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Notating Dances from Films: A Method in Hungarian Ethnochoreology

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Abstract
Achievements of Hungarian ethnochoreology are due in large part to results of processing fieldwork data primarily using dances captured on films. Hungarian dance researchers historically have focused on notation as the primary tool for conducting analysis of traditional Hungarian dances. After a short review of how Laban's kinetography achieved the status of the appreciated tool in the Hungarian dance research methodology, the author details the advantages of notating dances from films, but also the possible obstacles to which the notator may face when the only means of movement information is the moving picture. Best practices for doing notation analysis from films are provided. Solutions for silent films, to satisfy a demand to restore the original dance and music synchrony, are discussed as well. The paper provides a proposed workflow for how to best prepare manuscripts for completion and clarity, and thoughts about which analytical points of view to consider when dances are notated from film.

Keywords
Laban kinetography, traditional dance, ethnochoreology, Hungary, dance notation, ethnographic film

A fundamental requirement of preserving dance on paper is, first, an appropriate and effective knowledge of a dance notation system. Considering the wide variety of dance genres, it is certainly not an exaggerated statement that, among all the existing approaches to record dance on paper, the Laban kinetography,[1] probably alone in the field, is capable to provide an exceptional level of reliability for successful reconstruction and scholarly analysis. The Laban system is introduced in several comprehensive reference books, textbooks, study guides, and articles in periodicals, and it is discussed and analyzed by technical papers presented at the conferences of the International Council of Kinetography Laban (ICKL). However, the high level of the system's complexity requires many years of study, notation practice, and corrective feedback to reach the standard needed to provide reliable dance scores—few scholars or experts of dance are willing to invest such an amount of time and energy. Beyond the appropriate knowledge of the system itself, the most demanding requirement of completing a dance score is the capability of understanding and abstracting the essence of movements and their subsequent autography. Dance can be notated adequately to capture the original intentions only if the notation is based on movement analysis and the expressive content of the movement is understood.[2]

Discovering and representing the abstract intentions of the dancer as manifested through movement is a challenge. The essence of movement can be comprehended only if the notator him- or herself is proficient in the technical details of the dance genre to be notated. The task may cause difficulties, even if the notator intends to notate his or her own actual or imagined movements. When other performers' movements are notated, the notator of stage works may participate at rehearsals and have the possibility to ask the choreographer, or the

[1] Rudolf Laban named the dance notation system in *Schrifttanz*, the very first introduction of his and his colleagues' achievements in 1928 as follows: "Das vorliegende Heft bildet einen vollständige und abgeschlossene Darstellung aller Aufzeichnungsmöglichkeiten der Bewegung in der Kinetographie Laban [This booklet is a complete and closed description of all recording possibilities of movement in Kinetography Laban]." See *Schrifttanz 1: Methodik, Orthographie, Erläuterung* (Wien/Leipzig: Universal Edition, s.a.), 3. Even if the system was regarded "complete and closed" that time, the original concept of describing the movements of dancers related to regular solids such as the octahedron, cube, and icosahedron, was surpassed by intensive development in the coming years. The developers, Albrecht Knust in Germany and Ann Hutchinson in the USA, concluded in two dialects, different in certain indications and movement concepts. The system practitioners today refer to the version by Knust as "Kinetography Laban," and to that by Hutchinson as "Labanotation." Here all mentions of the system intend to indicate both; therefore a reference "the Laban kinetography," or shortly "kinetography," is selected.

2. The word "meaning" mentioned frequently in connection with dance movements is avoided here intentionally. The abstract, non-imitating dance movements may carry certain "meaning" as formulated by the experts, but verbalizing these "meanings" in a semiotic sense is nearly impossible. The notion of expressive or aesthetic "content" is applied here as realization of space, time, and dynamics.

dancer about the intentions in case of difficulties. Still, it may happen that communication is restrained by the lack of movement consciousness or verbal means. The most frustrating situation is when a notator has no opportunity to inquire about intentions because the task is to notate the performance from film or video as the only source of information. Hungarian notators face mostly the case mentioned last.

For historical reasons, the use of Laban kinetography set roots only in the field of traditional dance in Hungary. Knowledge of the system at an applicable level reached the country comparatively early, in the late 1930s. Olga Szentpál, a leading personality of Hungarian modern dance in the period between World War I and II, turned considerable attention toward the new opportunity to document her choreographies and educational exercises; teaching the system became part of the Szentpál School's curriculum as well.[3] After World War II, during sovietization, all modern dance activity became prohibited—the initiating, organic agents of notation use ceased existing. However, in the 1950s, a new generation of Hungarian ethnochoreologists[4] recognized the exceptional potential that kinetography offered: they could establish analytical theories and prove their hypotheses with notated dance material,[5] made from films recorded during their fieldworks. Also, accepted as a subject, Laban's system has been taught in traditional dance teacher training programs since the 1960s; due to its established education methodology[6] and need in dance research it became a substantial part of the university curricula in the 1980s.

Kinetography use in Hungarian traditional dance research serves a twofold objective: to preserve folklore creation for a long period of time and to

3. For more on the subject see János Fügedi and Lívia Fuchs, "Doctrines and Laban Kinetography in a Hungarian Modern Dance School in the 1930s," *Journal of Movement Arts Literacy,* vol. 3, no. 1 (2016), Article 3. Available at: http://digitalcommons.lmu.edu/jmal/vol3/iss1/3.

4. The main representatives are Ágoston Lányi, György Martin, and Ernő Pesovár, all actively applying notation. Ágoston Lányi was nominated as expert notator to support the work in the decades during their cooperation.

5 Papers of this era, as prelude to the European approach to traditional dance analysis, were not only revolutionary in ideas, but represented a mastery use of notation. The most significant examples are: Olga Szentpál, "Versuch einer Formanalyse der Ungarischen Volkstänze," *Acta Ethnographica Academiae Scientiarum Hungaricae* 7. no. 3–4, (1958): 257–335; György Martin and Ernő Pesovár, "A Structural Analysis of the Hungarian Folk Dance: A Methodological Sketch," *Acta Ethnographica Academiae Scientiarum Hungaricae* 10, no. 1–2, (1961): 1–40.; György Martin and Ernő Pesovár, "Determination of Motive Types in Dance Folklore," *Acta Ethnographica Academiae Scientiarum Hungaricae* 12, no. 3–4 (1963): 295–331.

6 Mária Szentpál's books, revised continuously, have been applied in kinetography education for decades, from the 1950s to the 1990s. See: Mária Szentpál, *Táncjelírás: Labankinetográfia* [Dance Notation: Kinetography Laban], vols. 1–3 (Budapest: Népművelés Propaganda Iroda, 1969–1976).

produce sources for content analysis. The great majority of scores on original traditional dances[7] are registered in the Dance Notation Archive of the Institute for Musicology at the Research Centre for the Humanities, Hungarian Academy of Sciences (RCH HAS); the number of notated dances surpasses 1500.[8] The dances were notated formerly from films, and, in recent years, from digital video. In the following paragraphs circumstances of notating dance from moving picture are discussed.

Advantages and Difficulties of Notating Dance from Film

Few published sources can be found on the practice of creating manuscripts of ballet and modern dance scores, which reveal that the notator participates personally in rehearsal or live presentations of dances especially for notation purposes. Ann Hutchinson reported about the beginning of the Bournonville project, a book being prepared by Kirsten Ralov and herself for publication with scores, as "Our initial mode of working was for Kirsten to dance while I notated."[9] She referred also to discussing the questions regarding style, positions, and other details. In connection with another large project to notate eighteen ballets by George Balanchine, Muriel Topaz remarked in her historical retrospection: "we discovered that, because little of the stylistic information was communicated during the initial teaching week, we could produce better scores if the notator attended two rehearsal periods, a procedure we soon adopted whenever practical."[10] Sandra Aberkalns mentioned notating dance from live performance several times in her paper on the glossaries of dance scores: "8 were notated as repertory works—meaning previously choreographed works, and an additional 20 were notated as Taylor was choreographing them."[11] The method of producing scores

7. The term "original traditional dance" refers here to dances performed usually by the local peasant population, who learnt their dance culture transmitted in traditional circumstances, without the influence of organized education such as dance schools. The identification is contrasted to "staged traditional dances," choreographies created from original dances, but the structure, length, and accompanying tunes of the original ones are usually changed, formations constructed, and often several dance types, even dances from different villages are composed into one work, following the actual aesthetic expectations of a certain cultural period.

8. The metadata of scores (name of dance and performers, location of research, notator, length, and so forth) can be retrieved in János Fügedi, gen. ed., *Knowledge Base of Traditional Dances* (Budapest: Institute for Musicology RCH HAS, 2017). Available at: dx.doi.org/10.23714/nzntk.ntt.ind.en.

9. Ann Hutchinson, "Bournonville Project," *Action! Recording!*, issue 3 (1976), 7.

10. Muriel Topaz, "The Balanchine Project: A Brief History," *Dance Notation Journal* 6, (1988–89): 1.

11. Sandra Aberkalns, "Inside the Glossaries of the Dance Notation Bureau." In *Proceedings of the Twenty-eighth Biennial ICKL Conference*, edited by Marion Bastien and János Fügedi, (s.l.: International Council of Kinetography Laban), 111.

from live performance may have been similar in Hungary as Mária Szentpál's report on her notation activity in the Hungarian State Folk Ensemble at the first ICKL conference in Addlestone in 1959 was cited in the minutes as follows:

> She chooses the best dancers, the ones most aware of what they are doing, to show her the steps to be notated. She is granted one complete group rehearsal where she corrects transitions, missing parts etc.[12]

Notation of original traditional dances requires a different approach. These dances are recorded on film or video[13] at a single event, organized by researchers visiting the field usually only for a few days. It is nearly impossible to notate the dances with widely varied structures on the spot. During the intensive hours of recordings, there is seldom opportunity to see the dance more than once. Original Hungarian traditional dances are commonly improvised; dancers would likely not be able to repeat certain complicated sections, or to have a discussion about how they achieved technical details. Recorded dances are notated from films after field research, sometimes years, or even decades, later.

Fig. 1. Divided front

Fig. 2. Twisted torso

An advantage of notating dance from a recording is that movements are not changed when repeated; the film can be slowed down or frames of complicated, twisted body positions, such as in Figures 1 and 2, can be paused for analysis. The notation is facilitated if the music band accompanying the dance can be seen in the picture, as in Figure 3. The musicians' handling the bows or percussion

12. ["Minutes of the First ICKL Conference in Addlestone."] In *Conference Proceedings 1959–1977*, compiled by Lucy Venable (s.l.: International Council of Kinetography Laban, 1996), 1.

13. From the 1930s up to the middle of 1990s dances were recorded on 16 mm black and white films in Hungary. Film technology was completed with video technology from the middle of the 1990s; research changed to digitized video from the middle of the 2000s only.

instruments may help to find the corresponding beats of music with dance movements, especially if dances were recorded without sound, which was common in the early age of field research. A musicologist, well-trained in playing the violin, was able to recognize the tune from a silent film, based on the movements of the fingers of the violinist, as visible in Figure 4; therefore, the synchrony of dance and music could be reconstructed.[14]

Fig. 3. Music band visible

Fig. 4. The fiddler's play is observable

Ethnochoreology considers the synchrony of dance and music a basic requirement for analyzing structures. György Martin and Ernő Pesovár in their study, "A Structural Analysis of the Hungarian Folk Dance," stressed the determining influence of music upon dance:

> As the rhythm and the kinetic stock of the motives are determined by the tempo and rhythm of the accompanying music, so the major units of the dance are distributed and divided according to the different musical units (as bar, half line, line, period, section). The relationship of the major units of the dance and of the music does not mean that the musical and choreographical units always coincide but that the major units of the dance run parallel to the minor or major musical units, which, naturally, involves sometime coincidence.[15]

They designated the first, and most important, step of analysis to recognizing the relationship between musical and choreographic units. The focus of their investi-

14. Such an experiment is discussed in detail in János Fügedi and András Vavrinecz, "Unheard but Visible: Defining Dance and Music Synchrony in Silent Films," *Acta Ethnographica Hungarica* 60, no. 1, (2015): 171–183.

15. Martin and Pesovár, "A Structural Analysis of the Hungarian Folk Dance," 8. The term "coincidence" was meant here that a section of dance, closed by a motif different from the previous ones, "coincides" exactly with a musical period (half of a tune) or a complete tune.

gation was directed toward cadences, such as concluding motifs, which differ from those constituting the major structural units of a dance. A cadence could be recognized only if an exact synchrony of dance and music was defined.[16]

Establishing synchrony is easy if the dance and music is recorded with the same device and the playback technology provides an immediate synchrony of movement and sound; an example is the modern video technology. Some former 8 or 16 mm film technologies used the solution with magnetic strip on film to present the synchrony without a special synchronizing process after the film was shot. However, this technology needed "reverse" films; the same single copy, on which the dance and sound was recorded, was used for viewing. Researchers of traditional dance rarely used reverse films in Hungary, primarily for the vulnerability of the single copy. During the numerous playbacks, needed to observe dances for notation, reverse films were endangered by mechanical injuries to a great extent. For the protection of the original shooting, negative-positive copies were applied: negative films preserved the original recordings, and the positive copies, made from the negatives, were used for projection and analysis. Sound film technology recorded the picture and sound separately; synchronization of dance and music was made during post-production. If a clapper indication at the start of footage was missing, expert attention was required to match acoustic effects, such as the dancers' claps, heel clicks, and boot hitting, audible on tape, with the appropriate movements on films.

The sound film technology was available for the Hungarian ethnochoreologists from the middle of the 1960s. When only silent film technology was at hand, Hungarian researchers introduced the method of hand stroke to help establish the synchrony with the music. As Figures 5–8 of consecutive film frames show, a researcher waved a hand in front of the camera at the beginning of a musical strophe or line. If the hand stroke was correct in timing, the downbeats of the tunes' first measures could be ascertained. Unfortunately, some movements were invisible in a numbers of frames.

Fig. 5–8. Frame sequence with a hand stroke

16. Ibid., 8–9. The notion of "motif" was not investigated in detail in this paper. An elaborated definition was published later by Martin in his book *Motívumkutatás, motívumrendszerezés: A sárközi–Duna menti táncok motívumkincse* [Motif Research, Motif Classification: Motifs of the Sárköz—Danube Valley] (Budapest: Népművelési Intézet, 1964).

Notating dance from films may involve other difficulties. Depending on the position of the dancer in relation to the camera, movements of certain body parts can be hidden, such as in Figure 9, where the position of the right leg can only be estimated. Researchers have always faced monetary difficulties with purchasing film stock in Hungary; it was necessary to use film stock sparingly. For example, in the 1950s, dances were recorded with film speeds of 12, 16, or 18 frames per second (fps) at several field works, instead of the optimal 25 fps. As a result, fast movements blur, as in Figure 10–11.

Fig. 9. Forward leg gesture is hidden

Fig. 10–11. Fast movements blur

It is especially difficult to recognize the movements of props, such as sticks whose end points follow curving paths with high speed if the fps rate is low. Consequently, the handling of the prop, as shown in Figures 12-14, can hardly be estimated.

Fig. 12–14. Fast movement of the stick is not visible

If a film is made with the intention that the dances will be notated, further technical requirements should be considered. A camera positioned far from the dancers may record a picturesque environment, but, because of the high angle, the dancers appear small in size and at a distance, as in Figure 15. The dance recorded at this occasion included fast heel drops; such small movements, though significant from the point of the local style, can hardly be observed from this film. Similarly, small and sudden movements such as finger snaps are difficult to identify in recordings, as in Figure 16. Even if the forward lifted arms of the dancer facing the band suggest snapping fingers, the proper notation is prevented by poor visibility. It is regrettable because finger snaps are an integral feature of the virtuoso *legényes* dances,[17] often performed with different rhythms that go beyond the usual ostinato eights by changed hands.

Fig. 15–16. Persons too small—details of movements are difficult to observe

The dance was filmed from a unique angle in Figure 17, from above. The constantly altered floor pattern of the four couples can be followed clearly; if movements are simple, notating is fairly easy. If the level of the camera is lower, as shown in Figures 18–19, and several couples are dancing, the research may have problems estimating the hidden movements. For a while, the couple in front in Figure 18 hides the couple behind; the hidden couple can be visible some measures later, as seen in Figure 19.

17. Lit. "as a young man." A male dance type of extremely rich forms and complex rhythmic patterns, danced by Transylvanian Hungarians in Kalotaszeg, Mezőség, and the Maros–Küküllő Midland. Despite its improvisatory character, the dance strictly adjusts to the articulation of the accompanying music. A special structural characteristic of the dance is the segmentation of musical periods in a recurring pattern with opening and closing formulae.

Fig. 17. Recording from above

Fig. 18–19. One couple covers the other temporarily

Apart from the rapidly changing formats, it is obvious that no media can be preserved forever. Analogue video is endangered by demagnetization, long time preservation of digital data does not seem to be solved even today, films are prone to chemical degradation of vinegar syndrome, as shown in Figure 20, and silver mirroring (re-deposition), as demonstrated in Figure 21.[18] Notating dances on paper from films is a way to preserve a cultural heritage using another media, which, in proper conditions, may last for centuries

Fig. 20. Vinegar syndrome

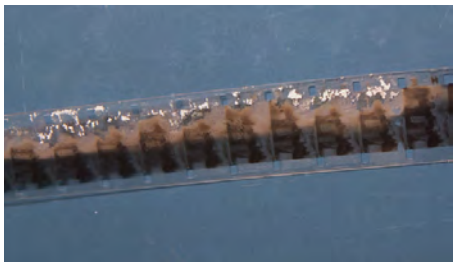

Fig. 21. Silver mirroring on 16 mm film

18. Both pictures were made from the endangered stock in the Film Archive of the Institute for Musicology RCA HAS.

Methods and Practical Considerations

In the following, some practical advice is provided, which may help with notating traditional dances from film and video.

Equipment

1. Viewing and analyzing dance on film requires equipment with which the dance can be observed in normal speed or in slow motion. Certain unusual or complicated movements do require thorough analysis using frame-by-frame investigation, either to understand their content or to reveal their rhythm. Establishing the proper rhythm of movements in silent films is especially difficult and may require counting the number of frames. Formerly, Hungarian notators used a simple device, shown in Figure 22, with a screen of 12x9 cm, the film could be wound by hand. The poorly illuminated small screen raised great difficulties with observing detailed movements. From the beginning of the 1990s, a professional editing table provided a considerably larger screen (see Figure 23), which helped produce better results.

Fig. 22. Meonet 16

Fig. 23. ST–16 Steenbeck editing table

Digital Tools—Special Considerations

2. Today, films and analogue videos are digitized, and notation works are supported by software with several options of replay. To ensure proper results when comparing the length of movements (number of frames), attention must be given to digital formats to match the original recording speed, which might have been set 18 or 16, or even as low as 12 fps. Software used during observation must be matched to the digital file with the appropriate frame rate, and not with the usual 25, 30, or even higher fps. If the recording and replay fps do not match, the software will insert computer generated "half-frames" between the real ones, as shown in Figures 24–27, which may lead to false rhythm identification.

Fig.24–27. Computer generated half frames between real frames

Manuscript Formats

3. Notation manuscripts are usually written on squared paper. Formerly only the generally known 5x5 mm A4 or A3 size squared paper was available. As shown in Figure 28, in the early years of kinetography use in Hungary, in the 1950s, the notator drew the center line of a staff that one square corresponded to the support and gesture columns, without space for a subsidiary column between them; the beat, usually a quarter note, corresponded to two squares. From the late 1960s, the center line of the staff—as shown in Figure 29—was drawn in the middle of a square; the staff became wider, serving space for an inner subsidiary column. Currently, as shown in Figure 30, a pre-printed staff on 2x2 mm square paper models a format for publishing notation, with two inner subsidiary columns. The need can be justified by the fourth beat where several signs such as the horizontal bow, the dynamic sign, the inclusion bracket, the foot hook, the rotation sign, and the place low direction sign are written horizontally side by side. Note the six squares for a beat, which helps the indication of rhythms such as eights or triplets.

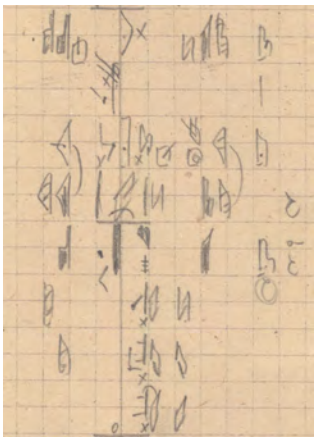

Fig. 28

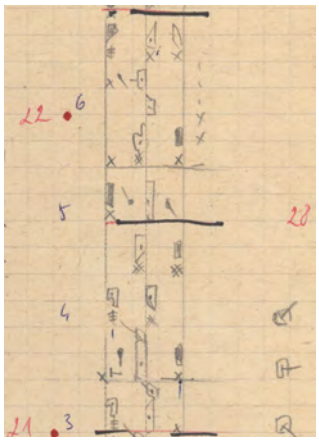

Fig. 29

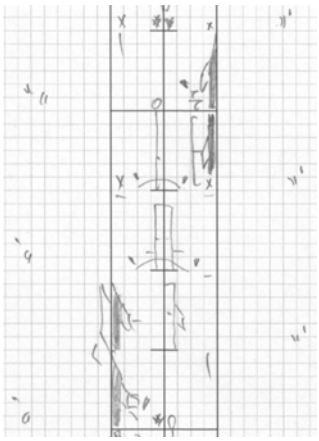

Fig. 30

Labeling and Archive Registry

4. If the notation is registered in a notation archive, it is good practice to indicate the archive ID on each page of the manuscript. If the subject of the work is a dance on an archive film, indicating the film and dance ID is also beneficial for later reference. For example, the dance in Figure 4 is identified in a manuscript page with notation ID Tit.1420, and dance ID Ft.223.4a, where "Ft.223" stands for the film, and "4a" marks the dance in the film logbook.

Structuring the Manuscript

5. Before the actual notation work is started, it is worth watching the whole dance several times. The size and structure of the manuscript needs planning based on the metrical structure of the accompanying music, number of measures on the page, length of a beat, and the length of the dance. Because dance and music have an integrated relationship in traditional dance, it is easier to follow the structure of dance if the number of measures on a page corresponds to a musical section, such as a period or a tune. Depending on the dance, the value of a beat may need a preliminary determination. In Hungarian practice, a beat unit is usually a quarter note, but it is usually re-evaluated to a musical eight count for fast dances such as *legényes*, which are rich in movement content.

Identification of the Performers

6. In a film clip of original traditional dances more than one person may dance and each of them differently, because the dances are improvised. Even though the names of the dancers are recorded in film logbooks, each dancer needs individual identification in the manuscript to facilitate matching the notation and the person. Best practice is to identify dancers by physical appearance (e.g., by clothing, height, approximate age) and not by their spot in the picture, as location may change.

Synchrony of Dance and Music

7. As discussed in the previous chapter, ethnochoreologists consider the synchrony of dance and music essential for analysis. The establishing synchrony when using film or video that includes sound is straightforward. However, special consideration must be taken when a dance on silent film is notated. If the film includes hand strokes, as discussed previously, and the tune, which is usually recorded separately from the dance, is audible, or when the musical notation, made at the occasion of the dance event, is at hand, the notator can define synchrony.

The Notator's Unintentional Synchrony

8. Even if there is no clue for synchrony in a silent film, as soon as the notator selects a staff with a metrical structure (2/4, 3/4, 4/4, and so forth) and starts indicating movements, without even a definite intention, a synchrony is established. See for example Figure 29: the bar lines drawn by the notator with pencil denoted a synchrony when the dance was notated; this synchrony was reconsidered and corrected as new bar lines were drawn by black pen.

Hypothetic Synchrony

9. In spite of missing marks for synchrony in the recordings, former dance folkloristic knowledge may help the notator selecting a hypothetic synchrony. Repetitive patterns such as the vertical upward or downward movements of the center of gravity[19] or characteristic gesture–support structures can be taken into consideration in relation to the downbeats of measures, which are characteristically the same in certain ethnographic regions. Also, a short analysis of notation may reveal whether cadence-like motifs divide the sequence of dance phrases, which can suggest structures of musical sections which the dancer follows. As a result, both the synchrony and the potential accompanying tune can be estimated. However, the fact, that the synchrony could not be established in a recording, or a hypothetical one is applied, must be noted in the manuscript.

Indicating Synchrony in the Manuscript

10. A dance may be accompanied by more than one tune, and a tune may be repeated several times. The identification of the tune, its repeated strophes, and the measure numbers next to the staves help orientation and analysis of the dance. For example, an indication as "B.2.9" identifies tune "B" (a new one played after the first indicated as A), number "2" stands for the repetition of B the second time, and number "9" indicates the measure. The tune and measure identifications must be added to the musical score, which thus becomes an indispensable part of the manuscript as well.

Indicating Synchrony in a Digital Clip

11. A frequent feature of original traditional dances is that short motifs are repeated several times in succession. When these sequences are viewed and reviewed, the notator can lose track of which sequence is being viewed at the

19. A detailed explanation of upward or downward accented movements can be found in János Fügedi, *Basics of Laban Kinetography for Traditional Dancers* (Budapest: Institute for Musicology, RCH, HAS), 43.

moment. Video editing software usually has a function showing the serial number of the actual frame on the screen. This number can indicate the downbeats of measures (or each new rhythmical unit of movements) in the manuscript. Another, technically more sophisticated, solution can be to add measure and strophe numbers as subtitles to the clip. Beyond supporting the retrieval of a section, such identifiers may help with discovering metrical or rhythmic deviations from the usual, expected flow of the dance.

A Movement Phenomenon Unknown

12. Attention has already been given in the introductory chapter to the most important aspect of notating a dance, which is to recognize the essence of movements. Such ability is developing in accord with notation practice, but it may happen in the highly varied movement world of traditional dances that a so far unknown phenomenon is met. A first step toward the solution is to check the published literature. If no result is found, the well formulated problem should be discussed with colleagues and, after a consensus was achieved, a solution proposed.

Interpreting Dance: Spatial Aspects

13. The spatial interpretation of certain movements may be hindered by the two-dimensionality of film and video. Depending on the camera angle, the depth of the picture (as shown already in Figure 9) can be difficult to judge. If the same dance is recorded by two cameras from different angles, such as in Figures 31–32, this difficulty can be overcome. Note the left leg gesture of the woman on the right side of Figure 31 (in bright white shirt, darker skirt). It seems as if her left leg in the air is very near to her supporting right leg. The film frame of the same moment in Figure 32, recorded by another camera from different angle, reveals that the left leg of the same dancer (now in the middle of the picture) is comparatively far from the right.

Fig. 31–32. Dance recorded by two cameras

Interpreting Dance: The Assistance of Environment

14. Notating proper directions and measurement of support movements may be assisted by the comparing the person to the environment in which the film was recorded, such as, for instance, the pattern on the floor. In Figures 33–35 three consecutive steps are illustrated, while the woman was turning and the man progressing backward. The notation can reflect the dance with great accuracy due to the relative placements of feet to the squares of tiles on the floor.

Fig. 33–35. The pattern on the floor helps accuracy of notation

Interpreting Dance: The Significance of Rhythm

15. In traditional dances, the rhythmic variations are just as important as the spatial ones; therefore, careful attention should be paid to the rhythm of movements. Recognizing the rhythm accurately can be challenging, even from film and video that have clear audio. Dancers with advanced skills use a large number of rhythmical variations, the timing of their movements may be elongated or shortened compared to the usual quarter or eighth notes of traditional dance tunes. Sometimes the underlying rhythm of a single movement may alter occasionally; very good dancers may use movement agogic.

Interpreting Dance: Dynamics

16. Beyond spatial and temporal features, traditional dances are rich in dynamic qualities. This realm—beyond the apparently dynamic floor stamps, heel click, and leg hits—is mostly undiscovered in traditional dance notation. For a start, the recommended source in this area too is the Effort theory of Rudolf Laban.[20]

20. Rudolf Laban and Frederick C. Lawrence, *Effort* (London: Macdonald and Evans, 1947).

Context of Expression and Depth of Details

17. When the essence of movement expression is comprehended, the simplest approach to notation should be used, which, however, still carries all the information discovered. Too many symbols may present difficulties for readers to comprehend the movement from the notation. The notator must strive to find a sensitive balance by choosing the appropriate depth of detail needed to record the expressive content. Prior experience in the dance genre and dance knowledge of a potentially skilled reader is both essential to a successful outcome.

Preservation

18. Perhaps it is needless to say that notation manuscripts must be copied and the copies stored separately. The best practice is to register the manuscripts in archives that take care of their long-time preservation.

Closing Remarks

The incomparable advantage of kinetographic notation of a dance performance is that it presents and highlights the *concepts of movements*, which no recording technology is capable of doing, no matter how developed it is. Movement concepts of dance must be best known by their creators, the choreographers of stage works. However, most choreographers seem to lack the required level of notation knowledge to document their works for later understanding and interpretation. Similarly, researchers of traditional dance are not usually able to notate the dances selected as subject of their investigation.[21] Consequently, when needed, a group of specially trained experts, the notators, mediate dance from performance into symbols. This interposition emphasizes the notators' particular responsibility for the proper conceptualization of movements. With the time passing, validity of stage work reconstructions and analytical theories may depend on scores as the only source available.

21. In Hungary, the scores of filmed traditional dances were usually made by Ágoston Lányi. Further published examples for researcher–notator separation are: Lisbet Torp, *Chain and Round Dance Patterns: A Method for Structural Analysis and its Application to European Material*, 3 vols., (Copenhagen: University of Copenhagen, 1990), notator William Reynolds; Anca Giurchescu with Sunni Bloland, *Romanian Traditional Dance: A Contextual and Structural Approach* (Mill Calley, CA: Wild Flower Press, 1995), notator Jean-Philippe Van Aelbrouck; Adrienne L. Kaepler, "Method and Theory in Analyzing Dance Structure with an Analysis of Tongan Dance," in *Dance Structures*, edited by Adrienne L. Kaepler and Elsie Ivanchich Dunin (Budapest: Akadémiai Kiadó, 2007), 53–102, notator Judy Van Zile.

The notator of staged dances, as a participant in the process of creation, has the advantage of viewing dance in live performance without the hindrances of film recordings listed above, just as well the possibility of discussing their doubts with the creator or dancer. His or her understanding can, therefore, reflect the original intentions. However, there is no chance to control the notator's decisions later as usually neither the notation sessions, nor the discussions, are visually recorded. The notator of original traditional dances faces the responsibility of conceptualizing movement exclusively from film or video. However, as long as the original recording of dance can be viewed, his or her precision and analysis can be controlled and verified by another expert or a new generation of notators.

As the current state of dance literacy shows, dance notation has not yet reached the level of general acceptance and use, even if the development of the analytical tool, the Laban kinetography, has been progressing for more than eighty years. Its present state among dance sectors represents a beginning of literacy of dance, showing a potential of practiced by a wide circle of choreographers, dancers, and researchers in the future. However, results of dance research in fields such as education, aesthetics, ethnography, or even history, can be verifiable only if its subject, the dance, is notated, and conclusions are drawn after the analysis and interpretation of notated dance. Without dance literacy, there is no chance to construct choreology, the academic disciplines of the dance itself.

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List of Illustrations

The pictures presented were selected from digitized 16 mm films. Below the archive data of the source material is listed. The Ft. abbreviation represents the Film Archive and the Tit. represents the abbreviation of the Notation Archive of traditional dances at the Institute for Musicology RCH HAS. The film ID is followed by the residence of the dancer (in brackets the current name of the location and the country, or only the country if the name is currently the same), and the year of research. The notation ID is followed by the residence of the dancer, the name of the notator, and the year of notation. Further details of sources can be found in the FILMS and DANCE NOTATIONS databases of the *Knowledge Base of Traditional Dances*.

Fig. 1–2: Ft.785, Inaktelke (Inucu, Romania), 1972.
Fig. 3: Ft.30, Hadikfalva, Istensegíts (Dorneşti, Ţibeni, Romania), 1948.
Fig. 4: Ft.223, Simonfa (Hungary), 1954.
Fig. 5–8: Ft.492, Öregcsertő (Hungary), 1961.
Fig. 9: Ft.223, Simonfa (Hungary), 1954.
Fig. 10–11: Ft.504, Gyimesközéplok, (Lunca de Jos, Romania), 1962.
Fig. 12–14: Ft.242, Mándok (Hungary), 1955.
Fig. 15: Ft.208, Lakócsa (Hungary), 1954.
Fig. 16: Ft.681, Magyarlapád (Lopadea Nouă, Romania), 1969.
Fig. 17: Ft.30, Hadikfalva, Istensegíts (Dorneşti, Ţibeni, Romania), 1948.
Fig. 18–19: Ft.206, Vizvár (Hungary), 1953.
Fig. 24–27: Ft.223, Simonfa (Hungary), 1954.
Fig. 28: Tit.71, Marosbogát (Bogata, Romania), notated by Ágoston Lányi in 1959.
Fig. 29: Tit.252, Tardoskedd (Tvrdošovce, Slovakia), notated by Ágoston Lányi in 1967.
Fig. 30: Tit.1397, Magyarózd (Ozd, Romania), notated by János Fügedi in 2007.
Fig. 31–32: Ft.174, Sárpilis (Hungary), 1952.
Fig. 33–35: Ft.529: Méra (Mera, Romania), 1963.

Bibliography

Aberkalns, Sandra. "Inside the Glossaries of the Dance Notation Bureau." In *Proceedings of the Twenty-eighth Biennial ICKL Conference*, edited by Marion Bastien and János Fügedi, 106–120. S.l.: International Council of Kinetography Laban, 2014.

Fügedi, János. *Basics of Laban Kinetography for Traditional Dancers.* Budapest, Institute for Musicology, Research Centre for the Humanities, Hungarian Academy of Sciences, 2016.

———, gen. ed. *Knowledge Base of Traditional Dances*. Budapest: Institute for Musicology RCH HAS, 2016. Available at: dx.doi.org/10.23714/nzntk.ntt.ind.en.

Fügedi, János, and Lívia Fuchs. "Doctrines and Laban Kinetography in a Hungarian Modern Dance School in the 1930s." *Journal of Movement Arts Literacy* 3, no. 1 (2016), Article 3. Available at: http://digitalcommons.lmu.edu/jmal/vol3/iss1/3.

Fügedi, János, and András Vavrinecz. "Unheard but Visible: Defining Dance and Music Synchrony in Silent Films." *Acta Ethnographica Hungarica* 60, no. 1 (2015), 171–183.

Giurchescu, Anca, with Sunni Bloland. *Romanian Traditional Dance: A Contextual and Structural Approach*. Mill Calley, CA: Wild Flower Press, 1995.

Hutchinson, Ann. "Bournonville Project." *Action! Recording!* 3 (1976): 6–7.

Kaepler, Adrienne L. "Method and Theory in Analyzing Dance Structure with an Analysis of Tongan Dance." In *Dance Structures*, edited by Adrienne L. Kaepler and Elsie Ivanchich Dunin, 53–102. Budapest: Akadémiai Kiadó, 2007.

Laban, Rudolf, and Frederick C. Lawrence. *Effort*. London: Macdonald and Evans, 1947.

Martin, György. *Motívumkutatás, motívumrendszerezés: A sárközi–Duna menti táncok motívumkincse* [Motif Research, Motif Classification: Motifs of the Sárköz-Danube Region]. Budapest: Népművelési Intézet, 1964.

Martin, György, and Ernő Pesovár. "A Structural Analysis of the Hungarian Folk Dance: A Methodological Sketch." *Acta Ethnographica Academiae Scientiarum Hungaricae* 10, no. 1–2 (1961): 1–40.

———. "Determination of Motive Types in Dance Folklore." *Acta Ethnographica Academiae Scientiarum Hungaricae* 12, no. 3–4 (1963): 295–331.

["Minutes of the First ICKL Conference in Addlestone."] In *Conference Proceedings 1959-1977*, compiled by Lucy Venable, 1–5. S.l.: International Conference of Kinetography Laban, 1996.

Schrifttanz 1: Methodik, Orthographie, Erläuterung. Wien/Leipzig: Universal Edition, s.a.

The Bournonville Heritage. Reconstructed by Knud Arne Jürgensen, notated by Ann Hutchinson Guest, assisted by Marion Bastien. London: Dance Books, 1990.

Topaz, Muriel. "The Balanchine Project: A Brief History." *Dance Notation Journal* 6 (1988–89): 1–2.

Torp, Lisbet. *Chain and Round Dance Patterns: A Method for Structural Analysis and Its Application to European Material*. 3 vols. Copenhagen: University of Copenhagen, 1990.

Szentpál, Mária. *Táncjelírás: Laban-kinetográfia* [Dance Notation: Kinetography Laban]. Vols. 1–3. Budapest: Népművelés Propaganda Iroda, 1969–1976.

Szentpál Olga. "Versuch einer Formanalyse der Ungarischen Volkstänze" [An Attempt at the Form Analysis of Hungarian Traditional Dances]. *Acta Ethnographica Academiae Scientiarum Hungaricae* 7, no. 3–4 (1958): 257–335.