



17 Collective Body Memories

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Human bodies are similar all over the world, but their habits, postures, and comportment are to a large extent shaped by culture. Cultures preordain and suggest certain ways of sitting, standing, walking, gazing, eating, praying, hugging, washing, and so on. In so doing, they induce certain dispositions and frames of mind associated with these bodily states and behaviors: for example, attitudes of dominance and submission, approximation and distance, appreciation and devaluation, benevolence or resentment, and the like. Cultural practices, rituals, roles, and rules shape the individual's *techniques of the body*, as Mauss (1935) termed them, and the resulting way the body moves and comports itself is one of the main carriers of cultural tradition. As Bourdieu notes, cultures are thus “treating the body as memory; they entrust to it in abbreviated and practical, i.e., mnemonic, form the fundamental principles of culture. The principles embodied in this way are placed beyond the grasp of consciousness” (Bourdieu 1977, 94). The main period for the transmission of these influences is of course early childhood and upbringing, which consists to a large extent of an “implicit pedagogy, capable of instilling a whole cosmology, an ethic, a metaphysic, a political philosophy, through injunctions as insignificant as ‘stand up straight’ or ‘don’t hold your knife in your left hand’” (ibid.).

This intimate connection between culture and embodiment is bound to a specific kind of memory, which usually escapes our conscious recollection or deliberate actualization—a system of embodied habits and skills acquired by the individual, which may also be termed *body memory* (Fuchs 2011a, 2012). This memory is of a kind quite different from the episodic memory by which we recollect and represent the past as such. Through repeated and typical interactions with others an individual habitus is formed, and with it the norms and rules of culture are inscribed into the body, yet in such a way that the resulting memory corresponds to an embodied and implicit knowing *how*, not to a knowing or remembering *that*.

The social interactions that shape the individual body memory usually follow certain patterns, styles, and rhythms (e.g., turn-taking), and they are often directed toward shared goals. Following Di Paolo and De Jaegher (this volume), we might also speak of “participation genres,” such as joint play, shared meals, salutations, queuing, bedtime rituals, and the like.

Since such habitual or ritualized forms of embodied interaction are possible only in dyads or groups, the question arises whether we can also posit a superindividual level of memory formation, resulting in what may be termed *collective body memory*. This would be a crucial complement to the notion of “collective memory,” which has been introduced by Halbwachs (1939) and further investigated by cultural anthropologists (e.g., Pennebaker, Paez, and Rime 1997; Assmann and Livingstone 2006), but which is mainly related to verbal tradition or explicit shared commemoration of the past.

The interbodily basis of collective memory is confirmed by the multifarious forms of ritualized and synchronized movements and performances, which contribute to building human culture. In his seminal work *Keeping Together in Time: Dance and Drill in Human History*, McNeill (1995) has collected compelling evidence that coordinated rhythmic movement—and the shared feelings it evokes—has played a profound role in creating and sustaining human communities. Synchronized action and chant facilitated group labor in rowing, tilling the soil, moving megaliths, and so on. From festival village dances or the chanting rituals of churches to the close-order drill of early modern armies, various forms of joint bodily movement have supported groups in their capacity for cooperation. This is based, above all, on shared bodily sensations and feelings, or what may be called *interbodily resonance* (Froese and Fuchs 2012), with the effect of weakening the psychological boundaries between the self and the group, and enhancing the sense of community and identity. More recently, these dynamics of social coordination and synchronized movement have also been explored from an enactive and dynamic systems perspective, emphasizing the coupling of interacting systems and the emerging autonomy of the interaction processes as such (De Jaegher and Di Paolo 2007; Fuchs and De Jaegher 2009; Schmidt and Richardson 2008; Wiltermuth and Heath 2009; Oullier and Kelso 2009; Valdesolo, Ouyang, and DeSteno 2010).

In what follows, I will investigate the idea of a collective form of body memory, which develops in dyads or social groups through repeated interactions and preordains a coordinated behavior of the members. This idea is closely related to the question whether there is an interbodily “we-experience” or even a kind of collective body, which could become the carrier of such memory formation. My main focus will be on a phenomenological approach, with frequent side-glances to enactive and dynamical systems aspects, which I regard as complementary. I will start with a definition and short explanation of individual body memory. As one of its subtypes, I will consider the phenomenon of intercorporeal memory, in order to then extend it in the direction of a dyadic and collective body memory. In the second section, I will take a closer look at several phenomena that may be attributed to collective body memory. These are, on the one hand, particular forms of interaction such as play and ritual, and, on the other hand, patterns of interaction and behavior in families, social classes, or cultural communities as a whole—often subsumed under the concept of *habitus*.

1 Individual, Dyadic, and Collective Body Memory

(a) Body Memory

The capacity of conscious or explicit recollection, which is usually termed *episodic memory* (Tulving 1993), by no means exhausts the phenomenon of memory. Most of what we have experienced and learned is not made accessible to us in retrospect, but is reenacted through the practices of everyday life. We can define the entirety of established dispositions and skills as *body memory* that become current through the medium of the lived body without the need to remember earlier situations (Casey 2000; Fuchs 2000, 2011a, 2012; Summa 2011, 2012). It thus comprises all those habits, manners, skills, and practices that are performed prereflectively or “as a matter of course.” It is a memory for patterns of movement such as walking or dancing, for the skillful handling of instruments such as a bicycle or a keyboard, for familiar *gestalts* of perception, for complex spatial situations (for example, finding one’s bearings in a dwelling or a town), and last but not least for the habitual bodily interactions with others. This bodily memory, which was first considered by Maine de Biran ([1799] 1953), Félix Ravaisson ([1838] 1999), and Henri Bergson ([1896] 2007), does not “presentify” the past through explicit recollection, but rather reenacts it implicitly, as a grown and presently effective capacity.¹ While the term *implicit memory* as used in cognitive psychology (Schacter 1987, 1996; Rovee-Collier, Hayne, and Colombo 2000) covers some of its phenomena such as procedural or skills learning, the term *body memory* is more comprehensive and emphasizes its basis in the lived or subjective body.

Body memory is thus the ensemble of all habits and capacities at our disposal. It conveys the founding experience of “I can” (Husserl 1952, 253), an embodied knowledge or knowing how, or, in Merleau-Ponty’s terms, the *operative intentionality* of the body (Merleau-Ponty 1962, 372, 382): I can dance a waltz because my lived body attunes of its own accord to the rhythm of the music and performs the movements. I can type with ten fingers, yet without being able to describe the position of the letters on the keyboard. I have long since forgotten the clear assignment of fingers and letters that I learned when I first learned to type. Now, the knowledge is “in my fingers,” and they type of their own accord.² Bodily familiarity with

1. Bergson already emphasized this peculiar temporality of what he called *mémoire habitude* (as opposed to *souvenir-image* or episodic memory): “This consciousness of past efforts stored in the present is certainly a memory as well, but a memory fundamentally different from the first, always directed toward action, based in the present and looking only to the future. ... Indeed it does not represent our past, but enacts it” (“*cette conscience de tout un passé d’efforts emmagasiné dans le présent est bien encore une mémoire, mais une mémoire profondément différente de la première, toujours tendue vers l’action, assise dans le présent et ne regardant que l’avenir. ... À vrai dire, elle ne nous représente plus notre passé, elle le joue*” [1896] 2007, 87, my translation).

2. Though certainly not an embodiment theorist, Descartes already described this kind of memory: “Thus, for example, lute players have part of their memory in their hands, because the facility to move

things or performances means biographical forgetting, the descent of conscious deeds and experiences into a substrate from which consciousness has withdrawn, and yet which carries our everyday being-in-the-world.³ I am familiar with an instrument, a face, or a situation as a whole because my capacity for perception and action comprises my earlier experiences in the form of types or patterns, without explicit remembering. Hence, one could say that body memory means my *lived past*. Moreover, in a sense this memory implies *a collective past*, for it is obviously shaped to a large extent by cultural practices, rituals, roles, and artifacts that the lived body adopts, or assimilates to, from birth on.

What is the locus of this embodied knowledge or body memory? Is this only a metaphorical term, and do we in fact have to locate it in the brain? According to the computational view of mind and brain, the process of learning writes bits of information into memory banks where they are stored and can be recalled at will. However, this representational and internalist view of memory does not fit the dynamic interaction with the environment that takes place when bodily skills or habits are reenacted. To be sure, this memory is based on specific patterns of neural activation derived from earlier experience; and, in contrast to correlates of episodic memory, these are mainly subcortically organized, that is, in the basal ganglia, cerebellum, and limbic system (Graybiel 1998; Ennen 2003). However, this does not imply any representational memory: instead of inner maps or models of external reality, the brain provides only the *open loops* of potential interactions. These loops are only closed to full functional cycles by suitable counterparts in the environment that the body currently connects with, leaving no role for separate representations (Fuchs 2011b).⁴

Granted, in these interactions, implicit protentions or anticipations play a crucial role: the hammer that I grasp will have a certain weight, the stairs I walk up will lead me to my apartment, and so on. These bodily protentions might also be related to concepts of “predictive processing” in the brain (see Kirmayer, this volume). Yet this is all part and parcel of the operative intentionality of the body whose connection with each environment opens a *procedural field* of possibilities, affordances, and probabilities. This field is not “represented”

and bend their fingers in various ways which they have acquired by habit, helps them to remember passages that require them to move their fingers in that way in order to play them” (see *Lettre à Meyssonnier*, 29.01.1640; Descartes 1996, AT III, 18–21, my translation).

3. William James made the fitting observation: “It is a general principle in psychology that consciousness deserts all processes where it can no longer be of use” (James [1890] 1950, 496).

4. The term *representation* suggests that the brain activities could, at least in principle, be separated from the cycle, as if they were reconstructing or modeling inside what is outside. But in a current sensorimotor coupling with the environment, there is no separate “inside” that could map, reconstruct, or represent the “outside.” In such an ongoing circular process, no segment can “represent” or “stand for” another. Instead, the achievement in question is realized by the brain-body-environment system as a whole.

somewhere inside but extended before us, as our bodily being-toward-the-world (Merleau-Ponty 1962).⁵

Thus, if “memory” means not some kind of static inner depository, but *the capacity of a living being to actualize its dispositions acquired in earlier learning processes*, then this capacity is bound to the ongoing dynamic coupling between body and environment. An illustrative example is the attempt to find the keys for typing a certain word on an empty keyboard (where the letters have been removed from the keys) just by looking at it. Even for an experienced typewriter, this will be impossible—as mentioned above, one usually has no representational knowledge of the position of the letters. However, at the very moment of having one’s fingers set on the keys, they project their capacity onto the keyboard, and one can write the word immediately, without thinking. Here the knowledge is clearly an embodied know-how *without knowing that*, and the memory may well be said to reside in the “hands-on-the-keyboard,” or to put it more precisely, the memory is an emergent dispositional property of *the whole system of organism and keyboard connected to each other*. Thus, since the locus of this memory is not only the brain, “body memory” may not be regarded as a merely metaphorical term. Rather, it precisely describes the body in connection with the environment as the carrier of habit or skill memory. It is not static or reproductive but a dynamic memory, both in its formation through the body’s interaction with the environment as well as in its flexible reactualization through similar interactions later on.

(b) Intercorporeal Memory

We can distinguish several types of individual body memory, for example, procedural, spatial, situational, traumatic body memory, and others (Casey 2000; Fuchs 2011a, 2012). I will focus here on one type, which may be termed *intercorporeal memory*, following Merleau-Ponty’s notion of *intercorporéité* (1960) as a sphere of prereflective mutual bodily attunement (see also Moran, this volume). As we will see, this memory also enables the formation and tradition of collective patterns of interaction.

It is widely acknowledged that early childhood development is characterized by the incorporation of shared practices, which define the infant’s sociocultural world. Infant research has shown that motor, affective, and social skills do not develop on separate tracks, but are

5. From this it follows that there is no such thing as “pure perception” that would give us mere objects without any possibilities or affordances. A hammer is “graspable,” a staircase is “walkable,” and a house is implicitly seen as having a backside (Husserl’s “appresentation”)—otherwise there would be no perception of the hammer, the staircase, or the house at all. Hence, seeing a hammer means perceiving *both* something present *and* “what-might-be.” These possibilities are opened up by body memory: if one has learned to juggle, one sees a formerly neutral object as affording juggling (Gibson 1966). In other words, perception is always rich in possibilities, and these are not separable from it—as long as we do not imagine them in an *as-if* mode. The latter starts with what Kirsh (2009) has termed “projection,” namely an imagination by which we deliberately overlay the perceptual field. Only an “as-if” mode of intentionality may rightly be called a representation.

integrated through the formation of affective-interactive schemas. Even the earliest experiences of how infants are held, comforted, guided, and reacted to by their caregivers are imprinted in their implicit or body memory, hence also displayed in their later actions and interactions. Repeated patterns of interaction soon become familiar and result in a prereflective, practical knowledge of how to get along with others—how to share pleasure, elicit attention, avoid rejection, reestablish contact, and so on. It may also be termed *implicit relational knowledge* (Lyons-Ruth et al. 1998) or *intercorporeal memory* (Fuchs and De Jaegher 2009; Fuchs 2012): a temporally organized, “musical” memory for the rhythm, dynamics, and vitality affects shaping interactions with others (Stern 1985; Amini et al. 1996).⁶

This primary intercorporeality has far-reaching effects: early interactions turn into implicit relational styles that form one’s personality. As a result of learning processes, which are in principle comparable to acquiring motor skills, we later shape and enact our relationships according to the patterns extracted from our primary experiences. These implicit relational styles are also expressed in the habitual posture of the body. Thus, the submissive attitude toward an authority figure implies components of posture and motion (bowed upper body, raised shoulders, inhibited motion), components of interaction (respectful distance, low voice, inclination to consent), and of emotion (respect, embarrassment, humility). All our interactions are based on such integrated bodily, emotional, and behavioral dispositions, which have become second nature, like walking or writing. They are now part of one’s habitus or “embodied personality structure” (Fuchs 2006). The shy, submissive attitude that we find in dependent persons—their soft voice, childlike facial expression, indulgence, and anxiousness—belongs to an overall pattern of comportment and attitudes that is part of their personality and even their identity. Thus, our basic attitudes, typical reactions, and relational patterns are crucially based on body memory.⁷

To summarize, early childhood development is characterized by the incorporation of shared practices, which shape the infant’s habits of interaction and comportment. These embodied skills define the space of possible relations in which children grow up and later on live their adult life. In the dispositions and habits of the lived body, others are always implied: a person’s typical patterns of posture, movement, and expression are comprehensible only as referring to actually present or imaginary others. Embodied personality structures can be regarded as *procedural fields of possibility* that are activated in contact with others and suggest certain types of behavior. They are therefore best accessible in the actual intercorporeal encounter: the lived body can be understood only given other embodied subjects.

6. Of course, the term *intercorporeal memory* could already be understood as denoting a superordinate memory of dyadic processes. However, in earlier papers (Fuchs 2011a, 2012) I have used it as an individual type of relational body memory or “implicit relational knowledge,” and I will therefore maintain this usage. The superordinate memory will then be termed “dyadic body memory” (see below).

7. On the fundamental role of body memory for the diachronic identity of the self, see Fuchs 2016.

(c) Dyadic Body Memory

As we have seen, each body forms an extract of its past history of experiences with others that is sedimented in intercorporeal memory. Can we speak of a superordinate dyadic or collective body memory as well? To answer this question in the affirmative, we just have to shift our focus somewhat, namely from a view on the individual to a view on the interactive history of a dyad or a group. For just as the intercorporeal experiences of an individual are transformed into body memory, the interactions *between* two persons also develop their own history. It manifests itself in shared patterns of interaction, which are actualized every time the two persons meet again. One may, for example, develop a specific style of interacting with a close friend, a particular way of talking, a special style of humor and so on, which are possible only with this person and turn up again even after years. In this case, the respective intercorporeal memories of the partners unite to form a *joint procedural field* that suggests and preordains certain typical postures, interactions, and interaffective experiences. Both body schemas are attuned to each other through resonant kinesthetic patterns and thus *interenact* the shared history: rituals of welcoming, joint repertoires of gestures, postures, movements, voice pitch, and even dialects, which one “falls into” in the presence of the other, as a kind of unintentional entrainment (Schmidt and Richardson 2008). We can call this a *dyadic body memory*.

Let us take another example, namely of a well-attuned pair of dancers whose hands and bodies find each other without guidance of the gaze, resonating with the rhythm of the music, and incorporating the dynamic flow of each other’s bodies into how they modulate their own sway and movements. Both partners bring in their own procedural and intercorporeal capacities, and yet they behave and experience in a way that is possible only in the interaction. Together they create the spatiotemporal *gestalt* of the dance, which in turn draws them into its dynamics. Thus, they no longer experience themselves as clearly separate bodies, but rather *mutually incorporate* each other (Fuchs and De Jaegher 2009). Their kinesthetic body schemes literally extend and connect to form an overarching dynamic process (Froese and Fuchs 2012; Koch and Fischman 2011). Related examples include jointly sawing wood with a two-man saw (Christian and Haas 1949) or double sculls rowing (Lund, Ravn, and Christensen 2012), both forms of cooperation that lead over time to a harmonic, sinusoidal coordination of movements, with each partner tuning into a complementary activity that unconsciously compensates for the irregularities of the partner. Modifying Merleau-Ponty’s notion, we might speak of an *operative we-intentionality*, since for skilled agents, the goal of the joint action is achieved through such habitual and largely prereflective bodily attunement.

Generally speaking, when two individuals interact in such ways, the coordination of their body movements, gestures, gazes, and so on can gain such momentum that it may even override the individuals’ intentions. This is based on the general capacity of the body to connect with instruments as well as with other bodies in skillful interaction and thus to dynamically incorporate them. In mutual incorporation and resonance, both agents form an “extended

body,” as it were, which may even develop its own history. Rhythm and melody particularly support this incorporation by providing dynamic constraints for the movements of both partners. This process has been described at the systems level as the interaction gaining an autonomy of its own, or as the emergence of *participatory sense-making* (De Jaegher and Di Paolo 2007).

Where shall we localize this memory of joint dancing and other skillful or habitual interactions? On the one hand, the superordinate system or “extended body” of course has no natural substrate for forming a memory—it emerges only from the present connection of two bodies in which, based on each brain’s neuroplasticity, the respective dispositions have formed. Each social memory must finally be based on the biological memory substrates of the individuals involved in order to become effective for their behavior. On the other hand, the “open loops” of these dispositions are especially preattuned to the corresponding loops of specific others. Only together are the individuals in a position to actualize and interenact their reciprocally related memories, which justifies attributing the memory as an emergent dispositional property to the dyadic system or the dyad itself.⁸

(d) Collective Body Memory

Thinking about memory and identity in collective terms, we still tend to focus on verbal, representational, and other symbolic traditions. However, a great part of our collective memory has been passed from one generation to the next through performative practices and specifically socialized bodies. “Every group ... will entrust to bodily automatisms the values and categories that they are most anxious to conserve. They will know well that the past can be kept in mind by habitual memory sedimented in the body” (Connerton 1989, 102).

Since Mauss’s influential work on the techniques of the body (Mauss 1935), researchers have increasingly acknowledged and investigated the role of corporeality for carrying cultural memory (see Narvaez 2006 for an overview). On the one hand, cultural anthropology has long since criticized the idea of a natural or precultural body as “biological essentialism,” emphasizing the history of the body and claiming embodiment as a cultural phenomenon. On the other hand, phenomenological approaches, in particular advanced by Csordas (1990, 1994, 1999), have moved away from representational theories that see bodies as mere symbols of cultural ideologies, inscribed textures, or enacted metaphors. Instead they argue for a primary level of meaning where experiential and expressive qualities of the body stand for themselves, thus bringing the prereflective layers of experience into focus. Cultural phenomenology examines the unique ways in which the lived body unfolds in experiences of and cultural practices surrounding sickness, ritual, dance and sports, healing, and music. Thus,

8. A related question concerns the locus of cooperative agency. Stapleton and Froese (2015) have argued for a restricted notion of “collective agency”: while cooperating, group members may well develop a shared lived perspective. However, this should not be conflated with a collective first-person perspective or “we-subjectivity,” since subjectivity is necessarily bound to a living body.

embodiment is increasingly regarded as “existential ground of culture and self” (Csordas 1994, 6).

Against this background, body memory may serve as the mediator between embodiment and the history of culture, in particular when it is regarded from an interbodily point of view. For this, we have only to transfer the results of the last section to the embodied interactions of several persons or social groups. A *collective body memory* may then be defined as an ensemble of behavioral and interactive dispositions characterizing the members of a social group, which have developed in the course of earlier shared experiences and now prefigure similar interactions of the group. Here too, a procedural field of dynamic behavioral patterns emerges that induces the members to perform coordinated interactions and at the same time constitutes the meaning of their interactions. Similar to dyadic body memory, collective body memory is based, on the one hand, on the acquired dispositions of the individuals; on the other hand, it is actualized only through the interactions of the group as a whole. As we will see, it is also particularly suited to carry the identity of the group and make it tangible for its members.

The notion of collective body memory should be distinguished from other concepts of sociology and cultural studies. As already mentioned in the introduction, Halbwachs (1939) coined the term *collective memory* as the shared traditional knowledge of a group. This concept, however, does not refer to performative reenactments of former collective actions. The related notion of *cultural memory* (Pennebaker, Paez, and Rime 1997; Assmann 2011) includes bodily and performative components such as rituals, but also oral history, written documents, monuments, and other objective carriers of cultural tradition, which are not related to body memory and reenactments. What comes closer to collective body memory is the concept of *habitus* as introduced into anthropology by Mauss, and into sociology by Bourdieu. However, though describing what members of a group or culture have in common, it is still bound to the individual and seems less suited to illustrate the phenomena of group enactments such as games or rituals. I will therefore take the habitus as one, even though important, type of collective body memory (see below).

2 Some Phenomena of Collective Body Memory

Having outlined a general concept of collective body memory, I will now take a closer look at some of its appearances, namely games, family memory, rituals, and habitus.

(a) Games

Team sports such as soccer may serve as a first example of collective body memory. First, the game consists in a form, which is determined by rules, goals, and means. It is bound to individual capacities of dealing with the ball, but also to the embodiment of the playing field whose dimensions the player has to incorporate in order to handle the ball without much deliberation or calculation. The bodily dispositions of the player and the ever-changing

spatial configuration of the field are mutually implicated elements of an indivisible whole (Hughson and Inglis 2002). It is a form of consciousness that is not reflective, but rather a “field-consciousness” so well described by Merleau-Ponty:

For the player in action the football field is not an “object,” that is, the ideal term which can give rise to an indefinite multiplicity of perspectival views and remain equivalent under its apparent transformations. It is pervaded with lines of force (the “yard lines”; those which demarcate the “penalty area”) and articulated in sectors (for example, the “openings” between the adversaries) which call for a certain mode of action and which initiate and guide the action as if the player were unaware of it. The field itself is not given to him, but present as the immanent term of his practical intentions; the player becomes one with it and feels the direction of the “goal.” ... At this moment consciousness is nothing other than the dialectic of milieu and action. (Merleau-Ponty 1963, 168–169)

Moreover, in a well-attuned team, the players also have a sense of the joint positional play, for the routes the others will usually take, and for well-practiced combinations. The movements the single player performs on the field gain their meaning only against the background of the movements of the team as a whole. Thus, the playing field and the soccer team together form a procedural field that induces the movements, directions, and dynamics of the players—of course, always in conflict with the opposing team. Having incorporated this procedural field, the player also becomes part of an extended or “collective body” with its peculiar flow and dynamics. The practical sense for the game that the experienced player has acquired is now at the same time a sense for the potentialities of the team’s play, its immediate future: it includes a *shared bodily protentionality* (see section 1a above), or in the words of Bourdieu:

A player who is involved and caught up in the game, adjusts not to what he sees but to what he fore-sees, sees in advance in the directly perceived present; he passes the ball not to the spot where his team-mate is but to the spot he will reach ... a moment later, anticipating the anticipations of the others. ... The “feel” for the game is the sense for the imminent future of the game, the sense of the direction of the history of the game that gives the game its sense. (Bourdieu 1990, 81–82)

The emergent procedural field implies not only an embodied sense of the future, but also a form of normativity: a player does not only perceive his teammate’s intention of kicking the ball, but can perceive his kick as unsuitable for shooting at the goal. With repeated joint training, the mutual attunement of the players will increase, stabilizing their interactions according to the normativity of the field, and thus indicating the development of a collective body memory as an emergent property that preordains the individual actions. The more space and less resistance offered by the opposing team, the easier this shared memory will be reenacted in the game. Then the patterns of movements and combinations practiced in training will reemerge automatically, without deliberate purpose, reflection, or planning. If this does not succeed, however, it is the task of the trainer to change the tactics and possibly to actualize other dynamic patterns from the collective repertoire of the team. In this case, explicit cognitive strategies and implicit dispositions of the team work together.

(b) Family Memory

Even without codified rules, social groups over time develop their peculiar patterns and dynamics of interaction. A typical example is the collective memory of a family, which attributes specific roles, positions, and behavioral styles to its members. Thus, children are drawn into a topology of intercorporeal and affective resonance structures from birth on. Most families also develop specific rituals of shared meals, weekends, excursions, birthdays, and so on. This results in what may be called an *embodied family memory*: the behavior patterns and relations between the family members constitute a prereflective and invisible procedural field that is enacted each time the family gets together.

A way to make this field visible has been developed in the therapeutic method of the so-called family constellations (Steifel, Harris, and Zollmann 2002; Cohen 2006). They typically proceed as follows: One of the clients asks people from the therapeutic group to serve as representatives of his family. Then the client arranges them in a spatial constellation according to his intuitions about his family—standing close or distant, being turned toward or away from each other, and so on. The representatives have little or no factual knowledge about those they represent. Nevertheless, on the mere basis of their position within the constellation, they usually experience feelings, bodily sensations, or movement tendencies, which come very close to the experiences within the real family. Their statements then inform the further process of exploring the position, role, and feelings of the family members as well as the family dynamics as a whole.⁹

The mechanism behind this vicarious experience is not fully understood (see Lynch and Tucker 2005). However, we may well recognize the role of collective body memory in the process: the chosen configuration represents not a particular biographical situation but a constellation of felt relations that have sedimented in the client's lived body as an extract of uncountable experiences with his family. It refers to common orders of belonging or distancing, authority or inferiority, coalition and exclusion, and the like. Thus, body memory contains an invisible network of relations to the relevant persons of one's biography—persons that stand at our side or behind us, closer or more distant—and this should be understood quite literally in an embodied and spatial way. Hence, the client intuitively feels his sister closely at his right side, his father reassuringly behind his back, and so on. This invisible bodily and spatial network is made visible in the family constellation. It displays the collective body memory of the family as experienced by the representatives.

The concept of *lived space* (Fuchs 2007) may also be useful to explain the spatial dynamics of the constellation. Derived from Lewin's "topological" or "field psychology" (Lewin 1936), lived space may be regarded as the totality of the space that a person prereflectively "lives" and experiences, with its situations, relations, movements, and horizon of possibilities. This

9. Of course, the representatives' reports are subjective and contain some aspect of personal projection. However, the blending of projections with field resonance usually does not contaminate the process as a whole.

space is not homogeneous, but centered around persons and their bodies, characterized by qualities such as vicinity or distance, wideness or narrowness, connection or separation, attainability or unattainability, and structured by physical or symbolic boundaries. This results in more or less distinct domains such as one's own territory, home, sphere of influence, zones of prohibition or taboo, and so on.

Moreover, the lived space is permeated by "field forces" such as attraction and repulsion, elasticity and resistance, and the like. Competing attractive or aversive forces lead to typical conflicts, which may be regarded as opposing directions of possibility that the person faces. In analogy to physical fields, there are effects of "gravitation" and "radiation," caused for example by the influence of a significant other or by a dominant social group. Hence, lived space implies a unity of bodily, sensorimotor, affective, and intersubjective conditions and impacts, which are experienced and enacted in a prereflective, nonsymbolic spatial mode. Collective body memories are played out and enacted as lived spaces of individuals and groups; hence, the spatial structure of the family constellation with its peculiar effects may be regarded as a visualization of the topological field structure underlying the interrelations of the members.

(c) Rituals

Rituals are culturally prefigured social acts with high symbolic meaning that are governed by formalized rules and performed in ceremonial ways. They extend from simple types such as shared meals or salutations to so-called *rites de passage* (births, initiations, weddings, or funerals) (van Gennep 1909), rites of feasting or commemoration, and finally religious cults (Turner 1969; Bell 1997; Rappaport 1999). Their function lies, on the one hand, in regulating and smoothing social interactions in everyday life, and, on the other hand, in helping the group to cope with critical or precarious situations by embedding them in overarching social and mythical contexts. Group rituals may be conceived as arrangements of human bodies, often based on synchronized and rhythmic movements (dancing, singing, drumming, etc.) and turn-taking patterns. Their effect is mediated through the performance itself, which means that the concrete bodily enactment *evokes or creates* the jointly intended reality. At the same time, there is also a *mimetic relation* between former, present, and future ritual acts, which is anchored in the similarity and recurrence of bodily sensory actions and ceremonies. The more the different senses participate in the ritual (kinesthesia, touch, vision, hearing, smell, and taste), the more lasting its sedimentation in the individual body memory, and the more intense the shared experience of its reactualization. Rituals are thus essential parts of the collective body memory of a group, be it a clan, a tribe, or a larger community. They both express and enhance their members' sense of identity and togetherness.

Many rituals also serve as an explicit commemoration: they hark back to a primordial event or a mythical idol, a god, hero, or ancestor whose actions (e.g., an act of creation or a fight against a hostile power) are imitated and reenacted in the ritual. "Every religious festival, any liturgical time, represents the reactualization of a sacred event that took place in a

mythical past, ‘in the beginning,’” writes Eliade (1959, 69). The ritual performance enables the descendants or the believers to take part in the hero’s life through a “mystical participation” (Lévy-Bruhl 1910) and to secure the continuous renewal of the primordial beginning through cyclical repetition. By bodily imitating what the mythical ancestors have done, reproducing their actions and gestures, one communes with them and shares their essences. The metaphysical basis of this participation is the mystical community of the essence of things, their identity over time and space. As a result, things may represent both themselves and another thing, be both past and present, be both here and there at the same time. However, this participation is based experientially on the capacity of the lived body to incorporate and reenact its former experiences as if they were immediately present. Body memory enables the *lived presence of the past*, thus establishing, as it were, an immediate communication between different times of one’s life.¹⁰ Collective body memory extends this communion to the ancient times of the group as a whole.

This timeless present realized by body memory is the foundation of religious rituals. For Christians, for example, it is created in the Holy Mass, which encompasses not only the ever renewed enactment of the Last Supper but also the intercorporeal presence of Christ himself. Both Jesus, the finite and historical person of a remembered past, and Christ, who transcends history, are present in the Mass at the same time. Moreover, through the sacrament the communicants become one body with Christ, con-substantial with him, for the bread and wine, which they taste and ingest, become identical with his body and blood. Indeed the community and the church as a whole literally participate in Christ’s body: *corpus Christi mysticum*, the mystical body of Christ, was the term used since the twelfth century for the community of the Christian church, derived from St. Paul’s comparison of Christ with the “head” and the Christians with the “limbs” of one body.¹¹ Thus, the collective body memory of the community mediates the ever renewed participation in Christ, and the past is resurrected through the shared intercorporeal present of the mass.

(d) **Habitus**

As a final form of collective body memory I will consider the concept of the *habitus*. It may be understood as a set of socially learned dispositions, skills, styles, tastes, and comportment that are often taken for granted or go unnoticed—one may also speak of a prereflective

10. Thus Proust, in his *In Search of Lost Time*, famously describes the Madeleine experience, the taste of a tea-soaked cookie reminding him of his childhood, as an overwhelming experience of timeless bliss in which, as in an experience of *déjà-vu*, the distant past and the present coincide into one unitary time (Proust 2003).

11. “For even as the body is one and yet has many members ..., so also is Christ. ... Now you are Christ’s body, and individually members of it” (1 Cor. 12, 12–13); the church is “his body” (Eph. 1, 22–23). “Christ is the head of the church. He is the savior of his body” (Eph. 5, 23); he is the “head, from which all the body by joints and bands having nourishment ministered” (Col. 2, 19).

“social sense.” The habitus is formed by the continuous sedimentation of shared experiences into the body memory and embodied personality structure of the individual. Thus, the skills, habits, and practices acquired throughout one’s life find their proper intelligibility in the context of the respective life world and its social relations. Though the individual is the carrier of the habitus, it has been acquired in shared interactions and hence always remains implicitly related to actually present or imaginary others. Moreover, the combination of habitus-guided behaviors in interaction, for example of the roles of teacher and student, may be regarded as a superindividual embodied memory of interaction sequences. Considering this reciprocal relatedness of the individual habitus forms, it seems justified to include the notion in the concept of collective body memory.

Aristotle already used the concept of the habitus in his notion of *hexis*. In contemporary usage it was introduced into sociology by Marcel Mauss, who defined the habitus as those aspects of culture that are anchored in the body and in daily practices of individuals, groups, and societies (Mauss 1935). Bourdieu later re-elaborated the concept, defining it as the entire social appearance of a person, including his or her posture, manners, taste, clothing, attitudes, and general way of life (Bourdieu 1990). As a “system of internalized patterns,” the habitus produces culture- or class-specific styles of thought, perception, and action that individuals take to be their own, but which they actually have in common with the members of their class. For the experienced observer, the habitus may even allow us to infer the rank and status of a person in society.

Clearly, we are dealing with a mnemonic and historical concept, but one of a special kind: “The habitus—embodied history, internalized as a second nature and so forgotten as history—is the active presence of the whole past of which it is the product” (Bourdieu 1990, 56). Precisely because it is not explicitly remembered or reflected upon, the habitus induces us to certain mindsets, outlooks on the world, as well as to particular styles of interacting with others as a matter of course. These enacted practices thus belong to a “cultural unconscious” that naturalizes certain behaviors, while making others seem “out of place” or even unthinkable. It suggests patterns of distance or nearness, pride or modesty, benevolence or competition, and the like—mediated, for example, through customary interpersonal distance (think of different norms for personal space in Northern or Southern Europe, or Europe and the United States), through body postures or movements, clothing (think of headscarves or burkas, to take a current example), and also through environmental affordances and artifacts such as architecture, furniture, means of transportation, and so on.

As mentioned above, the habitus is acquired through practical immersion in the life world, that is, through repeated interactive experiences, mimetic learning (e.g., watching elders or peers), and implicit routines in typical situations. It does not require purposeful instructions, deliberate imitation, or other kinds of explicit learning. Rather, it resembles learning one’s mother tongue without having any explicit idea of grammar. By incorporating “schemes of being-with-others” (Stern 1985), infants already take over their attitudes and

roles, thus chiming in with a social context that they cannot yet realize explicitly. No one can remember, for example, having consciously adopted a certain role in his or her family. The habitus becomes second nature, which effectively guides one's behavior, all the more as it is not conscious *as a habitus*.

As engendered by the immersion in the life world, the habitus is also important for our concepts of *social understanding*. The homogeneity of the habitus as the shared body memory of a community or culture entails that the common practices are immediately evident or foreseeable against the background of a given situation. This provides a primary, noninferential understanding of others without conscious transposition or perspective-taking (Reddy and Morris 2004; Gallagher 2008; Fuchs and De Jaegher 2009; Fuchs 2017). Growing up and being immersed in a shared practical context results in an implicit understanding of the "rules of the game" and of typical interactive sequences. Like the soccer players mentioned above, the members of a culture normally understand each other intuitively and know how to react appropriately without deliberation, anticipating the next moves without a need to resort to theory of mind or mentalizing procedures. *Common sense* is primarily a practical sense of embodied social habits and interactions that constitutes the prereflective background of social life (Fuchs 2001).¹²

Conclusion

Based on a phenomenological concept of body memory, I have introduced the concept of collective body memories. These develop in dyads or social groups through recurrent shared experiences and lead to spatial and temporal patterns of joint group behavior. As we have seen, this type of memory may be described from a phenomenological point of view:

- as a history of shared intercorporeality that is experienced by the participants as a sense of "chiming in" with a joint performance, game or ritual, and as a feeling of being "in the flow" of the cooperative process; and
- as the "social sense" or habitus of the members of a group that is based on countless intercorporeal experiences and provides for a smooth interaction and attunement in typical social situations.

On the other hand, collective body memories may also be described by an enactive or dynamical systems approach, considering the interacting agents as an integrated system that displays novel properties not reducible to the properties of its individual agents. We may call this *procedural emergence*. The agents then display patterns of interaction

12. Nevertheless, one may also regard *common sense* as the superordinate or "structuring structure," whereas the habitus in Bourdieu rather refers to the individual agent: "[T]he habitus refers principally to the structured nature of specific, individual agency, while common sense is, of course, a communal rather than an individual property" (Holton 2000, 88).

- that are reenacted in the current situation through nondeliberate coordination and synchronization of their actions;
- in which the overarching process gains a degree of autonomy over the individual dispositions; and
- which are either repeated in similar ways or show a dynamic development over time.

Thus, the phenomenon of collective body memories may be seen as a paradigmatic case of a combined phenomenological and enactive approach.

As examples of such memories, I have presented dyadic interactions such as dancing or rowing, the formation of a soccer team and its fluent interplay, the interrelational field of a family as visualized by the so-called family constellations, and the bodily enactments of social rituals. In such situations, the intercorporeal memories of the individuals unite to form overarching procedural fields. Moreover, the interactive processes develop an emergent dynamic involving the individuals in positions or behavior they would not participate in outside of the formation. Once the group joins again in a similar configuration and situation, their collective body memory is reactualized.

As a more general form of collective body memory I have presented the concept of the *habitus* or “social sense”—a set of dispositions, skills, styles, tastes, and behaviors that are acquired through the practical immersion in the life world. It is the result of the continuous sedimentation of shared experiences into the embodied personality structure of the individuals, thus manifesting the enculturation that is mediated through the body and its implicit memory. In this way, collective styles of intercorporeality and interaction are passed on from one generation to the next without becoming explicit—in an unconscious, collective history. Thus, Merleau-Ponty’s notion of intercorporeality gains an additional, historical aspect: it means not only the primary familiarity of our bodies with each other, or their prereflective communication, but also the entanglement of human bodies in a shared history that is preserved in their collective memory.

These conceptual considerations are not meant to give an exhaustive account of types of collective body memory. One might think, for example, of culture-specific forms of childhood or adolescence, sexuality or aging, collective trauma or taboo, as various kinds of procedural fields, which are incorporated by individuals and dispose them to certain forms of shared behavior, interaction, or also restriction. A further question might be to what extent the external memory systems that are established in the course of cultural development (pictograms, artifacts, printing, computer technology, and the like) have a retroactive impact on individual and collective body memories, modifying and changing their habitual structure in important ways.

Finally, one might also pose the question of how the different forms of collective body memory described in this chapter are related to each other. Rituals and *habitus*, for example, are certainly closely connected, both in their development and their enactment. Frequently, rituals function as explicit and prominent ways for a culture or society to form

shared habitualities and to endow them with normative significance. Over time, these rituals gradually sediment in the individual body memories and are then performed as “second nature” without explicit reenactment. On the other hand, novel forms of embodied interaction may spontaneously emerge in dyads or smaller groups, and, once stabilized, spread to larger communities where they are established as rites and norms. As we can see, body memory opens up a range of stimulating questions for further investigation in the field of embodiment, enaction, and culture.

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