

# Energy, Eukinetics, and Effort

## Rudolf Laban's Vision of Work and Dance

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This essay presents Rudolf Laban's understanding of movement and dance as an example of how there cannot be a history of modern dance without both a cultural history of energy as a social construction, as well as a cultural history of work. Dance, like science, participates in a large web of ethical, social and political entanglements, while also constructing models of the moving body. Only by taking account of the reciprocal influences of scientific theories and artists' discourses and practices can we write a history of bodily movement, both onstage and in everyday life.

When Rudolf Laban (1879-1958) started teaching in Germany in the early 1920s, his courses included the study of gesture; the relationship between physical actions, dynamics, and spatial patterns; and the observation of movement and its notation. The issues of movement, space, time, and rhythm were at the core of discourses and practices of dance, but also fundamental to media and technology, as well as psychology, physiology, biology, the European science of work and American time-and-motion studies. Laban studied many of these scientific theories, particularly those concerning the notion of rhythm, which Katya Rothe defines as the »ubiquitous synonym for the new era« (Rothe 2012: 32). Laban considered rhythm to be the ideal tool for connecting people and communities to cosmic laws, and for activating the remembrance of ancient or primitive gestures, which were stored in the most archaic layers of our involuntary (collective and personal) memory. In other words, he conceived the body as a crossroads of different kinds of rhythms related to the universe, which itself was also seen as a network of invisible forces. Dance was an instrument for experiencing the world and for displaying the unity of all organic and inorganic matter as an expression of ›harmony‹. Rather than a language of emotionality, Laban considered

dance to be a language of action, in which »the various intentions and bodily mental efforts of man are arranged into coherent order.« (Laban 1948: 43) The quality of a movement did not depend on the dancer's ability to deal with a complex system of steps and postures, but rather on his/her own attitude toward certain parameters, such as weight, space, time and energy. The vocation of the dancer was to learn to perceive and interpret this energy hidden in the configurations of matter.

Laban built his complex theory of dance by highlighting hidden energies through ecstatic improvisation, as well as by analyzing different parameters of bodily movement by way of a research work that lasted for several decades. Even his notation system reveals modern anthropology's typical ambivalence between the classification of human movements based on scientific and positivistic models, versus a corporeal topology that considered the body to be the materialization of »an eternal cosmic«.

More recently, scholars have considered to what extent Laban's complex theory on movement functioned as a way of introducing and developing new social and political projects, in which the moving body resonated with the vibrations of both the universe and the modern world (Keilson 2013). Laban envisioned a new dimension for dance as a highly elevated form of consciousness in respect to our everyday life, where mystical Freemasonry met the science of work, Nietzsche's philosophy met *Völkisch* ideas, and Romantic anti-capitalism met industrial production. For Laban, the corporeity of modern man was a palimpsest in which to find the traces of a presumed ›original‹ and ›authentic‹ condition, while simultaneously following evolutionist and esoteric theories. He believed that an adaptation to modern life entailed the risk of obliterating memory, alongside the related impoverishment of sensorial and emotional life, as well as limitation of one's ability to relate with the world. The dancer's first task was to develop new skills for connecting him/herself to the rhythmic flows of modern life, and movement became the privileged tool for building a new technology of perception (Baxmann 2000). A dancer trained by Laban was invited to explore, by means of physical actions, his/her own emotional and psychological world and to awaken what he/she imagined as his/her ancestral memory, as well as to move through the space surrounding his/her own body with a deep consciousness of its features and laws. This part of Laban's research drew on the development of 19<sup>th</sup> century experimental psychology, which was based on evolutionary theories. From this perspective, so called ›tribal societies‹ were characterized by intu-

ition, dynamics, mysticism, and irrationality, and were therefore believed to represent the infancy of humanity and a foundational layer of modern man. The recovery of this archaic intuitive and irrational potential was a *leitmotiv* of German modern dance, which sought to overcome the impoverishment of sensory and emotional experience, and considered the moving body to be the ideal tool for re-immersing the individual in the cosmic continuum.

To investigate the »kinesphere«, as he called the imaginary space around the body, Laban used a set of geometric structures, such as the cube, the octahedron and especially the icosahedron: a volume with twenty faces and twelve spatial directions. A dancer could explore the space inside the icosahedron by practicing different sequences of movements to regain a »natural rhythm« (Laban 1920: 59). Not unlike the crystal that had become the symbol of the *Naturphilosophie*,<sup>1</sup> the icosahedron functioned in Laban's theory as a metaphor of the renewed harmony between nature and dance, as well as a tool for the re-integration of the human being into the cosmos (Laban 1920: 27, 31; Baxmann 2000: 151-160; Guilbert 2000: 33-35). In other words, the way the dancing body creates these tensions and follows the directions of the space corresponds to the organization of Nature and therefore, for Laban, »the laws of dance are the law of life« (Laban 1920, 59).

For the philosopher and psychologist Karl Ludwig Klages (who invented graphology, a discipline that measured the vital level of energy invested by an individual in his/her writing), the rhythmic soul was deeply linked to the unconscious memory accessible via dreams, ecstasy and the trance (Klages 1910). Klages, whose thinking profoundly influenced Laban, affirmed that rhythm was the vital principle *par excellence*, which manifested itself in the polarized tensions resulting from an alternation of antagonistic and complementary forces, through which phenomena are renewed and perpetuated. Laban was convinced that the rhythmic movement of the body (*Schwung*) was the perfect tool for activating an immediate form of communication, as well as for giving dancers access to a shared choreography or mass movement through vibrations. Rhythmic movements made mental or psychological states of being visible.

Laban's approach to improvisation was based on the erasure of acquired knowledge to recover the most remote and profound memory for artistic

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1 The concept of *Naturphilosophie* was introduced by German zoologist Ernst Haeckel (Haeckel 1904).

purposes, followed by the incorporation of new automatisms. He believed that a dancer could develop a condition of »absence-presence« in which to acquire a new ability to perceive hidden energies inside matter, merely using improvisation and the exploration of space. Simultaneously, the study of movement was aimed at enhancing communication skills, developing creativity and kinaesthetic senses, and last but not least, transforming each dancer into a member of a group. Like many other German modern dancers, Laban was also convinced that the rhythmic degeneration of modernity involved the loss of collective rituals, which were capable of establishing a link between the real and the spiritual; the profane and the sacred. Ultimately, this would cause the disappearance of a communitarian dimension, and Laban created his movement choirs as new forms of folk and social dance in the Western world to compensate for the degrading of society in industrial times.

In the 1920s, Laban developed what he called »Choreutics« or »harmony of space«: a branch of his theory that analyzes all possible trajectories of movement into space (directions, levels, plans) by referring to the kinesphere or »the practical study of various forms of (more or less) harmonised movement.« (Laban 1966: vii) The book *Choreutics* was published posthumously in 1966, but was written in 1939 to summarize a theory he had been developing since 1913. His approach to »space harmony« was not supported by the desire to create a new aesthetic; his aim was rather to rediscover what he assumed to be the body's natural experience in space and »the *real* structure of human movement and motion in *nature*.« (Laban 1966: 5-8) For Laban, space, time and weight were qualities of movement, and he considered them to be forms of acquired knowledge, whereas flow was seen as the dynamic content of movement. By practicing various forms of harmonized movement, he became convinced that human beings might learn to reconnect with nature and their own kinaesthetic dimension, or their state of being.

The exploration of the harmonic laws tied to kinaesthetic energy brought Laban to the development of »Eukinetics«: a branch of Choreutics that determines the dynamic structure of movement (Laban 1966: 30). Eukinetics consists in the analysis of the dynamics and rhythm of movement in time and space, and explores movement trajectories in relations to the origin of movement (central or peripheric), of time (fast or slow), and of energy (strong or light). Later he also defined Eukinetics as the theory of expression and as »a good movement in terms of the harmonious rules of dance.« (Laban 1928: 19)

»Effort theory«, which became the focus of Laban's interest in the 1940s in Great Britain, was a direct consequence of these investigations. Whereas Eukinetiks applies to the study of what makes a movement »good« in terms of harmonic laws of dance and its expressive qualities, Effort relates to the expressive qualities of the action, which are visible in the rhythm of body movement, and its observation and practice can have a descriptive as well as a prescriptive purpose. Laban's Effort theory is based on the analysis of four motion factors (space, weight, time, and flow), each of which are seen as a continuum between the polarities that constitute the elements or qualities of Effort (direct or indirect, heavy or light, quick or sustained, bound or free). The combination of space, weight, and time produces eight efforts (wring, press, flick, dab, glide, float, punch, slash) that classify styles of movement, as well as speaking to the personality of the person making them. Effort can also be described as the dynamics and qualitative use of energy, or the result of the interplay between the emotional and cognitive attitudes related to movement factors, as well as of the different levels of awareness of each person. More specifically, space is associated with attention and thought, weight towards intention and perception, time towards decision and intuition, and flow towards progression and sensation. Together they contribute to the phrasing or rhythm of Effort. Despite the fact that there is usually more concern about its expressive aspects, Effort is also functional, and Laban crucially connected the sense of self to physical categories (Flow and Weight), as well as to the environment (Space) over time (Time).

## **Energetic bodies, productive industries**

Until the mid-19<sup>th</sup> century the fundamental concepts of physics were space, time, mass and a single universal energy that could neither be created or destroyed (*Kraft*). As a hidden and invisible substance embedded in the many natural forms (mechanical, electrical, chemical, and so on), *Kraft* was considered to be capable of advancing society (Rabinbach 1990: 45-68; Campbell 1989: 73-106). Only after the discovery of the second law of thermodynamics was the optimism of energy conservation mitigated by the recognition of its inevitable dissipation and exhaustion. During the industrial revolution in Europe, the metaphor of the »human motor«, introduced in the late 19<sup>th</sup> century, suggested that the working body was a productive force capable both of

transforming universal natural energy into mechanical work, and of linking human organisms to the industrial world. The concept of »labor power« mediated a vision of society powered by a universal energy, wherein the working body represented »one exemplar of that universal process by which energy was converted into mechanical work.« (Rabinbach 1990: 1) As Rabinbach summarizes, the metaphor of the »human motor« – a body whose experience was equated with that of a machine – »translated revolutionary scientific discoveries about physical nature into a new vision of social modernity.« (Rabinbach 1990: 1) The power of industrial machines and the human (moving and working) body were both measurable because they followed the same dynamic laws: time, space, movement and rhythm.

In Germany, materialism rejected the distinction between the laws of inorganic and organic nature: the cosmos was subsumed under the laws of energy, society was subsumed under the natural law of development, and industrial productivity was only one of its many aspects. In adopting the industrial machine as the new model of the universe, it became the source of energy for industrialized societies. The body and the cosmos became linked by a single flow of energy, and the human motor was at the service of nature: an immense reservoir of energy and power.

In Europe and in the United States, scientists constructed different models of work and of the working body as a performance. They introduced the vision of an economy of energy, the opposite of which was the pathology of work: fatigue. Once the »ontology« of *Kraft* – or the energy able to convert itself into innumerable forms while remaining constant and unchanged – was brought into question by the new concept of entropy and the irreversible decline of energy, fatigue appeared to be *the* last obstacle for progress in modern times (Rabinbach 1990: 39). On the one hand, theories introduced in the United States by Frederic W. Taylor and Frank and Lillian Gilbreth, which included time-and-motion studies for industrial mass production, would improve efficiency and increase productivity by eliminating unnecessary steps and actions. On the other hand, precisely because it was the most evident sign of the external limits of the body (and mind), fatigue became the most important parameter for measuring the waste of energy, which in turn was the body's unique capital or its »labor power« (Rabinbach 1990: 7, 19-44). In Europe (and in Russia) physiologists, hygienists, psychologists and, last but not least, dancers and choreographers, all conducted laboratory investi-

gations or invented new techniques for measuring body movement, energy and fatigue.

Both the European science of work and Taylorism were modernist in their promise to liberate industry from the constraints of a society still attached to traditional social attitudes, as well as in predicating the rationalization of the body to augment productivity. However, they differed in their conceptions of the preservation of energy: the European science of work was interested in optimizing for the sake of society, whereas Taylorism was oriented towards the improvement of industry enterprises. From a European perspective, Taylor's system, which prioritized profit first and foremost, was alarming precisely due to its disregard of both social reforms and the preservation of the working body.

The context in which Laban developed his vision of dance and his attention to bodily movement was defined by the convergence of economy, Psychotechnics, Taylorism, and German body culture (Baxmann 2000: 99-118; Baxmann 2009). He was particularly inspired by the German economist Karl Bücher, the author of *Arbeit und Rhythmus* (Labor and Rhythm): a bestseller published in six editions between 1896 and 1924 (Bücher 1896). According to Bücher, »to work is to dance« (Bücher 1896: 334) because rhythm is essentially a bodily element, and its role consists in regulating labor movements favoring the preservation of physical and psychic energies. In order to increase productivity, Bücher suggested restoring natural bodily rhythms and automating movements, because it was only by making them independent of mental control that it was possible to reduce a worker's effort. These theories were very important for overcoming the idea that the most tangible difference between the work of civilized man and that of populations defined as »primitive« or »wild« consisted in the automation of movements. Bücher's analysis overturned the terms of the question and the automation of movements, which were previously considered to be an indication of laziness because they required no mental effort. These now acquired a positive connotation because they preserved and respected the body's natural rhythms as well as its fatigue. It was not industrial labor that caused excessive fatigue, but rather its externally imposed arrhythmic character. In the »revival of love for work« Laban saw the goal of a new dance culture, which wanted to recuperate the condition of humanity as described by Bücher, in which work, dance and play were united (Laban 1920: 128). He was also convinced that

»the level of civilization of a people« depended very much »on the respect for work« because work was »the nerve of life« (Laban, 1923: 2).

In the wake of these studies, German *Arbeitswissenschaft* (science of work) advocated an economy of energy, which sought to sustain the nation and promote social happiness through the introduction of rest pauses and training programs. Modern life required an adaptability to changing circumstances, as well as the synchronization of the body's rhythms to those of industrialized life through their repetition, incorporation and transformation into new habits. After the First World War, the psychotechnical craze became quite influential in restructuring the labor market. However, the economic crisis of the late 1920s accentuated critical attitudes toward the science of work, and were blamed for creating unemployment. The disillusionment of rationalization became a new trend, and the idea of work became infused with mystical and transcendental meaning: an authoritarian approach that erased the social neutrality of the European science of work and soon faced the rise of Fascism (Rabinbach 1990: 278-284).

Fritz Giese was a leading expert on Psychotechnic, had been a pupil of Wilhelm Wundt and Hugo Münsterberg, and later became a supporter of Nazism. He formulated a series of parameters for calculating ideal worker performance, taking account of his psychological profile and linking an organic notion of the self to the ideal of national regeneration (Killen 2005). Giese, who affirmed that rhythm was a technique for self-regulation, a way to understand modern society, and a potential mean of optimizing labor, exerted great influence upon Laban's theories. Using Giese's perspective on the romantic metaphysics of labor, rhythmic movements became a form of practical intuition rather than theoretical knowledge: not only was behaviour visible in rhythm, it was also controllable through rhythm (Giese 1932). Laban envisioned a new society where technology and the metaphysical dimension of the body, work, ritual and dance could complement one another (Laban 1920: 151):

All daily acts of labor must be formed out of danced movement. Not only their execution, their form and the form-creating activity of working itself must originate from danced feelings, but also the very choice of the necessity to create. (Laban 1920: 146)



Laban recognized that Taylor (whose *Scientific Management* appeared in its first German translation in 1912, a year after its publication in English) had introduced the first systematic approach to workers' movements, based on the idea of rhythmic efficiency and on energetically and temporally optimized industrial labor. However, he nonetheless explicitly criticized Taylor's approach (Laban manuscript E (L)/64/88: 2). From Laban's perspective, Taylor's time-and-motion study had not fully developed into a complete industrial instrument because he and his successors neglected the study of human movement. On the contrary, this latter study demonstrated the potential of the European science of work (Laban typescript E (L)/65/13: 1). Laban sought to use his own method to improve work performances via the optimization of motion sequences, but without sacrificing an acceptable level of worker satisfaction in the completion of a task. Laban believed that modernity required a radical change in how it viewed productivity, notably by preserving the quality rather than the quantity of the work, and by privileging bodily and psychological individual skills over industrial needs. The aestheticization of work was the fulfilment of Laban's utopian idea of this new beginning, as well as of the recovery of the original unity of labor, play, and art:

Industry will no longer disappear from our lives. [...] It is concerned with everyday work and the associated organization of life, as well as with celebrations, recreation, and in art, as it is a matter of making the necessary innovations simple and natural, in terms of the danced concept of life. (Laban 1920: 151)

Based on this cultural background, Laban arrived in Great Britain in the late 1930s and spent the rest of his life primarily researching »Effort« within a wide range of applications, including dance, education and industrial work.

## **Dancing into industry**

In an unpublished document written toward the end of his career, Laban described his role during his years in Monte Verità near Ascona as a »rhythmical manager«, and addressed a new approach to the correct rhythms for various manual activities (Laban E (L)/76/17: 2). In this alternative community people pursued vegetarianism, grew their own food and wove their clothes. Laban applied the concept of harmony to these different forms of manual

labor, from gardening to work in the fields; from kitchen tasks to weaving. He designed specific tasks and rhythmic patterns for each worker. Every activity was accompanied by music and dance, and at the end of the day the workers exchanged reports about what they had done. The process of becoming conscious of their own potentials and limits was considered crucial for assuring the quality of life of the entire community.

In 1929 in Vienna, Laban choreographed *Festzug der Gewerbe* (Pageant of the Trades), a four-mile-long parade of 10,000 representatives of the manual crafts and trades. On this occasion he also had the opportunity to enter studios and workshops, and to observe trade peoples' basic movements, which indicated the different rhythms required in various tasks (Laban 1935: 174-187). He also realized to what extent rhythmic movement directly regulated motivation, and thus productivity, and he became convinced that each worker needed to train his/her individual desires to move and be employed in accordance with his/her own skills.

Laban's experiences in Great Britain's industrial world led him away from his earlier ideals. Although he retrospectively tried to motivate his interest in work and its rhythms by identifying its coherent history since the 1910s, it is evident that the practical necessity of addressing the identity of the German citizen, combined with his professional unemployment during and immediately after the war, primarily pushed him to explore this dimension.

Laban's research became more and more theoretical in the 1940s and 1950s, and this transition is not unrelated to the end of his artistic career. During this time, he developed his research on Eukinetics and specifically on *Antrieb* (internal impulse), which became the core of his Effort theory. The initial phase of these theories can be traced in many of his German texts and expressions, such as »extreme polarization« or »contrasts«, and that these ideas later transformed into »elements of effort« further demonstrates this change. The general scheme, written in German in 1926, was called *Elements of Form Theory* (Laban 1926: 3-5), and probably represents his first attempt to classify movement and the initial synthesis of all of movement's components implied in his notation system, later published in 1928 (Maletic 1987: 54).

This was precisely the notation system that Fredrick Charles Lawrence appreciated about Laban's theory on movement. Lawrence was an engineer and one of the first industrial consultants in Great Britain, whose factories, the Pathon Lawrence & Co. where based in Manchester. He met Laban and his assistant and partner Lisa Ullmann through their common friends, Dor-

othy and Leonard Elmhirst, who welcomed them in 1938 when they first arrived at Dartington Hall, in the Devonshire countryside of South Western England. In the community of Dartington Laban was able to integrate his visions of dance and movement in other progressive education projects, including communal living and rural reconstruction (Preston-Dunlop 1998: 218-238; Knortz 2008: 117-132). Lawrence was a consultant for the administration of Dartington Rural Industries when he first met Laban, who spent time observing the workers' movements and made his expertise in movement analysis available to improve their performances.

In the early 1940s, Great Britain was fully engaged in the war effort, and the entire population was asked to increase production. The absence of men, many of whom were at the front, had forced factories to employ women and young boys. However, these populations were often physically unsuitable for the roles they had to assume on the assembly line, particularly those in heavy manufacturing. While in the immediate post-war period an urgent need to increase production and to re-employ young people had to be addressed, in the 1950s the government was mainly interested in developing workers' skills, and in adapting production processes to new market needs (Seymour 1954: 3-4; Seymour 1966). When the war was declared, Laban could be classified as a »German alien« by the British Government, and therefore needed to find a way to avoid the (admittedly remote) possibility of ending up in an internment camp. Being involved in the war effort would spare him from this potential outcome. For many reasons, Laban was therefore the right person in the right place and time, and Lawrence understood the great potential of both his approach to movement analysis as well as his notation system, to the degree that they began applying it to industrial work and named it »Industrial Kinetography« (Laban manuscript E (L)/71/9). Unlike other methods based on time-and-motion studies, Laban and Lawrence sought to relieve a worker's effort by analyzing and recording industrial processes, and by examining both rhythmical movements and workers' inner motivations. In 1942 a course called *Rhythmic Movement in Industry* held by Laban and Ullmann was given for a few weeks at Dartington. The exercises designed there to help people work more comfortably and more efficiently later became known as the core of their joint publication »Laban/Lawrence Industrial Rhythm and Lilt in Labour« (Laban-Lawrence 1942). Lawrence, who was able to translate Laban's mystical and philosophical beliefs on movement into management terms, convinced him to move to Manchester where they founded the Man-

agement Training Institute, and Laban was appointed as an adviser at Paton Lawrence & Co. They began developing the potential application of some Eukinetics principles to work on the assembly line, as well as the Personal Effort Assessment: a test that managers could use to evaluate employee's inner motivation. They discarded an early hypothesis of translating the term *Schwung* to *swing*, as it was too connected to the lexicon of popular music. In addition, Laban identified the future of dance as connected with the ›white race‹, and thus considered jazz and swing to be inappropriate (Laban 1920: 200). They therefore chose the translated term ›Lilt‹, and named their method *Lilt in Labour* or *L.L. Industrial Rhythm*. This consisted of a series of exercises designed to develop the physical strength of new workers, but also sought to sustain their personality and their rhythmic approach to life. They also wanted to increase the efficiency of each company. *The Tyresoles Laban/Lawrence Training Manual* (Laban-Lawrence 1942 T/AD/3/D) was the first booklet specifically addressed to a group of women trained under Laban's supervision.

A volume published in 1947 by Laban and Lawrence was titled *Effort*, and offers the first theoretical and practical guide to training body movement in a working context. In the co-authored book, Laban acknowledged Lawrence for his theoretical collaboration and for the job opportunity he had provided to him. However, Laban did not do the same for Lisa Ullmann, despite her crucial role and their enduring collaboration.

Laban was convinced that, despite its critical importance, the ›rhythmical revival‹ as a social issue had not received enough attention in modern times. He also believed that the process of civilization caused the loss of a mastery over movement, as well as the degradation of the role of rhythm in labor throughout widespread ›primitive populations‹ (Laban typescript E (L)/65/11: 15). For Laban, dance was the best tool for helping the worker liberate his/her body, and he compared a negative rhythmical pattern in industrial work to the wrong crystalizing processes, during which ›bad influences from outside the scope of the formative flow‹ compromise the potential perfection of its shape (Laban manuscript E (L)/76/11: 6). As Laban and Lawrence affirmed in the introduction of *Effort*:

Today all that remains of this former rhythmic vitality has been directed into mechanical devices in which the living, driving force of man has been neglected and left without articulate expression. (Laban-Lawrence 1947: 6)

Laban and Lawrence assumed that the control of effort in industry had become an urgent necessity, and they experimented with how it could be discerned in various working actions. To remedy the problem of industrial management in wartime, it was necessary to simplify working procedures, as well as to divide a task previously assigned to a single person amongst several workers. In both cases, an evident reduction of productivity was the result. A good alternative was to enable the worker to quickly perform a task using a series of targeted preparatory exercises. These included a better connection of the required movements, each of which would be executed along with its own counter-movement, and with careful consideration paid to each level of speed and energy (Seymour 1954: 26). For instance, most of the movements completed for industrial work concerned the upper part of the body, so dance could offer the possibility of balancing these through the introduction of a series of compensatory exercises and oscillating movements. Laban and Lawrence compared this compensation with what happened to Western dance when it acquired new kinds of movement from other traditions (Laban typescript E (L)/64/57: 3). The training method they developed for several industries therefore consisted in new movement sequences, designed to relieve fatigue and to »bring that swing and lilt in labor which makes efficiency a pleasure« (Laban-Lawrence 1942 T/AD/3/D: 3). Laban and Lawrence believed that every person invests in weight, time, space and flow in different ways, in order to create a sequence of movements whose intentions are related to a physic or psychic condition. In other words, Effort enables a link between the original inner motivation for the need to move (a sensation, a feeling, a task) and the actual physical movement. For Laban, there was never a single way to perform a task or a movement, and therefore the same worker could perform the same action by following different movement sequences. Laban and Lawrence wanted to highlight the positive and negative aspects of each movement sequence performed by the worker, as well as to particularly identify where the flow was being interrupted (Laban-Lawrence 1942). They therefore they analyzed the dynamic and rhythmic qualities of each worker, in order to identify their kinaesthetic and psychological profile for the task to be performed. The results were notated in a simplified version of Laban's notation, called *L.L. Industrial Notation* (Laban-Lawrence 1947).

The success of the application of the movement sequences suggested by Laban and Lawrence was particularly demonstrated when workers, undertaking long work sessions, experienced reduced fatigue thanks to the can-

cellation of ›unnecessary movements‹. For each company who used their method, Laban and Lawrence established: a customized ›right way‹ to carry out every single movement; the ›exact duration‹ of a sequence, which always included a moment to rest; and the ›exact amount of energy‹ required to dedicate to the work and its rhythm. In order to improve sales, Laban and Lawrence changed the name of their method to »Personal Effort Assessment«, and then later to the »Laban Lawrence Test«. They also applied it, in movement terms, in order to select and screen candidates for managerial positions. Factories that successfully applied the method included Mars Confectionery, Hoover Ltd., and even the UK Air Ministry. Following an interview that Laban gave in the mid 1950s, the factories in which his method was applied increased their productivity by up to 50 %, although no documented proof was provided for this affirmation (Moore 1954: 60). No trace of independent analysis verifying the results of these assessments and programs exist, and yet what seems to have diminished during this time was Laban's original assertion that there was no single way to perform a task at work. On the contrary, Laban and Lawrence progressively ›cleaned‹ movements, and standardized what they assumed to be the ›correct‹ motor sequences, primarily for the sake of industrial production. In the end, the logic of quantity prevailed over quality, and industrial tasks took precedence over individual skills.

At the same time, Laban had to maintain all possibilities for the development and use of his Effort theory without precluding the artistic field. He insisted that people *do* in fact use the same efforts in all the activities he had specified as including expressive gestures. He frequently repeated not only that dance should enter the industrial world, but also that the *L.L.Industrial Rhythm* could reveal its potential for connecting dance to »the reality of our present life« (Laban typescript E(L)/31/39: 2):

The incorporation of artistic elements is unavoidable as soon as one makes use of rhythm. This is the reason why it is justified to speak of introduction to ›Art of Movement into Industry‹ and this interrelation of art and science in the future will be considered as one of the outstanding features of a progressing industrial civilization. (Laban E (L)/65/70: 13)

Laban and Lawrence described the »Art of Industry« or the »Dance into Industry« as »a living reality with enormous possibilities« (Laban typescript E(L)/65/11: 13) and they ultimately compared a worker to a dancer:

A dancer does not use his arms, his legs and his mind more than a tramway conductor or a worker dealing with a press, because every human being uses movement and therefore the study of movement is vital if we aim at leading each person's energy to the best possible use for his/her satisfaction or to execute in the best way the task his/her need to execute. (Laban typescript E(L)/33/51: 1)

Lawrence believed that rhythm was the most cohesive of all motion factors, and that the right proportion between all rhythmic elements in a motion sequence introduced an unusual but important element: beauty (Lawrence 1943: 131). »Industry« as he affirmed »requires movements that comprise the whole scale of dance and recreation, and can with profit turn to them to learn, at long last, how to move easily, well and to good effect.« (Laban typescript E(L)/65/13: 2) Laban also introduced the vision of a »symphony of production« (Laban-Lawrence 1942: 15):

When entering a well running factory, the first thing that strikes you is the rhythm of the work. The rhythm of all activities evolving before your eyes and impressing our ears can easily be compared with the rhythm of movements and sounds in an orchestra. (Laban typescript E(L)/76/2: 11)

Laban's Effort theory introduced in Great Britain a way of thinking about energetic forces as forms of aesthetic intervention. This was not unlike what had been widely experienced during the 1920s in Russia at the Moscow Central'nyj Institute Truda (Central Institute of Work). Laban was aware of this context, wherein a team of scholars and artists focused on the well-being of the workers, and sought to make their movements more attractive. This was intended to create new art forms and performances in order to disseminate new approaches to Taylorism (Misler 2017: 161-180).

## A poem of Effort

After the end of the war, Laban adapted his approach to Effort to different contexts and presented it in different books. *Modern Educational Dance* (1948), reprinted five times, was the most widely read and probably the most influential of his writings. *The Mastery of Movement on the Stage* (1950, and the following editions) reworked Effort theory to apply it to dance as well as to mime and acting. Other texts, such as *The Introduction of the Art of Movement into Industry* (Laban typescript E(L)/65/70), *Dancing into Industry* (Laban typescript E(L)/33/51), and *Road Connecting Dance and Industry* (Laban manuscript E(L)/65/12) remained unpublished. Contained within these archival material is a project for a film on Effort – unfortunately, like most of the others, not realized – that bears witness to what extent Laban believed in the potential of his theory (Laban manuscript L/E/42/27; Franco 2012).

What is known today as Laban Movement Analysis and Effort theory is a theoretical and experiential system for the observation, description, prescription, performance, and interpretation of human movement, and provides an understanding for developing both expressiveness and efficiency. Laban's German cultural background is rarely recognized by most practitioners, particularly in the British (dance) educational system, in which it has long since been extensively integrated. The ideologically complex and controversial substance of Laban's theory (Kant 2002; Vertinsky 2007) also seems to have been forgotten amidst the growing field that is defined under the umbrella term »somatics«, where today many aspects of Laban's theory are indirectly transmitted. In this context, Effort theory has contributed to the idea that not only are weight, affect and psychology intertwined with each other, and able to describe our way of being in the world, but also that they represent tools for a deep transformation of a dancer's body and imagination. In other words, matter is the only path to a person's most profound transformation, and Effort theory investigates the deepest input that causes movement and enables its transformation.

Dance is a »poem of effort« through which we can constantly reinvent our own physical matter and make our bodily, mental and emotional energies circulate (Laban 1959: 37). A cultural history of dance should make these concepts and their complex ideological origins circulate as well.



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