Being moved: Kinaesthetic reciprocities in psychotherapeutic interaction and the development of enactive intersubjectivity

Listening to and attending to the wisdom of one's body is a highly refined and sophisticated act of consciousness (Geller, 1978, p. 353)

Abstract

This paper will present an art-based frame of reference to psychotherapeutic intervention. Structures form clinical Dance Movement Therapy (DMT) will serve as an example to investigate the specific contributions of kinaesthetically informed interactions to (experiential) psychotherapy.

In DMT the working alliance between patient and therapist is informed mainly through non-verbal engagement. The mutual engagement is perceived and regulated in movements and actions by the sensing and expressing body.

The kinaesthetic encounter between patient and therapist will be conceptualised from this somato-sensory perspective as (kin)aesthetic intersubjectivity. Structures from dance as an art form will be described to inform our understanding of the kin(aesth)etic, non-verbal characteristics of interpersonal attunement during psychotherapy. In DMT non-verbal structures of interpersonal attunement are used to create a situation that addresses and supports the patient to engage in corporeal shared, improvised, movement experiences.

We propose that this engagement may contribute to the co-creation and co-regulation of the therapeutic relationship. Kinaesthetic relating may contribute to participatory pre-conceptual sense-making between patient and therapist. Embodied as they are, the experiences of mutual non-verbal relating, social engagement and understanding transfer easily from the therapeutic context ahead into everyday life.

Keywords: Kinaesthetic; intersubjectivity; attunement; therapeutic alliance; shared movement; dance movement therapy

Introduction

The field of psychotherapy has traditionally privileged the verbal domain. For a long time, the psychodynamic paradigm has dominated the field. Patients are invited to talk about problems, feelings, thoughts. With the implicit assumption that “talking about” will offer relief from emotional pressure and conflict. Psychology as a science of mind contributed to the understanding of verbal structures and psychotherapy as the application of psychological findings furthered the precept of the verbal processing of emotional content as paramount in therapy.

The challenge during these processes has always been how to capture the experiential content in the stories about life experiences. Human beings are bound to embodied existence, consequently psychology needs to find a way to integrate the experiential, ‘lived’ body with the conceptualizing mind. Recent findings from affective neuroscience (Gallese and Lakoff 2005) emphasize the importance of body-originated information for the formation of neural structures.

The kinaesthetic dimension in human development

Movement is our primary and most elementary and direct interaction with others in our environment (Sheets-Johnstone, 2011). We come into the world with specific movement experiences as already during the prenatal state there has been a responsive interaction between the unborn child and the carrying and caring parents (Loman, 1997; Stuart, 2011). After birth the elementary needs of a child are expressed through body movements like orienting towards a nourishing source or avoiding/turning away from distress. Our bodies are the primary and most direct space to experience ourselves and our environment. The first relational experiences of being held, being carried (supported) and being regulated are body-related experiences (Stern, 1985; 2010).

Through being touched the child experiences itself as being an “other”, the caregiver is the regulating and holding environment. Long before there is any possibility for a verbal exchange the non-verbal attunement between child and caregiver transports essential information on states and wellbeing (Tortora 2010). The non-verbal attunement between child and caregiver has been studied intensively. In the first parent-child interactions attunement can be observed in movement characteristics (Kestenberg, 1975; Lotan & Yirmiya, 2002). Synchronisation of tension flows (Kestenberg-Amighi et al., 1999) can be

observed in the facial imitations that occur between the new-born and attentive caregivers quite early after birth (Meltzoff & Decety, 2003), the smile of the adult is answered by the child with a release of tension into a widening mimic response, the frowning expression of the adult is answered by the child with an increase of tension into contracted facial expression. Similar synchronisations develop throughout the first month for rhythmic exchanges that will later develop towards turn-taking (Trevarthen & Aitken, 2001). Also gaze, facial orientation and orientation of gestures develop towards synchronisation between caregiver and child and will later serve for joint attention. Until the child is able to control posture and motor action the caregiver will hold and regulate the weight of the child through carrying, supporting and organising the actions. The lack of motoric functionality (i.e. stillness) at this early pre verbal stage facilitates an enormous amount of receptivity to emotional signals from the environment (Gallese 2016). It affords human engagement in social relations and to make sense of others' behaviours. The first dialogical relation between child and caregiver develops through these sensory-motor exchanges wherein both child as well as adult learn to regulate their posture, timing and intent (weight and force) towards the interaction partner. Understood as movement interactions the early dyadic attunement can be observed in detail for their sensory-motor aspects (e.g.: Kestenberg, 1975; Weinberg & Tronick, 1994; Trevarthen, 1998).

Within the early dyad the caregiver forms the holding and responsive environment for the developing regulatory capacities of the child. It is through these bodily and movement processes that the child learns how to establish, pursue or terminate interpersonal contact and relating. Through the differentiation from shared (kin-) aesthetically attuned interactions the child develops a sense of self as being separate or different from the object of attention (Reddy, 2013).

All relational experiences leave traces in the patterns in which the child develops self-other engagement. Disturbances in this process may arise when the child is not met by a responsive environment (Papousek & Papousek, 1997), which might be the case when one of the parents struggles with psychopathology, or when the child itself is not able to respond to the signals and interactional cues from their environment, which might be the case in developmental disorders, like autism (Rogers & Williams, 2006; Hobson, 1990).

The early attuning dyad is a sensitive system that listens closely to subtle changes like adjustments or clashes during the various synchronising and desynchronising actions. Disruptions in these processes may prevent the emergence of continuity within the intersubjective relation, for example when the various synchronisation processes do not

pertain sameness (and thus predictability to a certain extent). Poor emergence of boundaries between the dyadic partners may lead to confluence within the attuning dyad preventing the development of clear self-other discrimination for the child, which would make it most unlikely to develop from primary to secondary intersubjectivity, that is to develop from direct interaction between two subjects towards interaction between two subjects about a (shared) object (Trevarthen & Aitken, 2001).

The caregiver's social orientation and engagement towards the child support the intentional organisation of the child's non-verbal attunement behaviour towards the other (Legrand, 2006; Delafield-Butt & Gangopadhyay, 2013). The purposeful and intentionally oriented actions of the interacting dyad form the base from which shared kinetic melodies (Luria, 1973) develop towards patterns that underlie all human communication and that bring forth and support the development of narrative structures (Hutto, 2003). With the concept of vitality affects Stern (2010) also relates early forms of emotional exchange between subjects to animated embodiment and movement exchange.

The contingencies in interactional patterns of early relating will format the neuronal encoding of interpersonal relating. Neurobiological functioning is a developing process (Stiles & Jernigan, 2010) namely the development of social neurosciences has shown the sensitivity of the brain's functional development to movement experiences (Keysers et al., 2008). Regulation of hormones like cortisol has shown to be sensitive to the movement engagement of the individual (e.g. Krogh et al., 2008).

Studies with dancers have shown that movement experiences have an impact on the brain's responsiveness to observed movement behaviours (Calvo-Merino et al., 2005). Which is why a kinaesthetically-informed, experiential perspective to psychotherapy may contribute to a neuro-somatic rooting of the psychotherapeutic context.

Dance as an intersubjective practice

Processes of interpersonal relating as found in dance may add to an exploration and understanding of reflexive potentials of embodied intersubjective relating in psychotherapy. The experiential quality of *moving and being moved* is at the heart of dance as an art form. Dancers perceive their movement partners through kinetic patterns and qualities. A dancer directly reflects-in-action upon, and within, the movement qualities s/he shares with a partner through own movement impulses that are coming from direct perception through the kinaesthetic senses (Rouhiainen, 2003; Tufnell & Crickmay, 1990/93). During this

kinaesthetic partnering dancers co-create an interpersonal relatedness by adjusting for example their body position to that of the partner, their timing and movement patterns towards synchronisation.

These types of adjustments stem from a self-other engagement on a body to body level. Through embodied mutual responsiveness the movers co-create a dynamic intersubjective regulation of the movement interactions that is not informed by conceptual or representational structures, but by directly perceived and regulated moved aspects of space, time and weight.

Improvised dance duets are embodied participation in shared kinetic patterns. In dance duets mutual understanding and shared creation of relationship arise from kinaesthetic partnering. Regulation of the duet is achieved by adjusting one's own impulses and adapting these to the dynamics of the interaction. During kinaesthetic partnering dancers are engaged in highly attuned mutual responsiveness. In this process shared kinetic qualities present an 'in-between' experience. In the 'in-betweenness' the dancers experience each other through the shared movement qualities (e.g. Sheets-Johnstone, 1999; Tufnell & Crickmay, 1990; Halprin, 2003; Nelson, 2006).

These structures of kinaesthetic relating fit very well into an enactivist conceptualisation of intersubjective relating. The reciprocal involvement during intersubjective experiences is described by Fuchs and De Jaegher (2009) as mutual incorporation, "in which each lived body reaches out to embody the other" (ibid, p. 474). In this enactive approach to intersubjectivity the intercorporeal participation in shared dynamical body actions is at the base of social cognition. Intentions and meanings will emerge from the interaction in embodied responsiveness, and can be perceived by the movers directly through their moving presence (Catmur, 2015).

The structures of intersubjective attunement described above are widely used in DMT interventions. During dyadic DMT, the therapist intervenes directly in the shared movement themes through a variety of relational modes and through highly attuned movement actions (Samaritter & Payne, 2013) that address the participant within her capacities to relate on a movement level. Initially the participant might be addressed as a dance partner intentionally one-sidedly by the dance movement therapist.

By mirroring the actions of the participant the therapist offers a movement feedback to the participant, which can be felt kinaesthetically within the context of the moving dyad. Both

movers feel their own movement impulses and at the same time relate to the expression of movement impulses of the partner. The bodily felt content not only has an implicit quality, but rather bears an explicit quality, because the awareness is with the movement action of the partner while experiencing their own potential to articulate and regulate the expressed action. In this it bears a similar type of reflexivity that can also be observed in dancers. These experiences contribute to newly formed chains of kinaesthetic relating that contribute to the self-organisation within the participating movers as well as within the moving dyad (Varela et al., 1991). The movers are sharing in the experience and are at the same time forming the environment for each other's actions (Noë, 2004). Through their movement performance they actively stage the environment in which they are moving. This is achieved through a perceptive attitude that has been proposed as kinaesthetic listening (Petitmengin-Peugeot, 1999). By moving they express their felt sense (body-informed expressions) while being continuously informed kinaesthetically through their movement actions and by seeing those of the other.

Case vignette:

During an improvised 'dance' between a young female adult patient and her therapist the patient came to know the habitual role she takes in life as if for the first time. The patient suffered with anxiety, depression, chronic fatigue, pain in her joints and irritable bowel syndrome. She spoke of her body as punishing her with ill health following times when she had a positive life event or had some fun.

It was suggested that they role play the two aspects, the therapist taking the role of the 'victim' - being punished. The patient, rather than taking the role of the punisher, chose the role of the 'empowered one' in the duet.

During the nonverbal, improvised, dyadic interaction it became clear that the more the movement of the other came toward her in relationship the more the 'victim' felt fearful and had to withdraw, feeling unable to make relationship. She collapsed her chest and hunched her shoulders, retreated and went down to the floor. Her hands hid her face and she felt weak and vulnerable.

The 'empowered one' attempted to reassure the 'victim' and to bring her into relationship through movement and touch. Despite her attempts there was a great distance between them spatially by the end, the 'victim' having retreated into a corner behind a curtain. In this place it became apparent to her that her fear of the environment and relationship resulted in anger needing to be expressed. She slapped the wall with her hands and stamped the ground in frustration with her feet. This led to a response from the 'other' which in turn became a shared sound conversation where there was a connection between them through hand claps/slaps.

During the reflections afterwards the patient said she wanted to reassure and comfort the 'victim'. The therapist commented it had felt to her like the patient had wanted to rescue her and bring her into relationship to reassure her. The patient agreed then reported that this had been precisely the role which she had taken during her childhood. She explained that her older brother had had a terminal illness and died when only a teenager. She had spent her childhood trying to reassure him, rescue him from his pain and be his comforter. This memory emerging from her embodied experience in the dyad had been unconsciously acted out. Furthermore, she explained that she still puts other people's needs before her own and takes the role of rescuer habitually. It was beginning to be understood by her how her early childhood and preverbal experiences in relationship had shaped her interactions as an adult.

In these dynamic interactions circularity arises between the movement and the movement feedback from a partner. It is in this circularity that the movers come to know their own actions from how they are reflected by the partner's actions. During this process the other is perceived in a direct, non-avoidable experience from their own kinaesthetic sensations (Stuart, 2011). The other is an experienced existence, not in an objectified way, but as an acting subject in the shared movement situation.

Verbal reflection on the movement process may support a hermeneutic explication and interpretation of the significance of the embodied experiences for the personal development (Samaritter, 2009; Gallagher & Payne, 2014). Reflecting on the meaning of the shared experiences in view of the personal life story and life events may bring the autonomous kinaesthetic regulation more into awareness. The therapist will seek to address positive relational patterns and supportive experiences in order to build 'safe places'. These demarcations serve as stepping stones that the therapeutic dyad may return to after, as well as during, the therapeutic explorations of experiences that have threatened existential balance (Ogden et al., 2006; Rothschild, 2000; Siegel, 2003). Returning to safe places, or places of wellbeing, will construct new bodily and kinaesthetically processed experiences, memories of a holding and responsive environment (Fuchs, 2012). The procedures will also affect the somatic regulation of processes of the autonomous nervous system and have shown to contribute to the decrease of stress (Dosamantes, 1992; Bräuninger, 2012).

Kinaesthetic interaction in psychotherapy

The dance-informed perspective on kinaesthetic processes between two interacting subjects as it has been described above may also serve as a model on the embodied attunement between therapist and client in the context of psychotherapy. The psychotherapeutic working alliance is informed by participation in the intercorporeal synchronisation and de-synchronisation between therapist and client. Intervention research has shown that the levels of attuned synchronisation during verbal psychotherapy are related to therapy outcome as evaluated by participants (Ramseyer & Tschacher, 2011). In the kinaesthetically informed model of psychotherapy personal reflections and narratives emerge from the experiential qualities of enactive participation of therapist and patient (De Jaegher & Di Paolo, 2007; Panhofer et al., 2012).

A kinaesthetically informed perspective will put the non-verbal attunement actions at the base of the psychological intervention. The therapist will closely pay attention to the kinaesthetic content and dynamics of the therapeutic interaction. S/he will actively include

layers of primary intersubjectivity into the therapeutic interaction. Through the kinaesthetic responsiveness of the therapist the patient is addressed at a developmental layer that lies before and underneath all narrative discourse and thus integrates a pre verbal, pre-conceptual subject to subject encounter into the therapeutic alliance. By responsive attunement, synchronising and desynchronising actions the therapist not only acts as a primary holding environment but also will help to rebuild primary interactions that contribute to the experiential knowledge and memory (Fuchs, 2012) of the patient. These corporeal intersubjective experiences may contribute to benign and resilient relational structures, that will inform the patient's experiential frame of reference on intersubjective relating, that in turn will form the placeholder for the patient's therapy process.

A young man in his 30s has been referred to psychotherapy with medically unexplained symptoms (MUS). He suffers pain on his chest, in his back and in his knee joints. Circadian rhythms are heavily disturbed. In the beginning he comes to therapy with heavy depressive traits. One day while exploring relaxation he feels deep anxiety and a panic attack coming up when the therapist invites him to lean back in his chair and feel his body weight. When the therapist is mirroring the way he is sitting in his chair, she reflects on her kinaesthetic information by verbalising: "when sitting like this I feel my ribcage all pumped up, like after a sudden and deep inhale, like in sudden terror". Every tiny sound or movement, every little light or shift comes strongly to the senses – flooded by silence as by sound. The patient looks at the therapist with tears in his eyes. From the wording of the therapist a memory came back to his mind. As a little boy he suffered from an illness that also attacked his ears. Nearly deaf he made an enormous effort to take everything in, being in constant high alert, his breath and heart rate high. He was living in continuous high stress and did not dare to allow himself to release his strain as if he would do so he might loose connection to his surrounding and feel lost. With his tears comes the sadness about the effort he has put into understanding others. People around him didn't realise his auditory problems, didn't understand why he was so "indifferent". Now he experiences for the first time that someone has put words to his effort, it seems that he is able to connect to a bodily felt memory and is able to connect to his feelings and relational experiences he could not put into words before. The memories of the nearly deaf child emerging from the scene.

In therapeutic practice we find that the patient's wordings of life-narratives may be reframed by this newly found experiential context of primary intersubjectivity. Articulating and expressing inner feelings the patient is now able to actively (co-)regulate the therapeutic dyad. Life narratives become experientially embedded by sensations of bodily signals and feelings, and new wording is found from the bodily felt content. The patient is now able to connect to and reflect on the "unthought knowns" (Bollas, 1987).

A young woman in her late 30s has been referred to psychotherapy for an eating disorder. In this session she explores her deep wish to get in touch with people again. In this vignette she addressed the therapist:

When you touched my shoulder - I felt there would be a possibility that I could touch you too.

But I can't – never did touch anybody – like this – like coming from me.

I could do the forms – I could reach out to you now for the sake of form – but I won't

I really long to be able to reach out, to reach out to somebody

But I can't.

I long so much to be able to reach out to someone, I like people reaching out to me though.

I would really like to try, but – uh – my hands, they get all cold and wet

I know how to reach, but I don't know how to reach out

Could I try reaching out to you?

See I have shifted now a little towards you - Is that strange?

This feels different, I know I want to try it

(the patient is touching, very slightly, the arm of the therapist)

Oh – the moment I touched you, I got all these images of people I've been reached out to before

All are dead people; they are all gone now. Can't remember if I've been touched by my mother, I am so afraid everybody will disappear again. Just again to be left alone.

The role of the therapist in this approach is not only to process verbal content, which might cover life events, relational themes of the therapeutic dyad, or emotional content etc., but also the therapist has to be sensitive to kinaesthetic exchange and responsive to the patient's non-verbal impulses towards kinaesthetic attunement. The therapist might take the therapy process as an open ended improvisation, during which s/he will very attentively practice an attitude of kinaesthetic listening (Petitmengin-Peugeot, 1996; Samaritter, 2015) to the unexpected changes in the use of space, gestures, body posture and movement repertoire of the patient. In this sense the therapist has to come to the therapeutic alliance 'kinaesthetically informed'. S/he can achieve this by a kinaesthetic reflexive attitude which enables her to perceive the kinaesthetic content (from her own body) while at the same time articulating movement actions towards the dyadic relation that stem from her direct perception of her own kinaesthetic responsivity. The therapist is making proprioceptive predictions which have a twofold character, they are oriented towards the patient's movement repertoire and at the same time they are oriented towards the personal movement answer to the patient's actions.

This process is similar to the attunement between child and caregiver in primary intersubjectivity and on a more complex level of interaction to those in all forms of dance. In the case of the therapeutic interaction the non-verbal/movement actions of the therapist

might be considered as affording behaviours (Friston, 2013). In the dancing dyad the therapist expects changes to happen and will responsively move in answer to these changes, with the intervention mode depending on the specific content and context of the therapy situation. The intervention might, for example, be more emotion-focused to promote emotional expression and release, focused on the interaction to promote attunement or engaged with investigating transference themes. Regardless of the specific content and context of the therapy, the therapist, through her movement contribution, intends to reframe the ongoing interaction with the participant into a (kin) aesthetic subject to subject interaction.

The development of a kinaesthetically dialogic interaction becomes visible through the development of interpersonal kinetic attuning behaviours within the shared space of the therapeutic relationship and setting. This shared space may be understood in terms of Winnicott's (1971) ‘potential space', or Gallese's (2006) ‘we-space’, or Merleau-Ponty’s (1962) ‘corporeity’. These conceptualisations although not identical, express the idea of a potential space of new phenomena within the intersubjective interaction. New interpersonal experiences will emerge within the improvised dance the shared space and kinaesthetic exchange. In the course of this emergence the patient’s contribution to the intentional mutual attunement may become more visible and tangible/sensible through the responsive mirroring by the therapist.

The interpersonal content here is not the verbal narrative interaction but the bodily situated content of kinaesthetic attunement and interaction, and in that the qualities of the body and the character of the body movements determine the perception of the shared situation. Being the bodily placeholder of the interpersonal content they also determine the concepts that the participants form about this situation. Thus the personal body within the containment of the kinaesthetically responsive other forms the experiential space not only for reflections on emotions and life experiences (in a passive voice or container of past events) but more so as active participation and regulation of the interpersonal relational patterns in the therapeutic dyad. The patient has become an active, regulating subject within the context of the kinaesthetic holding environment. Viewed as a dance, the interaction between therapist and patient offers them the opportunity to experience how the other is entering and moving in the shared kinaesthetic space and to participate in each other’s ways of acting (van Trommel, 1989).

From the shared agreement on treatment planning, both therapist as well as patient come to therapy with the expectation of changes coming forth and happening within the therapeutic

working alliance. Like in all forms of improvisation the information about how to move on during the subject to subject interaction comes from within the circularity of the shared movement situation itself (Barrett, 2000). The dynamic system of the kinaesthetically interacting dyad will organize towards attunement or dis-attunement, synchronisation or de-synchronisation. Within the moving system both movers' will be informed by sensations coming from their own body and in response to the partner's non-verbal patterns.

The skilled dance movement therapist would use Laban based movement observations (Bartenieff & Lewis, 1989/2000), to structure and analyse the non-verbal content of the interaction. For the experiential psychotherapist the embodied perspective might be helpful to attend to the kinaesthetic contents and structures during the therapeutic interactions. S/he may foster an immediate connectivity by developing a "thinking body" (Todd, 1937) through knowing/thinking from the body (Shotter, 2011). Reflexive language thus develops from the direct/bodily perceived as a "knowing from" (Shotter, 2010). This concept has shown to be especially helpful in the clinical practice of DMT of patients with personality disorders to develop a congruent self-reflexive attitude from movement experience.

Experiential therapy for patients with fragile personalities

Patients with developmental disorders or with personality disorders often do not have a sense of their moving body. Patients report that they do not feel their bodies, sensations from the body do not come into awareness other than as fatigue or pain (Payne, 2015). They seem to lack the experiential coupling of body signals with the sense of "being moved" by the world around them. All somatic autonomous processing of experiential content (e.g. raise of heartbeat, flattened breath etc.) seem to become isolated into somatic pathways and are often reported as medical symptoms. Patients may have great concerns about their somatic wellbeing, but seem to be unable to relate this content to their actual life situation or life history.

From what we have discussed before this inability to link experiential content to the somatic signals will not be surprising. After all, patients with fragile personalities most probably have suffered from disturbances in the early pre-verbal, intersubjective exchange. Regardless of these disturbances occurring as a result of developmental problems of the child or as a result of an inadequately adjusted caregiving context to the child's needs and interactional impulses, mismatches and disturbances during the synchronisation processes in the early dyad will lead to atypical patterns or to unpredictable contingencies of primary intersubjectivity.

It has been described above how structures taken from dance can offer the methodological means to intervene in the pre-conceptual, interpersonal relating between two interactive partners. This approach combines well with a developmental perspective on psychotherapy in which the process of interpersonal relating is the focus of treatment. The embodied psychotherapist will develop sensitive kinaesthetic interaction with their patients. In DMT the processes of kinaesthetic listening and kinaesthetic partnering are used in the broader frame of reference that is rooted in dance as an art form. With a prominent role for kinaesthetic responsive interventions, DMT has the experiential means to address underlying non-verbal mechanisms of social relating in patients with fragile personalities (for systematic reviews: (Ritter & Low, 1996; Koch et al., 2014). The use of kinaesthetically attuned interventions by the therapist seeks to engage the participant in a mutual kinaesthetic experience (Samaritter & Payne, 2013). From the shared sensory-motor activities between patient and therapist new embodied and kinaesthetic ways of interpersonal engagement will develop. The shared experiences between partners, who move in non-conceptual structures of space, time and weight appear to contribute to non-verbal interpersonal contingencies between patient and therapist. These contingencies seem to continue during the transfer of the therapeutic content towards more verbal, narrative structures.

> Leaving therapy, a patient reported about the transfer from therapy to everyday life:
> "...I take the experience with me in my body and then when I am in a situation that has a corresponding theme I just happen to be able to act from that experience during therapy,

The outcome of clinical work is promising, especially in the combination of verbal psychotherapy and DMT (Samaritter & Maagdenberg, 2012). During outcome evaluations participants have reported that they experienced more vitality and expressiveness after DMT interventions. Giving attention to their body and to the unfolding movement process within the shared movement space brought about a sense of self-connectedness. The regulation of body signals and movement patterns were experienced as forms of self-regulation and supported the regulation of stress and emotions. Changes that occurred throughout therapy in the embodied relation towards the therapist have been described in terms of changed self-other perception and supported the development of trust and a feeling of social connection. Further research into this domain may study the effects of kinaesthetic interventions more systematically.

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