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LBMS in the Twilight of Truth and Lie: Movement, Behavior and Meaning

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Abstract:

Describing and communicating what we observe is a critical endeavor whenever non biased assessment of individuals and their movement is needed. Evaluations of behavior and meaning appear rewarding in the therapeutic and in the forensic context, where practitioners and investigators have to deal with deceit. Actual scientific research invests in developing computed systems for movement evaluation to provide crime prevention and solve health issues, although computed systems lack the capability of resonating dynamically during real time assessment. Laban/Bartenieff Movement Studies (LBMS) and Laban Movement Analysis (LMA) provide a methodically structured approach to movement observation which is much more precise, but includes the human as dynamic part of the evaluation process. This paper provides insight into two dilemmas occurring within the matter of implementing this framework into research practice: 1) There is no definition for congruent terminology for scientific movement observation 2) Real time observations have no determinate methodological structure. Further discussion is suggested.

Keywords: Laban/Bartenieff Movement Studies, Laban Movement Analysis, observation, forensics, deception

Dealing with Deception

Deception is part of social interactions in daily life. It is the indispensable glue that keeps our society together and anyone good at deceiving or detecting deception has an advantage in pursuing personal development, even in contemporary times. The majority of lies told are not serious ones. High-stake lies are the ones where we might have a greater interest in unmasking the deceiver (Granhag, Vrij & Verschuere, 2015) and these are the ones really of interest when it comes to criminal investigation.

Today's human interactions and verbal communication is a diluted version of interactions that were originally linked to the fight for survival that includes the flight or fight mode, at times when verbal communication was not available to us. Physiological reactions provoked by triggers from the environment made our body and nervous system react and act to facilitate survival in an unpredictable shared environment. Fast and precise perception was crucial for survival. But how do we use these abilities in our lives today?

Observing to survive

In peaceful times and surroundings, the necessity for quick, alert perception decreases. Like any other animal, humans lose their learned abilities once they start neglecting them. The disposition for exceptional adaptability remains immanent and available to anyone who is willing to exploit the individual range of developmental feasibility. It is just a question of how useful one or the other ability is to the individual. Integrating things coming from daily experience sometimes find a fruitful ground for scientific research in case it manages to meet scientific standards.

Observation and structured assessment of movement and behavior is an established method in research. It is broadly used in various fields like psychology, biology, sociology and anthropology. It is a traditional approach when it comes to studying, analyzing and learning new things.

Deceivers, however, try to sell us invalid or disguise relevant information deliberately for various reasons (Vrij, 2008; DePaolo, Lindsay, Malone, Muhlenbruck, Charlton,& Cooper, 2003) and often manage to get away with it. This hinders the exchange of trustful communication and interaction. We might not be aware of it, but we as therapists are often dealing with deceit in our daily practice. We notice matches and mismatches in communication, movement and behavior. Psychologists and other specialists, are sometimes even asked to assess the health and mental states of our patients or other individuals and communicate our impressions to team members or superior authorities, like in court hearings. We typically do that, using standardized psychological evaluation tools and documenting the outcome. Direct communicative exchange between patient and therapist and other therapeutic interactions will also guide and support the assessment of the patient´s state or development, to enable a thorough evaluation.

Observation and Language

There is a strong link between observation and language as we use words to describe and communicate our observations to others around us. We try to build common grounds for further efficient objective related communication, when describing our observations of reality based on our perceptions. We see what we see, and what we see, is describable in words. Depending on how fine tuned observation skills are, professionals develop observation skills which range from describing a simple movement like a nod of a head, to sensing a change of the quality of an interaction, although no apparent visible movement has been made. This kind of skill can be trained. It can be useful in various fields of research, theory and practice. It is applicable to where movement abilities need to be stabilized, cured, optimized or corrected aesthetically, or in sectors where the assessment of movement and behavior is of exceptional interest, like in forensics and deception detection.

Movement Analysis in Practice

In dance/movement therapy (DMT), we use Laban/Bartenieff Movement Studies (LBMS) and Laban Movement Analysis (LMA) to observe, support and evaluate individuals in motion. Laban´s theories and mode of organizing the analysis of movement observation serves as a multifunctional therapeutic tool which supports a holistic, spontaneous approach to our therapeutic interaction. When reaching out to our LBMS and LMA toolbox we use specified parameters when observing and analyzing people and their movement. Our specified training and embodied understanding of the theory and practice make this method of movement observation unique. It provides a structured, as well as a dynamic movement based approach towards movement analysis. LBMS and LMA trained practitioners engage in their training through body and mind and integrate this framework to their professional field and apply it creatively in their research and practice. Their bodies become sensitive to resonating with others in motion and their eyes get habile, noticing those components of a person´s movement, which define the individual movemental components and patterns of the personal uniqueness of the mover. Observations of this kind can be done on a macro or micro level. Technical components, like recordings on video, can be used to provide a very detailed analysis of movement, however, capturing and documenting the essence of someone's movement does not necessarily need additional technical equipment and can be done on the spot and in real time (Kennedy, 2010).

Using LBMS / LMA (See Fig. 1) for observation includes looking at how the moving body relates to its environment and the way the patterns in which particular movements appear (Kennedy, 2010; Studd & Cox, 2013; Hackney, 2002). The categories body, effort, shape and space constitute the core of the broad spectrum of observational parameters, which implicate an attuned approach to the observation of all visible - conscious and unconscious - movements (Laban, 1988; Bernstein, Shafir, Tsachor, Studd & Schuster, 2015; Adiarte, 2016). Comparing the detailed and viable framework of LBMS / LMA to common methodology in research practice in relation to observation, lets the hitherto scientific movement observation appear fairly superficial. LBMS / LMA methods have the capacity of analyzing movement on a much more minimal scale and describe appearances of motion and expression to a micro level. This methodological framework, however, has not yet found a stable ground for informed consistent scientific use, yet.

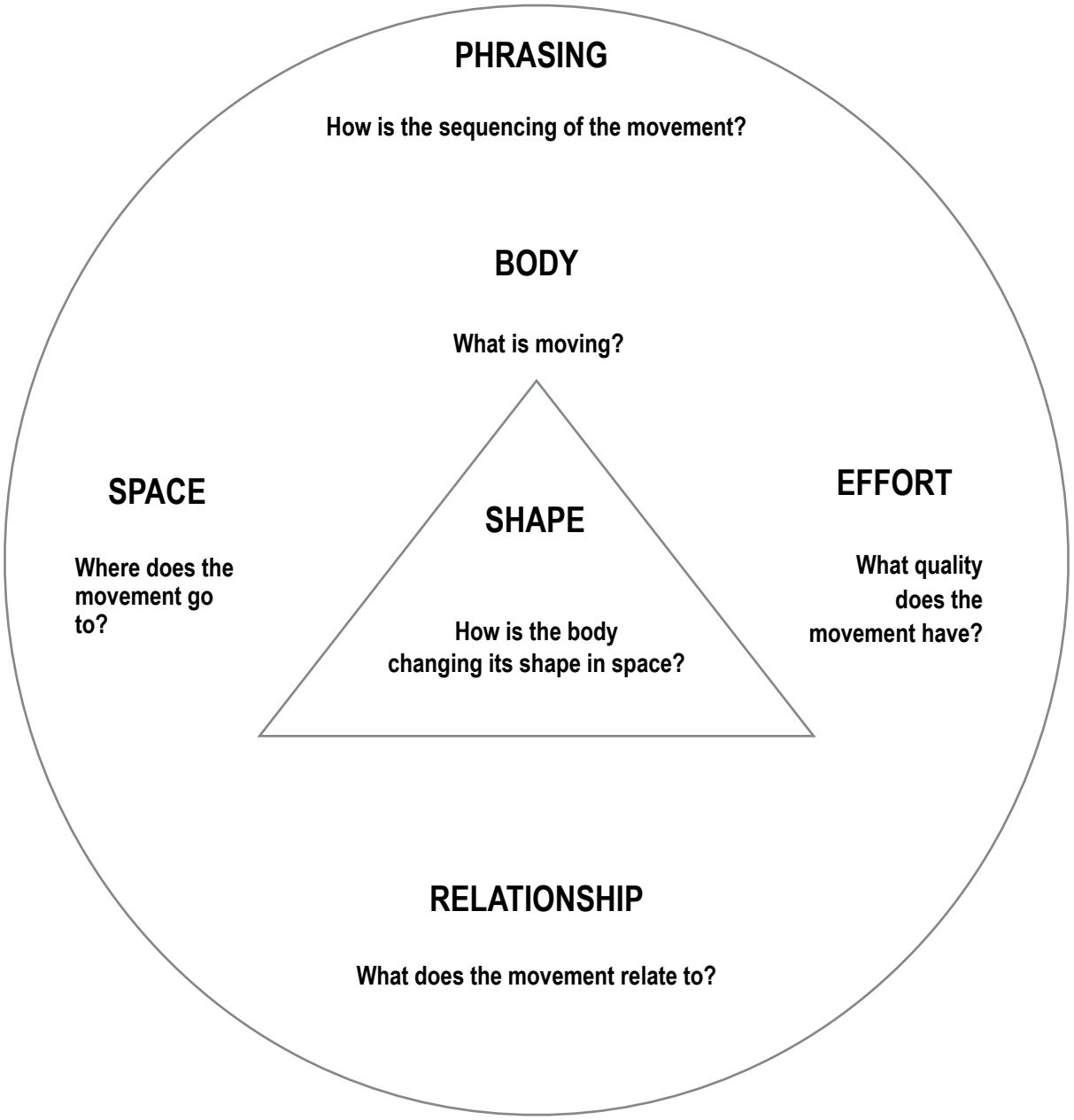

Fig 1.

Note: LBMS Categories (after Kennedy, 2010, p.7). Compiled by S. Adiarte (Adiarte, 2016).

Too complex to be true

The capacity of quick, intuitive and efficient assessment of our environment are still activated in our bodies and we are actually using it every day. But using such an integral dynamic resonance field as part of a scientific assessment tool does not appear as advantageous when judging about truth or lie. Why? Because the human factor in communication and the moving body itself appears to be too complex to decode. On the one side, the body observing and resonating in that moment in time and on the other, the body that is observed, also reflecting and dynamically reacting and moving within the shared communicative space.

Personal preferences when observing, biases, affinities, our socialization, age and the context or intention of our observations are only a few of the factors influencing this task.

Even trained personnel, like police officers, psychologists and judges are not much better in detecting deception than students or other laymen (Aamondt & Custer, 2008). Although, some individuals become really good at detecting deception, through long years of specific training and experience, up to date research supports that clear diagnostic, nonverbal cues to deception do not exist (Vrij, 2008).

When observing individuals in relation to forensics, health or risk assessment in the twilight of truth or lie, also moral and ethical questions arise (Dietz, 2015). Who is entitled to decide about truth or lie? What legal implications emerge, when we manage to identify a valid `cue for deception`? To avoid errors in judgements and arriving at correct decisions, unambiguous specific parameters are needed as well as the capability and precision of communicating the observations to others. Researchers, however, are still on a long journey towards handling this issue.

Computed systems versus human

There is a tendency of contemporary research to invest in the idea of using computed systems to analyze movements in relation crime prevention, law enforcement and health. Biases and observation errors typically arising in experimental setups involving raters instead of computed systems should thereby be replaced by the accuracy and precision only computers can achieve. In these projects the accuracy of measurement is guaranteed.

There are attempts to uncover disguised criminals via the comparison of gait analysis in evident crime scenes (Larsen, P., K., Simonsen, E., B. & Lynnerup, N., 2008) and develop technologies of gait analysis that are able to identify distinctive individual movement components comparable to fingerprints (Mihalcica, 2011). These projects show promising results, which is not surprising to a LMA practitioner.

Video cameras, movement measurement technologies, gait analysis and comparable tools are the norm in spaces where the risk of crime is high, where maintaining the overview of actions is difficult and where detailed movement analysis is likely to give precious insights to support health issues. But there are two problems: 1. There is no overarching theoretical framework that defines the specificity of congruent terminology for the parameters of scientific movement observation 2. Common methodological consent about how to actually structure real time observation and evaluate the seen, does not exist.

Bringing it all together

We have to ask ourselves this question: would we rather be judged by a computer or by a human? Translating parameters of observation to computed systems and letting this evaluation stand on its own is incautious because computed systems are unable to resonate in real time. Of course, such a system will assess perfectly in relation to the given parameters. In that sense, it would not fail. But, only a human has the capacity to resonate dynamically and sense mismatches in interactions and communication if the person is trained to do so and is capable evaluating the observations to the investigated facts. The computed system will assess on then base of the given parameters that were imbedded in its system, but what is the base of observational cues used here? And who / what will eventually decide how to interpret the outcome?

Observation is not an isolated action done by the eyes, only. It is a vital continuous part of human interaction and communication. This process is circulative, dynamic and interactive with merging information through the receptive membrane of the senders and the perceivers perceptive system that becomes visible in rapport, self organized synchronization, in communication and motion (Wackermann, J. in Tschacher & Bergomi (Ed), 2011; Storch & Tschacher, 2014; Tschacher, Rees & Ramseyer, 2014).

It is obvious that any structured, methodological observation will always bring more comprehensible results than an undirected one. But directing observation for specific purposes brings responsibility with it. A necessity for careful consideration of the implications, when we get to the point of being able to call things by their name.

Each human has a unique approach to perception. It is likely that a peculiarity, seen by one observer, will not be seen by another observer in the exact same way, which hinders inter rater reliability. People and their perceptions develop individually and their bodies and minds are influenced and formed by strategies of dealing with their environment, emerging during all of their developmental stages from infancy to adulthood. The way we take a stand in our own world and the way we take chances or believe in our own abilities, influences our approach to the world. It is like as if two worlds collided when two people meet in time and space (Adiarte, 2016).

Breaking down the complexity of a body in motion and its observation down to measurable and comprehensible components is possible when we find a common theoretical and methodological framework to start from. Being open minded and creative in the approach, while listening to ones own inner voice and sensing the tension in once own membrane is the key to discovering obvious and hidden traces of information in us and others, even though it appears very difficult describing it. Communication is complex and bodies in motion are, too, but if there was a system that has the capacity to decode individual patterns of movements and deception then it is LBMS / LMA. We just have to be aware that we cannot fail in perceiving, because this is a natural gift. We can only fail interpreting our perceptions.

Figure 1: LBMS Categories (after Kennedy, 2010, p. 7). Compiled by S. Adiarte (Adiarte, 2016).

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