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Kinaesthetic attunement, clashing and mismatches of early interactions and their influence in later development – Theoretical introduction to the Kestenbergs Movement Profile

This paper explores the theoretical grounding of the Kestenbergs Movement Profile (KMP) in psychoanalytic and object-relations theory with specific focus on issues of intersubjectivity and kinaesthetic affect attunement within early mother-child interactions. Kestenbergs has developed a complex method of movement observation and analysis that synthesizes elements of drive theory, ego-psychology, self-psychology and object-relations theory (Kestenbergs, Loman and Sossin, 2018b, 15.). Within the KMP framework, muscle-tension flow is understood to serve self-regulation, needs-satisfaction and drives discharge, and shape-flow patterns provide the structure for interactions. Affinity between movement patterns is crucial for the analysis and assessment of intrapsychic and interpersonal processes (Kestenbergs and Berlowe, 1971).

Judith Kestenbergs was born in 1910 in Poland, Cracow. She studied medicine at the Neurologische and Psychiatrische Klinik in Vienna. She began her psychoanalytic training at the Vienna Psychoanalytic Society prior to her move to New York in 1937. Kestenbergs was invited to New York by Paul Schilder and began her work at the child psychiatry department of the Bellevue Hospital with Schilder as her mentor. Kestenbergs continued psychoanalytic training with the New York Psychoanalytic Society & Institute (Kestenbergs, Loman and Sossin, 2018a, 8.). Kestenbergs started to publish as Ida Silberpfennig in the 1930s; her first seven papers were written in German and dealt with neurological issues. Some of these first papers were co-authored with Margaret Mahler, who was a few years her senior at the Clinic in Vienna. Kestenbergs and Mahler remained in close correspondence about their work after relocating to the USA, where they established two approaches of developmental theory and child observation. Mahler discussed Kestenbergs's observational method at a meeting of the New York Psychoanalytic Society in 1971 (Kestenbergs and Robbins, 1975, 210.). Early in her training, Kestenbergs became interested in the relationship between thought processes, neurological functioning and movement when studying brain-damaged individuals in Vienna. Paul Schilder's work on body image made a

great influence on Kestenberg's thinking. Schilder claimed that rhythmic tendencies are closely related to the system of emotions and affective life "while [...] deliberate action [...] has a much closer connection with the cortical region" (Kestenberg et al., 2018a, 8.). Working at the Bellevue Hospital, Kestenberg realised the limitations of verbal data in assessing psychic processes of young children and she began looking for a method of systematic observation and assessment based on movement patterns. In her search for a method of notating, documenting and psychologically interpreting movement, Kestenberg started with training in the Laban Movement Analysis (LMA) and Labanotation with Laban's students, Marian North, Warren Lamb and Irmgard Bartenieff (op. cit., 9.). Labanotation is a standardized notation system to assess and document movement. The system was developed by Rudolf Laban, an Austro-Hungarian choreographer, dancer and movement researcher. Similarly to writing a script in music, Labanotation made it possible to document movement in a standardized way (op. cit., 5.).

In 1953 Kestenberg began a longitudinal study of 3 infants (op. cit., 9.). In 1962, a group of child psychiatrists, mental health professionals (Jay Berlowe, Arnhilt Buelte, Hershey Marcus, Esther Robbins, and Martha Soodak) and movement researchers (Irmgard Bartenieff, Warren Lamb, Forrestine Paulay, Marion North, Jody Zacharias, Islene Pinder among others) led by Kestenberg established the Sands Point Movement Study Group, which held meetings every Friday for 20 years to develop a movement analysis and profiling system that integrates the Labanotation and Kestenberg's child developmental theory (op. cit., 6.). For further validation of the KMP method, Kestenberg brought the technique to Hempstead Nursery in London (now Anna Freud National Centre for Children and Families) in 1965. Kestenberg observed children in the Hempstead Nursery comparing her developmental observations of movement with Anna Freud's assessments. Anna Freud's clinical data and Kestenberg's movement profiles revealed significant correspondence (op. cit., 9.). Anna Freud followed Kestenberg's work with close attention and expressed her admiration for the accuracy of the KMP in gathering data from movement. They had many discussions about developmental profiling of children. Kestenberg also constructed the movement profile of Anna Freud (Stanton, 1991, 166.). Kestenberg stated in an interview that her main influencers in psychoanalysis included Winnicott, whose ideas of the transitional space can be linked to Kestenberg's theory of object-relations. Other influences mentioned by Kestenberg were Rene Spitz, Schilder and Michael Balint „who really taught me what I saw in bi-polar shape-flow, and taught me about environmental objects” said Kestenberg (Stanton, 1991, 170.).

The KMP method was applied to child observations in several Israeli kibbutzim where Kestenberg observed 150 infants between 1969 and 1970. The Sands Points Study Group opened their Centre for Parents and Children in 1972 to provide further research opportunities to validate the technique. In the Centre, their interventions were aimed at primary prevention of emotional disorders by optimising child development through assessing mother-child interactions with the KMP (Kestenberg et al., 2018a, 6.). Movement/play sessions were also held to provide the opportunity for the development of body awareness and somatic explorations to support attunement and bonding of the mother-child dyad. Throughout these sessions, specialists encouraged

the parents to explore their different non-verbal responses of matching and mismatching with their child's affective state through movement (Loman, 2016). These different nonverbal responses, for example, include harmonizing movement with the displayed temporal contour, rhythmic quality or intensity contour of the child's movement.

The use of the KMP has been widely integrated into dance-movement therapy training in the USA. Susan Loman established a modified version of the Centre in 1987, and Sossin offers a research nursery for doctoral students of clinical psychology applying the KMP (Kestenberg et al., 2018a, 7.).

Overview of the Kestenberg Movement Profile

The KMP is a complex integrative system, which in addition to identifying fundamental elements and dynamic changes of movement, focuses on the grouping, coordination and harmonisation of different movement qualities. Using the KMP, qualitative and quantitative data can be drawn from movement in relation to “ranges of drives, affects, adaptive and defensive styles of movement, narcissistic, anaclitic and object-related movement patterns” (Stanton, 1991, 173.). Observing an individual's movement repertoire gives insight into their preferred qualities and attributes in movement, which allude to aspects of development, unconscious drives, representation of the self and objects, development of ego functions, as well as to individual styles of relating (Kestenberg, Loman and Sossin eds., 2018).

I shall provide a brief overview of the KMP in the next section. In the KMP method, movement is recorded in 8 different categories. Each category consists of grouped movement qualities that are interpreted on a spectrum. The movement qualities are grouped and placed in categories in relation to their significance in psychosexual development. Within each category there are identified movement qualities, arranged in vertical order to reflect sequentiality of movement development. The KMP system consists of two subsystems. The first system – incorporating the Tension-Flow and Effort subsystems – addresses needs, drives, affective tones, temperament (Tension Flow Category), defences and coping strategies (Effort Category) (Kestenberg et al., 2018a, 7.). The second system –the Shape-Flow-Shaping subsystem – is related to generalized concepts of the self and others (Bipolar shape Flow), reactions to environmental stimuli (Unipolar Shape Flow), simple (Shaping in Directions) and complex object relationships (Shaping in Planes). In the KMP, the structure of movement categories is based on the structural model of personality; therefore, they relate to processes within the id, ego and superego (op. cit., 5.).

The developmental line begins from Tension Flow Rhythms and Attributes relating to drives and need satisfaction. Successive categories are Pre-effort and Effort categories reflecting the development of ego functions such as defences against internal impulses, learning to impact on and cope with the environment. Bipolar and Unipolar Shape Flow patterns convey qualities of self and object representations, which further grow into advanced shaping categories linked with complex patterns of

relating (Kestenberg et al. eds., 2018). The developmental sequence is summarised by Kestenberg as:

“In successive developmental phases regulations of tension-flow and shape-flow come under the control of the ego. Regulation of tension-flow aids drive differentiation; regulation of shape-flow contributes to the differentiation of self and objects. In later development, ego attitudes to space, gravity, and time, expressed through ‘efforts’, control the flow of tension” (Kestenberg, 1967, 357.).

The naming of different movement qualities within the categories attempt to capture the dynamic qualities and inherent intentionality of the movements. For instance, in the category of Tension Flow Attributes on the horizontal plane, the KMP lists the spectrum of Flow Adjustment and Even Flow. Flow Adjustment expresses dynamically adjusting flow of muscle tension, continually changing characteristics of a movement in opposition to even flow where the flow of muscle tension is held evenly throughout the movement. Adjusting muscle tension flow allows for a flexible approach, adaptability and mobility, inviting various ways of interaction. Evenly held flow can express direct attention, focusing, and the creation of boundaries (Kestenberg et al., 2018c, 78–81.).

The table (KMP Overview table.jpg)¹ provides an overview of the KMP as a whole. On the further left side of the table, developmental phases drawn from psychosexual developmental theory are listed with the assigned rhythmic movement qualities appearing in specific developmental phases. The horizontal reading of the table demonstrates how the various categories of movement build upon and develop out of one another. Vertically, we can see how various movement qualities within one category build upon one another. The colour coding of related patterns attempts to capture the dynamic relationship between one’s affective world and expressive structures.

Early somatic interactions

Dosamentes-Beaudry (1997, 520.) stated that the sense of self as a dynamic, whole unit emerges from a well-integrated sense of one’s own body-space, body boundaries and a cohesive body image. During the psychic development of the infant, the caregiver acts as a physical and psychic container by somatically reinforcing, affirming the infant’s body boundaries and embodied sense of vital existence (Stern, 1985 [1998]). The caregiver’s ability to emotionally resonate, attune to and share the embodied states of the child establishes an experiential communion, which provides the foundations of body image, trust, empathy and communication (Dosamentes-Beaudry, 1997). Qualities of these somatic, non-verbal interactions providing the fundamental basis of psychic development influence self-concepts, object relationships, development of ego functions, and continue to unconsciously shape complex relationships in adulthood (op. cit., 528.). This takes place, as Dosamentes-

¹ See in the KMP Overview table in the Appendix.

Beaudry claims “[...] through the varying tension levels we use as we move in space, through the rhythms of our actions, and through the interpersonal distances and boundaries we establish in relation to others” (op. cit., 520.).

Psychoanalysis has been facing a complex issue of conceptualising bodily processes within the analytic space (La Barre, 2018, 247.). Psychoanalysts pursued different pathways to search for the importance of bodily experiences in psychic development. Some became interested in the interrelation between drives, bodily experiences and ego development. Within object-relations theory, the attention was drawn to the emotional and physical contributions of the caregiver’s behaviour to the infant’s emotional development (Dosamentes-Beaudry, 1997, 518.). Mahler, Pine and Bergman (cited in op. cit. 518.) postulated that the psychological birth of the infant is brought about by the development of body awareness. Kestenberg (1967) in the *Role of Movement Patterns in Development* described two fundamental patterns of movement underlying self-regulation, the muscle tension flow and the apparatus for body shape flow. Dosamentes-Beaudry (1997) summarised it as follows: “Changes in tension flow take place during the discharge of drives, with each drive finding its own distinctive motor rhythm and expression. Changes in shape flow occur when the body expands and contracts in response to internal and environmental stimuli” (op. cit., 518.). Winnicott (1971) emphasised the mother’s role in the process of the infant acquiring its own sense of embodiment. Attunement or harmony in holding patterns take place through the mother attuning her muscle tension flow and adjusting her shaping patterns to the infant’s reflexes, which then creates a shared, embodied experience, making mutual holding possible (Dosamentes-Beaudry, 1997). Raphael-Leff (cited in op. cit., 520.) stated that the caregiver’s non-verbal communication, body language and movement repertoire are internalised by the infant as „affective commentary on the self” and become part of the body image of the child. Early somatic disturbances may remain in the realm of embodied experience of the self, bypassing the process of symbolisation and continuing to influence one’s body image and relationships in later life (op. cit., 520.). Dosamentes-Beaudry further asserts: “Therefore, how one perceives, moves, and interprets the body in action becomes a significant determiner of one’s inner reality” (op. cit., 519.).

Daniel Stern stressed that “[...] feeling states that are never attuned to will be experienced isolated from the interpersonal context of shareable experience” (Stern, 1985 [1998, 151.]). Kestenberg, Loman and Sossin (2018c, 85.) refer to Schore (2001), who claimed that when the caregiver modulates levels of intensity to match the infant’s level of intensity, it is to support the child in developing awareness of emergent internal/visceral states and in gaining access to more complex patterns of emotional regulation.

Kinaesthetic affect attunement and feelings of vitality

After outlining the significance of early somatic experiences within the mother-child dyad regarding psychic development, I shall review the specific aspects of these interactions that contribute to the creation of the intersubjective space.

Daniel Stern (1985 [1998]) claims that infants are able to recognise and match feeling states of others quite early on. This phenomenon is called interaffectivity (op.cit., 138.). “Interaffectivity – may be the first, most pervasive, and most immediately important form of sharing subjective experiences” (op. cit., 132.). In the *Interpersonal World of the Infant*, Stern (1985 [1998]) elaborates that the mother-child dyad engages in a profound process to share affective states. He therefore argues that

“Affect attunement [...] is an impression of an imitation but it is rather a form of matching in quality. It appears that what is being matched is not exactly the behaviour itself but the qualitative aspects of that behaviour, the underlying feeling state. The match does not happen through the contours of the behaviour but through the realm of shared internal state.” (Stern, 1985 [1998, 141–142.]).

The underlying aspects of behaviour that can be matched are

- Absolute intensity
- Intensity contour
- Temporal beat
- Rhythm
- Duration
- Shape (Stern, 1985 [1998, 146.])

There are affect qualities that Stern called “vitality affects”, which are different from categorical affects (Stern, 1985 [1998, 53.]). The infant experiences these vitality affects from within and from the behaviour of others. Stern also suggested that vitality affects arise from internal biological rhythms within the body (cited in Kestenberg et al., 2018, 75.). He stressed (2009, 312.) that the first explorations of these modalities of motion-force-time-space-intention are acquired during early infancy and then become part of a “sensorimotor gestalt” of a pre-reflexive experience base, from which the infant’s understanding of the inanimate world evolves. Stern’s vitality affects can be compared to the Tension Flow Rhythms/Attributes and Shape Flow categories of the KMP. Regulation of tension-flow supports differentiation of drives, and shape-flow regulation allows for differentiation of self and objects. Both tension and shape flow patterns are based on alternation between agonistic and antagonistic muscle groups controlled by the reticular activating system (Kestenberg, 1967).

In the KMP, movement is viewed as the readily observable physical aspect of behaviour. Tension flow means the observable flow and continuous change of muscle tension in the body throughout movement. Free flow of tension (agonist muscle engagement) and bound flow of tension (antagonist muscle engagement) can be observed in all movements of tension flow (Kestenberg et al., 1971, 746–748.). In addition to these two basic elements of tension flow as free and bound, the KMP

recognises four other qualities of muscle tension flow. These attributes of tension flow relate to frequency of change (flow adjustment – even flow), degree of intensity (high – low intensity), and rate of increase or decrease of tension (gradual – abrupt). These factors are called Intensity Factors of movement. The use of tension flow in movement is a highly differentiated form of self-regulation (op. cit., 746–748.).

The Shape flow category within the KMP relates to the continuous change of body shape throughout movement. The two basic elements of shape flow are growing and shrinking that continuously permeate the flow of body shaping throughout movement. Additionally, we differentiate four other attributes of shape flow on horizontal, vertical and sagittal planes. These are called Dimensional Factors of movement (Kestenberg et al., 1971, 746–748.). Periodic alternations between shape flow patterns of growing and shrinking dimensionally are another highly differentiated form of self-regulation, which gives structure for interaction. Tension flow provides the affective tone and intensity of vitality, while shape flow adds expressive, structural qualities to the movement.

From the beginning of development, the tension flow apparatus is utilised for drive discharge of phase-specific-zones (Kestenberg et al., 1971, 748.). Oral, anal, urethral and genital drives find expression in appropriate motor rhythms of tension flow of phase specific bodily zones. Tension flow and shape flow are used in combination to express phase-specific drives/needs to the phase specific object (op. cit., 748.).

Clashing, matching, harmony and concordance

Within the KMP method, biologically adaptive combinations of qualities are considered affined qualities, while clashing combinations are recognised as concordant and non-adaptive. There is biological affinity between free flow of muscle tension and growing shaping patterns. Similarly, there is affinity between bound tension flow patterns and shrinking shapes (op. cit., 748.). The primary caregiver supports the infant through the use of her own combination of patterns to find advantageous, functional combinations for self-regulation and emotional expression (op. cit., 749.).

To reduce exposure to noxious stimuli, the infant would need to utilise shrinking shape with bound flow of muscle tension to adaptively protect herself and express her disinterest or dislike. For instance, when the infant is overstimulated, she would need to withdraw from engagement to regain an inner sense of containment. The caregiver of this young infant might choose to support the child by picking it up to create a narrower, less stimulated space by the embrace and by narrowing the shape of the child's body boundaries. The caregiver might use even or bound flow of muscle tension to give a certain accentuation for the body boundaries of the child to soothe the baby. Attunement through muscle tension and adjustment to a mutually shared narrow shape of the body help the caregiver and the infant create an intersubjective space in which, through harmonised somatic functioning, they arrive at a mutually held experience, a type of communing (Kestenberg et al., 1971, 750.). The caregiver not only attends to the infant's needs, but through the combination of narrow shape flow

and the even or bound flow in muscle tension, an adaptive pattern of grounding and self-soothing is transferred somatically. It is imperative in the early dyadic relationship that the child should feel well organised by the caregiver, and that the caregiver should feel able to organise the child (Samaritter and Payne, 2013). This task of organisation happens through kinaesthetic senses and somatic interactions, which ideally lead to the establishment of body boundaries. These fundamental features of the early embodied experience can be described as kinaesthetic intersubjectivity according to Samaritter and Payne (2013).

However, constant attunement in tension flow between the caregiver and the infant can undermine the development of boundaries, while the predominance of clashing in tension flow does not allow for true communing (Kestenberg et al., 2018, 85.). Kestenberg, Loman and Sossin (2018c, 85.) referred to other researchers (Stern, 1998, Fonagy et al., 2002; Delafield-Butt and Trevarthen, 2015) who argued that the early caregiver-infant somatic dialogue is like an interactive dance that consists of periodically changing moments of attunement and misattunement. Misattunements may be followed by reparative attunements of tension flow or adjustments in shape to re-establish a shared experiential space, which serve as reparation for the emotional bond. In responsive caregiving, a dynamic flow of these moments can be observed. The continuous, active engagement in this somatic-improvisational dialogue provides structure for resilience and stress recovery for the infant and the mother-infant bond in general (Kestenberg et al., 2018c, 86.).

Preponderance of clashing attributes or rhythms of tension flow might reinforce dysfunctional patterns of self-regulation. These clashes may emerge from the caregiver's clashing qualities within her own movement repertoire or by the misattuned quality of the caregiver's movement to the child's developmental task (Kestenberg et al., 2018b, 15.). Kestenberg (1985) notes various combinations of matching, clashing, affinity, attunement and adjustment, which all have their specific outcomes for the somatic dialogue. Within the KMP, the attunement of muscle tension flow without the adjustment of matching shape flow creates a shared feeling state without attuned shapes of outward expression (Kestenberg and Loman, 1999, 217.).

I shall illustrate this process of clash, mismatch and misattunement through a few examples. If the caregiver in the previous case of an overwhelmed child had tried to divert the attention of the child by bringing her close to new people or new toys, requiring an opening and widening (shape flow) of body boundaries, the infant most likely would have experienced even more bombardment of stimuli. In the same case, if the caregiver had engaged the child in a rhythm of drifting, a scattered quality of tension flow, it would not have been soothing for the child. This example illustrated misattunement.

Clashes can occur interpersonally or intrapersonally. Free flow of tension combined with closed shapes (shrinking, shortening, and hollowing) and bound flow of tension with open shapes are considered clashes, as the intention of the movements are conflicted. An example of an intrapersonal clash within the caregiver's movement repertoire would be embracing the infant with narrowing the body shape, aiming to create a less stimulated space in combination with flickering, adjusting flow of tension.

To create a safer space for the infant to calm down, the caregiver intends to narrow the attention on to her and onto their connection through the embrace, but flickering changes of tension flow conflict this process of creating a singular focus, i.e. direct attention. There is a clash between the narrowing shape flow and continuously adjusting tension flow. Flow adjustment of tension provides for carefree, multi-focused quality of engaging with the environment, whereas narrowing shape flow matches with even flow of tension to withdraw towards the self/centre of the body. If this clash is a frequent combination used by the caregiver, internalised by the infant, it might influence the movement patterns of self-regulation in later development.

Interpersonal clashing between caregiver and infant can occur in both shape flow and tension flow patterns (Kestenberg et al., 1999, 218.). The caregiver might use abrupt tension flow due to a state of anxiety in engaging with a feeding infant, who is immersed in low intensity. Similarly, the caregiver may open up the space during play for others to join in by widening her body when the child finds the environment unfamiliar, using a narrowing or hollowing shape flow. A certain level of clashing and misattunement is expected even in an ideally responsive mother-child dyad. Clashing can be helpful to establish boundaries and separateness or to express discouragement of certain behaviours (Kestenberg et al., 1999, 218.).

Attunement of tension flow patterns solely communicates empathy and understanding but does not suggest support or well-modulated structures for expression. Adjustment of shape flow without attunement through tension-flow appears like an empty expression without a corresponding dynamic factor of vitality. It might give an ambiguous sense to the infant as to whether the caregiver really shares their experience or only mirrors the structure. Adjustment in shape flow along with attunement through tension flow creates the experience of sharing an affective state in presence and understanding in correspondence to this affective state.

The KMP system also considers affinity between qualities of movement. Within non-verbal interactions, a complete match of tension and shape flow occurs by both participants engaging in the same pattern. Affined or harmonious interactions can happen not only through matching/engaging in the very same pattern but also through using another affined/harmonious pattern (op. cit., 218.). For example, a caregiver might be able to express empathy and togetherness with the infant by using low intensity tension flow strokes on the child's head when the infant is engaged in a gradual swaying movement of the arms. Graduality and low intensity are affined tension flow qualities. Similarly, one can show a supportive attitude by using affined shape flow patterns with the other without forming the exact same body shape. The caregiver might shorten down; bend down to a child who is expressing a hollow shape of depletion from feeling of sadness. Hollowing shape flow and shortening shape flow are affined qualities.

In the movement repertoire of adults assessed through the lenses of the KMP relational patterns, cognitive functions, expression of needs and patterns of self-regulation can be determined through the individual constellations of movement qualities. In optimal adjustment, we can see a harmonious use of tension and shape flow. Through the control of shape flow, one is capable of expressing feelings and

subtle combinations of complex relating. “Tendencies toward certain static shapes of the body (wide or narrow, elongated or short, bulging or hollow, straight or twisted, angular or soft) from which shaping of the surrounding space evolves, reflect adult concepts of self which influence the style of relationships.” (Kestenberg, 1967, 396.).

Certain combinations within one’s movement show individually preferred ways of expressing needs, adaptation to environment and adjustment to others. Harmony within an adult’s movement profile reflects the harmony within the ego, which successfully mediates between demands of the id, the ego’s own interests, the superego and external demands (op. cit., 395.). Accordingly, lack of harmony within the movement repertoire, clashes between patterns of tension flow, shape flow, efforts or shaping allude to certain difficulties of the ego in coordinating between drive expressions and adaptive relation to the world of objects (op. cit., 398.).

Possible applications of the KMP

K. Mark Sossin (2002, 2018) and Frances La Barre (2001, 2018) are two practising psychoanalysts, who emphasised the benefit of an embodied approach and a systemic method to interpret nonverbal phenomena in the analytic space. La Barre (2018, 243–247.) gives a detailed account of how, in her practice as an analyst, the KMP provides additional information on what is being communicated verbally and non-verbally by her client. “Studying the KMP provides enhanced perception, conceptualization, and access to what happens in the flow of movement in the kinetic text.” (La Barre, 2018, 245.). La Barre also emphasises how attunement, matching and mismatching in movement and body shape support her to create therapeutic alliance, containment for the client. “My own rhythm of speech, like my usual body movement, is gradually changing in intensity, while my patient’s was extremely abrupt and jittery.[...] I could kinetically attune to her by gesturing and moving around in my chair to her rhythm.” (La Barre, 2018, 245.). La Barre goes on to show that the kinetic text derived from the non-verbal behaviour of her client through the use of the KMP reveals that the somatic material holds additional meaning (op. cit., 245.).

Silvia Birklein (2018, 247–251.) provides a case study of applying the KMP in her analytic practice with a client who experienced childhood trauma and sexual abuse. By observing loss of plasticity of muscle tension flow and lost temporality of the client’s movements, Birklein was able to somatically understand the traumatised state of the client. Through adopting the displayed movement qualities of neutral flow, low intensity with narrowing and hollowing, the therapist experienced the client’s psychic retreat. “[...] an intrapsychic state that holds one frozen, immobilized, and empty where all psychic time and space seem to have collapsed.” (Birklein, 2018, 250.). The therapist chose to initiate movement qualities that can regulate the client’s tension flow by adding widening and bulging patterns in her own body shape in order for a sense of safety, containment to arise. The client slowly followed the therapist and engaged in new patterns of tension and shape flow by taking deeper breaths, lifting her head and making eye contact (op. cit., 250.).

Sossin (2018) recently wrote about the KMP's possible contributions to the research of non-verbal behaviours. He argues that the complexity of the KMP and Labanotation system in relation to the quality and quantifiability of their data is generally underappreciated in the field of non-verbal behaviour research. Funded research on this field tends link to neo-Darwinian approaches of facial action assessment (Facial Action Coding System – FACS) developed by Ekman or the Maximally Discriminative Facial Coding System – MAX, developed by Izard, Dougherty and Hembree (cited in Sossin, 2018, 288.). According to Sossin, surprisingly, there is a lack of use of the KMP/LMA movement observation, notation and interpretation approaches in FACS like research. Sossin states that the KMP needs to be viewed as conceptually different from FACS, and therefore, it could be complementary as a research method. Sossin notes that apart from Kestenberg's thorough publications on the method, more empirical studies are necessary for the further validation of the KMP, for the advancement of the methodology and for building evidence-based use in different settings (Sossin, 2018, 289.).

Recent work about applying the KMP in dance-movement therapy have been published by Melanie Johnson (2018), who worked with a group of adults with developmental disabilities, and Suzanne C. Hastie (2018), who applied the KMP to a personal therapy process with a young boy with language and communication disorders. Gass and Kennedy (2013) have used the method in assessment and treatment planning for children with Down syndrome.

The KMP theory and practice have a potential to enrich the therapeutic process with an embodied depth in the field of mental health, parent and child psychotherapy, and psychoanalysis of adults and children. Understanding of the KMP may also contribute to the development of therapeutic skills of forming therapeutic alliance through kinaesthetic attunement, somatic holding/containment, somatic transference and countertransference. According to La Barre (2018, 246.), the therapist and the client co-create the psychoanalytic dialogue not only through verbal expression but also through their non-verbal behaviour, through the *kinetic text* and their body awareness. Continuous attention to attunement and adjustment of tension and shape flow patterns, for example through intonation of voice or subtle changes within gestures and postures, and early experiences of communing in a shared feeling state can be reinstated in the therapeutic space.

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