations, events, time periods, and places; jokes and anecdotes; references to experiences and events; and references to material objects (i.e., a specific song from childhood, a movie ticket from a couple's first date, wedding rings, or a baby's first hair) that entail specific meanings for the interactants are often referred to in a certain affective style within the collective, and, importantly, are often referred to *with a first-person plural perspective*. For example, a group of friends may listen to "our song," a scaffold to collective memory and experience that is also a scaffold to shared feelings of nostalgia and emergent, shared feelings of interpersonal liking and rapport. Sutton (2006, p. 238) explains how "the social manifestation of memories brings into being new emergent form and content through the transactive nature of collaborative recall." The scaffolding provided by shared references, especially shared memories, is thus multi-functional.

While interpersonal relationships (or other group contexts) and participation in joint activities heighten "the probability of exposure to or being involved in identical emotionally relevant events" (Von Scheve & Ismer, 2013, p. 17) so that collectively shared memories are likely to form (Bietti, 2012; Parkinson et al., 2004), these collective memories, in turn, boost and may be intentionally used in the future to elicit qualitatively corresponding emotions to those that were initially experienced.

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phenomenon: In some cases, robustness is a key factor for emotional sharing, while in others, it may even *hinder* it, which could possibly have something to do with novelty: Novelty and unpredictability may also boost and intensify emotional sharing experiences, since these expand on the experienced pleasurefulness of such shared experiences, precisely because they are *unexpected*. So, there are different degrees of robustness scaffolding emotional sharing, and whether it functions as a factor of efficiency or hindrance may depend on other factors, such as the partners' attitudes, beliefs, values, and intentions toward one another.

Bodily-affective styles, together with shared references that are individualized for us, are, I think, powerful tools for eliciting corresponding feelings or boosting emotional convergence because they have distinct, tailored, and likely deeply entrenched affective meanings. Due to that attachment, it is possible that whenever a couple of friends or lovers or a parent and child exhibit such shared, co-created expressions and habits (like a specific facial display in a given situation), because those behavioral patterns and intentional objects are so *robustly entrenched* in our bodily-affective memory/processes, one can assume that they almost automatically trigger a specific emotional response that is similar for both interactants. *Entrenchment*, thus, is the entrenchment *of* (shared) emotions *parte objecti* (of a specific type/quality) to *collectively shared* bodily-affective habits. In other words, collectively individualized forms of behavior between, say, a couple sediment to cause similar emotions and mutual behavioral (vitality) attunement, sometimes leading to affective alignment between the dyad or group and boosting emotion sharing. Shared references, styles, and manners provide a lasting base that remains while *we* change and is capable of anchoring us to our common affective grounds time and time again. It is the familiarity and individualization of such collectively shared resources that makes it possible to use them to trigger and reignite corresponding feelings of togetherness, love, rapport, belongingness, and amusement.

5 Scaffoldings for interpersonal understanding and communication of mutual awareness

Emotional sharing requires communication of mutual awareness of corresponding emotions, and such mutual awareness can be established by, for example, inexplicit gestures, like a meaningful look or shared smiles (Liebal et al., 2011; Liszkowski et al., 2004). As Von Scheve and Ismer (2013) tell us, "Facial expressions not only make visible the affective consequences of situational appraisals but also allow individuals in face-to-face encounters as well as in mediated interactions to make inferences about the cognitions that caused an emotion" (p. 15). But what kind of expressions, then, may serve as communication of such shared appraisals, and what guarantees that we can correctly interpret the feelings and objects of attention etched in these expressions and gestures? In other words, what are the features of social interaction that are important to the development of mutual awareness? I argue that familiar, predictable, individualized, and entrenched gestures, expressions, habitual emotion-expressive patterns, and shared repertoires of affective interaction, together with shared references, scaffold the capacity for interpersonal understanding and communication of mutual awareness and, consequently, emotional sharing.

5.1 Gesture, expression, and habit

The first functional feature conditioning mutual awareness revolves, again, around the dimension of familiarity. Notice that mutual awareness presumes interpersonal understanding, which, in turn, requires that interacting individuals, if explicit verbal expressions are not delivered, be able to correctly interpret one another's bodily

expressions, such as knowing that eye contact in a given situation is meant to communicate amusement or some other thought. Bodily-expressive gestures convey different kinds of meanings: Whereas a smile often signals positive feelings and conformity, a frown is a sign of more or less negative feelings or confusion. As Crone (2021) points out, it is precisely the exchange of these social (emotion-expressive) cues that underlies and guides social interaction such as conversation: "A facial expression may reflect a subtle emotional state a person is in, thereby signaling an evaluation of the particular situation" (p. 11824). Krueger (2011, pp. 650–651) makes the same observation and similarly argues that non-verbal and bodily elements of social interaction *simplify* social cognition. This idea is also supported by empirical findings from social neuroscience (Pfeiffer et al., 2013; Vogeley, 2017) that show how social interaction based on the exchange of social cues "makes it easier for interacting partners to become *aware* [emphasis added] of each other's mental states and to interpret and predict each other's behavior" (Crone, 2021, p. 11825).[10]

In addition to—and as a result of—individualization and familiarity, the *entrenchment* of another's emotion-expressive manners to one's own body memory also plays a significant role in promoting the communication of affective convergence by building the pre-reflective epistemic frameworks for knowing how to deal with others (Fuchs, 2016, p. 12, 15). This kind of social entrenchment is important, I believe, since in order to maintain a shared focus of emotional appraisal, the other and their behavior, expressions, and gestures must be grasped partly as *phenomenally transparent* to my perception, *pre-reflectively.*[11]

When we become familiar with and accustomed to someone's emotion-expressive style, we do not need to explicitly reflect upon their behavior as the *intentional object* of our experience. This familiarity allows individualized, shared patterns of emotional expression to become transparent "instruments" for experiential sharing so that the feeling of *sharing* can come to the attentional *foreground.* Phenomenal transparency is essential, for it is likely that too explicit "theorization" of the mental states of the other may hinder emotional connection and convergence. When we begin to thematically (over-)analyze what the other feels and thinks, we move from the joint focus of attention (say, parents jointly focusing on their child) to perceiving

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[10] Some (e.g., Krueger, 2011; Sutton, 2006) have also proposed that various embodied interactions, such as gesturing or "following certain bodily procedures and rituals … [are themselves] forms of cognizing, rather than the mere expressions of prior internal cognitive processing" (Sutton, 2006, p. 238).

[11] However, this is not to say that the embodied features and expressions of the other should be thoroughly incorporated (or *intercorporated*) into my *corporeal schema* so that I seamlessly experience them as if they were integrated parts of *my own* embodied expressions, gestures, features, and bodily activities (such as movements, postures, and motion). Instead, this type of phenomenal transparency and the entrenchment that follows are best illuminated within Legrand's (Legrand, n.d., pp. 500–503) notion of performative entrenchment, which is further illustrated by Colombetti and Krueger (2015, p. 10) in the context of affective scaffolding. In these cases, we remain aware of the other individual or object with which we interact while not *explicitly* and *thematically* attending to them. In the context of interpersonal interactions, I suggest that this manifests in the sense that the feelings and intentions of the other do not entirely *fuse* with one's own perspective. I must remain aware that there is, in fact, another person *with me* in that experience in order to have a sense of *sharing something with someone.* In other words, to share, there needs to be someone to share with, which requires an *awareness of that someone.*

the other and their behavior as the thematic object of our attention.[12] As such, much like an experienced musician engages skillfully with her instrument without reflective attention, we spontaneously and fluently employ our practical understanding of other people's behavior and change our own bodily-affective style in relation to the other to share emotionally.

Importantly, Krueger (2011, p. 653) remarks that the idea of the epistemic functionality of interactional gestures and expressions is not that *all* cognition is accessible to *everyone*. As the capability to correctly interpret communicative expressions and gestures typically requires that we be able to predict and read one another, familiarity, again, is what makes the difference. When I am familiar with someone, I am more inclined to trust their ways of expressing their feelings and thoughts (Colombetti & Krueger, 2015, p. 11). In many cases, the explicit, verbal communications of our feelings may contradict the non-verbal, bodily cues of our mental states, which further highlights the function of familiarity in grounding the ability to interpret the mental states of the other: Typically, with those we know best, we can identify which expressions are more likely to adequately inform us of the "true feelings" of the person sending "conflicting signals."

Shared history makes us more competent in evaluating the affective meaning of these expressions: We know that a story told with a given tone expresses irony instead of insult and is meant to elicit humor and laughter; we know that when we play a specific song from our youth, our friends will, because of the shared experience, get excited with us; I know that when our child does something funny, and my partner gives me a certain look with a knowing smile, that he shares my feelings about the amusement and affection because I am familiar with his emotion-expressive style and we share a history as a couple and as parents. The more familiar we grow with somebody, the better we understand the messages they send to us—which expressions express which feelings, intentions, and attention. On the contrary, unfamiliarity with the emotion-expressive style of the other may make them difficult to read. This, in turn, can lead to challenges in knowing whether we are experiencing the emotion-eliciting situation similarly and, consequently, in knowing if we are indeed sharing that emotional experience in the first place. Imagine, for instance, that you are telling your new work colleague a joke. As you do not know your co-worker very well, you share no history of affective interactions with him; you may be unsure whether his laughter is authentic and thus reflects genuine amusement ("getting the joke"). Since emotional sharing necessitates interpersonal understanding and communication of mutual awareness, it is likely that unfamiliarity with another person's emo-

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[12] I want to thank an anonymous reviewer for raising a question regarding whether it is possible that, if we are very familiar with someone's feelings and thoughts, the knowledge and awareness of their feelings' explicitness and distinctiveness could in fact hinder the possibility of emotionally converging and sharing with them. While I do not have a straightforward answer to this, I do think that the right balance of phenomenal transparency is indeed needed to decrease the felt sense of individual distinctiveness and otherness. So, familiarity with and the predictability of the other's expression and gesture is needed to carry out emotional convergence and mutual awareness. On the other hand, phenomenological transparency is also important in that it keeps the ultimate difference of our emotional experiences at the background of our awareness.

tion-expressive style and the lack of shared communication manners could hinder the possibility of emotional sharing.

Compare this interpersonal familiarity to that of material resources. Sterelny (2010) describes how

> some historians of philosophy, who live their professional lives with just a few texts, adapt to their canonical texts. To a Locke scholar, the cadence, rhythm, balance, and vocabulary of seventeenth-century prose can come to seem natural and transparent; that of the early twenty-first century tangled and jargon-ridden. (p. 475)

Quite similarly, we also adapt to our loved ones' vocal styles and manners of speech—cadence, rhythm, balance, and vocabulary—so that we know which tones, words, phrases, and intonations express which emotions, emotional intensities, valences, and meanings. Due to our shared interactive history and the mutual individualization that comes with it, I can read my friends based on singular "keywords" and "tokens"; I know instantly and often very precisely what emotional appraisals, shared experiences, or meanings different singular words, vocalizations, anecdotes, or facial displays express.

However, notice that these gestures do *not* function as scaffolds because they are individualized for *me* but because my familiarity with the other person's personal, individual style makes that style reliable and unreflectively informative for me. Individual style, here, does not mean that one's style of gesture, expression, and so forth would necessarily be *individualized* and *personalized* for anyone but the carrier of those behaviors. My *style* of expression and gesturing can be very general and uniform with a larger social group; thus, it is ontologically individual and qualitatively not. Yet, one's *familiarity with* the other's personal style of social interaction and self-expression, whether highly distinctive or general, enables that person to reliably and unreflectively predict and understand the behavior of the other. Therefore, in this case, reliability, rather than individualization, makes the given resource effectively supportive of shared emotion by boosting interpersonal understanding.

5.2 Shared repertoires and resources

Familiarity and predictability, in turn, are often intertwined with the functional feature of individualization of our social interaction practices, manners, styles, and references. Different interactive contexts, thus, have distinct features: specific vocabulary, facial displays, phrases, and tactile gestures, as well as *shared references*, such as anecdotes, jokes, and memories that are relationship-specific. In our relationships and interactions, we gradually develop unique styles of expression and gesture to afford the other access to our feelings and intentions and, likewise, make use of the verbal and non-verbal cues of the other to access their thoughts and feelings. Thus, in our robust and long-term personal relationships, such as among close family members, we often develop unique, personalized styles of expression and communication, both verbal and non-verbal, that are tailored *in relation to the interacting individuals and their relationships* (Colombetti & Krueger, 2015, pp. 13–14; Coninx & Stephan,

2021, p. 62). As such, we are able to *predict*, say, how our friends will respond to our humorous expressions because the humorous style between us is *individualized "for us" mutually*—for that particular relationship and its participants; these individualized, personalized repertoires of interaction form *frameworks* that scaffold our communication.

Moreover, as discussed in the previous chapter, these shared interaction styles often include a wide array of collectively meaningful, shared references. However, shared referential resources are not merely powerful tools for eliciting (common) feelings. They are also tools for interpersonal communication. Von Scheve and Ismer (2013) describe how

> for example, when two or more individuals are part of the same situation and mutually perceive convergence in emotional responding, it is plausible that they also infer similarities in underlying values and beliefs that caused an emotion and possibly also in the degree of commitment to these values and beliefs. (p. 15)

But these underlying triggers, I think, do not merely encompass underlying values and beliefs (Von Scheve & Ismer, 2013), nor merely concerns and interpersonal commitments (Salmela, 2012), but also shared objects and references that enable individuals to grasp the other and shared intentionality of a given social interaction context. For example, I trust that a particular joke is meant to be funny for reasons associated with our distinct shared experiences that are of shared *relevance* to us.

Kiverstein and Rietveld (2021) have a similar idea in mind when they describe how joint actions are enabled by individuals:

> responding to a situation of shared relevance (on the basis of abilities that they have acquired thanks to a history of interactions in the same form of life). It is their mutual responsiveness to the same nested structure of affordances in the shared context of the experiment that accounts for how they are able to coordinate with each other. (p. 9)

Similarly, in order to emotionally share, we *rely* on our shared affective history and its jointly created interactive repertoires with their *shared referential objects*—"props and cons"—that carry specific affective meanings for the interactants. This epistemic functionality is due to the individualization and familiarity of such references: They accommodate meanings that are known to *us* respectively because they are *individual and distinctive* to us specifically. These shared resources of affective interaction are marked by "ourness," i.e., individualization in relation to interacting partners and their relationships. In other words, this specificity of the "we" in any given case is highlighted by unique interpersonal behavioral and communication patterns.

All in all, the functional features of reliability and familiarity, predictability and robustness, individualization and responsiveness, and entrenchment and adaptation render social interaction efficient in producing mutual awareness of shared affect. These functional features, just like the resources they pertain to, are closely related, partly overlapping, and mutually reinforcing, but they come in degrees. These results

suggest that shared emotions are forms of skillful engagement between two or more individuals that require the ability to adjust one's style of emotion-expressive behavior to better fit the corresponding affective signals of the "other" and the capacity to make use of jointly generated "props and cons" that carry specific affective meanings to interactants to elicit and encourage further responses and the continuation of the episodic interaction, as well as bring about emergent feelings of togetherness and pleasure of sharing among the interactants.[13]

So, does the effectivity of robust, predictable, and familiar social interaction styles and habits mean that emotion sharing occurs mainly in tightly integrated, long-term relationships?[14] According to León et al., (2019), tight relationships promote emotional sharing because they are more likely to involve we-identification between individuals in that relationship.[15] Salmela (2022), on the other hand, argues – rightly in my opinion -- that it is *communication*, not *identification*, that carries the *causal* weight for feelings of togetherness and emotional sharing experiences (p. 70). My idea complements Salmela's in that it is often – yet, not always -- shared history of interactions that enables *reliable* communication.

And yet we also seem to be able to share emotions with those we are not familiar with, such as when attending a concert, protests, and parties, or passing moments of interacting and connecting with people we have not previously met or who we don't know by name. For example, I may be working on my laptop in a nearby coffeehouse when my attention is grasped by a misbehaving, rude customer who yells at the barista. Very rapidly, my eyes meet those of another customer, and her look clearly signals similar disapproval that I'm feeling. In this case, we are clearly communicating the shared feelings with others who are total strangers.[16] How is that kind of communicative engagement possible if familiarity is so important? Perhaps the argument for the importance of such intimate, robust familiarity with one another's gestures and expressions in delivering interpersonal understanding might be overtly radical. We might ask whether emotional sharing or the mutual awareness it presumes is really that socially and cognitively demanding. Perhaps it is adequate for interpersonal understanding and the establishment of mutual awareness and emo-

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[13] I wonder if the combination of these scaffolds or functional elements would establish what Krueger (Krueger, 2011, pp. 643–645) refers to as "we-spaces," meaning a shared space of focused bodily interaction between two or more individuals in which "the other person is part and parcel of that experience" (Krueger & Osler, 2019, p. 218). Individuals who share such a space of interaction may realize emotional experiences that they could not have had alone -- such as joint attention, emotional alignment, and emotional sharing, which can be said to make their social interaction a scaffold for their experiences.

[14] An ambiguity, to which I was alerted by an anonymous reviewer, is what makes a relationship robust or non-robust. By robust relationships, I here denote personal relationships and social contexts that involve frequent, relatively regular interactions, including family members, romantic partners, friends, colleagues, and teammates. Non-robust relationships, in turn, do not involve frequent, ongoing, or regular interactions (e.g., passers-by, acquaintances, and estranged relatives). However, this criterion warrants more conceptual work and is, as such, only preliminary.

[15] This identification, thus, seems to imply something that is robust, perhaps resistant to change, that qualifies shared emotions as more meaningful or strong. However, as far as I know, these accounts do not explicitly provide any description of what that robustness means in a phenomenological sense—in what way is the shared emotion qualitatively more "strong" or experienced more "strongly" when there is an underlying we-identity qualifying and modifying it?

[16] I want to thank an anonymous reviewer for bringing this issue to my attention.

tional convergence that we be *generally* familiar with and thus can rely on the dominant expressive styles and shared references, symbols, conventions, and so forth. that are collectively shared?[17] Yet, we do not always understand, interpret, or read one another very well. And we definitely do not end up sharing emotions with everyone. So why is that?

So while I think that we can easily identify the functions of robustness, reliability, entrenchment, and individualization as a collection in "robust" relationships, the same scaffolding functions may also occur "outside" such personal niches,[18] which underlies the central idea of functional features responsible for scaffolding human agency is that they come in degrees. For example, an interaction pattern can be regular and robust, hence predictable, in a very specific context of engagement and shared intentionality, even between irregular acquaintances who don't know each other well enough to share a robust we-identity or tight relationship, such as in the interaction between a barista and their client. Actually, those patterns may become even more robust precisely because of the unfamiliarity and unpredictability: when we don't know the other very well, we establish and stay within those limited patterns that have previously successfully created an engagement between us — such as when I encounter a bartender with whom I interact only a few times a year, for a very short period of time, but if we remember one another we want to stick to those ways of self-expression, manners, conversational topics, and social gestures that perhaps accidentally occurred in our first encounters, or they successfully created a pleasant atmosphere between us.

Additionally, I'm also wondering whether the level of *adaptation* grows the less familiar we are with someone — so that we may try to substitute for what we lack in familiarity and predictability by making ourselves more like the other, responsive to the other, to help predict other-action. This idea in indeed supported by Pacherie's (2014, p. 36, 40) notion of how "(t)he more similar the actions co-agents perform, the more similar their effects and the more synchronous their timing, the greater the of self- and other predictions will be (…)" (ibid., p. 40). So when I'm not familiar with someone, I might want to attempt to increase familiarity between us by maximizing similarity and symmetry at all levels, and by being responsive and adaptive, we can decrease differentiability and experiential, social cognitive gap to the other. So, whereas in such cases, we wouldn't have all the described scaffolds that can boost emotional sharing available, we have *some*, we use them, and maybe try to (con-

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[17] Answering this question requires an empirical study on whether people in personal relationships can read and predict others' emotional expressions more accurately than, for example, concertgoers and if there are significant differences between different social and cultural groups/collective contexts.

[18] Of course, one solution would also be to contest that all humans, or all members of this and that social context or culture share a certain degree of dominant mannerisms, expressions, and gestures with a relevantly same meaning, which would make us, under favorable circumstances, somewhat familiar and responsive with one another's expression and communication anyway. So, in cases like interacting with a stranger in a concert, there might be a low (yet existing) level of familiarity and predictability in one another's expression, and I think that when the degree of one functional feature is low, then others are needed in addition to complement. Thus, I think that in the case of being able to emotionally share with a stranger, there might be other scaffolds available – most prominently, (collectively) shared resources as an object of intention, such as the band and its music.

sciously or unconsciously) increase the level of that feature in given social interaction to substitute for the lack of others.

Another supporting argument points to the multi-dimensional grounds of emotional sharing suggested in this paper: There are different functional properties and different kinds of scaffolds for emotional sharing (and other types of social engagement), and they don't all have to occur simultaneously. Whereas, in many cases, familiar, predictable, and robust gestures and expressions, as well as individualized expressive responses are not available in the interaction between strangers *to a similar degree* as between, say, life-long friends or a romantic couple that has recently met— do increase, aid, or boost interpersonal understanding (and emotional convergence), *it does not follow* that these kinds of social interactive resources are a *necessary requirement*, but instead, a *boosting factor*, for such communication and understanding, leading to emotional sharing. And when circumstances change, so do the requirements for emotional sharing: communication and emotional attunement between strangers demand different scaffolds compared to that between long-term friends; emotional sharing between caregiver and child requires another set of assisting social tools and balance between agent-agent-scaffolding than adult-adult-emotional sharing interaction does. Whereas one situation, say, the interaction between a parent and a child, requires robust and individualized social interaction as a scaffold for emotional sharing, another, say, interaction between a romantic couple, could mainly demand mutual adaptation or responsiveness, entrenchment, and predictability.

These findings, especially the role of familiarity, robustness, and reliance in scaffolding emotional sharing, may indicate that tight relationships can support emotional sharing by creating a favorable and affordable social-psychological ecology for it. This ecology constitutes a collection of emotion-expressive behaviors, shared cultural and material artifacts, and mutually created (emotional) conventional patterns of joint action, habits, and rituals, as well as the pooling of individual abilities and the distribution of demanding tasks across multiple individuals.

6 Conclusion

In this research, the scaffolded mind approach was employed to argue that social interaction scaffolds emotional sharing and, by doing so, to reveal novel aspects of interpersonal scaffolding processes. I have argued that emotional sharing experiences are effectively promoted within social interaction in various ways. My analysis shows that (1) emotional convergence and communication of mutual awareness are supported by robust, familiar, predictable, and hence reliable, expressions, gestures, and habitual interaction patterns; (2) individualization and adaptation of one's own expression in response to the other in social engagement is an act of providing oneself as a scaffold for the other's emotional attunement and social cognition; and (3) shared repertoires of affective interaction, often intermingling with collectively shared references, also trigger the emergence of corresponding emotions, boost emotional convergence, and deliver meaning. Moreover, I have illustrated how the conditions that support emotional sharing can alternate depending on the situation and the quality of the relationship between interactants: different circumstances demand different

kinds of scaffolds with different functional dimensions/features in order for individuals in that situation to share emotions. And while in "robust" relationships, we could typically find all or most of the features of social interaction scaffolds described in my analysis, we *also* rely on those same scaffolds outside these niches. Perhaps it is because the fewer functional features we have available, the greater the meaning of singular features will grow.

Since emotional sharing yields a variety of positive outcomes,[19] as both theoretical insights and empirical evidence have pointed out, we should further investigate how these findings could be harnessed to advance emotional sharing in our social relationships, such as in daycare environments, workplaces, schools, and family dynamics, as well as in children's cognitive, emotional, and social development. However, further research is required to explore other aspects of scaffoldings for emotional sharing: What degree of familiarity, predictability, individualization, entrenchment, and mutual adaptation and responsiveness is needed for social interaction resources to be effective scaffolds for emotional sharing? Are these functions merely effective in small-scale personal relationships, or do they also come into effect at a more general social and cultural context level? Is there a difference between permanent, robust scaffolds and temporal scaffolds (i.e., parent-child dyads) for emotional sharing? These and many more questions regarding interpersonal scaffolding, shared affect, interpersonal understanding, social perception, and social interaction warrant more research in the future.

Declarations

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[19] One reason why sharing emotions is beneficial is because becoming aware of the correspondence and mutuality of sentiments affords individuals with additional pleasure, regardless of the initial sense of pleasure or pain of the sentiment (Chevallier et al., 2012, p. 231; Nagatsu & Salmela, 2022, pp. 7–8; Salmela & Nagatsu, 2017, pp. 463–466). As such, we take pleasure in emotional sharing, which, consequently, enhances rapport, individual wellbeing, and interpersonal liking.

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