

## Alan Lomax and Choreometrics

by John Bishop

In *Envisioning Dance on Film and Video*, Judy Mitoma ed., Routledge Press, 2002

Alan Lomax makes you think of Walt Whitman's declaration "I am large, I contain multitudes." A pioneer in field recording of traditional music, and one of the founders of the Library of Congress Folk Music Archive, Alan often characterized his mission as bringing the best recording technology to the world's traditional singers and musicians, so that their art can take its rightful place as an equal beside the best classical and commercial music. His exquisite taste and a flair for eliciting great performances led to recordings of intense vitality, many now available on more than 100 CDs issued by Rounder Records. His important collections include secular and sacred music of the American South, the Caribbean, Italy, Spain, and the British Isles. While living in England in the 1950s, he compiled album series of world music for BBC and Columbia Records. Feeling that performance style was deeply embedded in culture, he worked with Victor Grauer and Roswell Rudd (musicologists), Conrad Arensberg, Edwin Erickson, Barbara Ayres and Monika Vizedom (anthropologists), a Norman Berkowitz (computer programmer and statistician) to develop Cantometrics – "a method for systematically and holistically describing the general features of accompanied or unaccompanied song. With the cantometric system the listener can evaluate a song performance in ways that supplement the conventional measures of melody, rhythm, and harmony."

Using multivariate factor analysis, a type of statistics that only became possible with the emergence of computers, they found that elements of performance style were consistent within cultures, and that clusters of these style elements correlated with elements of productivity and social organization. Raymond Birdwhistell suggested, "Humans move and belong to movement communities just as they speak and belong to speech communities." And that examining world dance might unlock additional structural elements and correlations underlying the relationship between social organization and expressive culture. Alan teamed up with movement specialists Irmagard Bartenieff, and Forrestine Paulay to examine film of the world's dance forms. The following quotes are from their article, *Dance Style and Culture* –

"We regard the vast, endlessly provocative, prejudice-laden, existing sea of documentary footage as the richest and most unequivocal storehouse of information about humanity. We do not agonize over its limitations or those of the persons who shot or edited it. We come to it with an observational approach like that used by the ordinary person in everyday life, which enables him to differentiate constantly between different classes of visual experience and to behave appropriately in relation to these varieties of experience."

"The aim of the present investigation becomes one of recording and noting regularities and contrasts in movement patterns sufficiently frequent and gross to produce units universally applicable in cross-cultural studies."

"Choreometrics ignores the problem of the unit; it is not concerned with a step-by-step, phrase by phrase result so that the dance can be reproduced in its entirety from a written score. It reaches out to another level, to the level of identification where signals,

constantly flowing in the kinesic stream, characterize all present in terms of age, sex, occupation, and most especially, cultural affiliation.”

“The pattern and succession of patterns of step and movement were omitted from our choreometric descriptions...because it was felt they referred to cultural but not cross-cultural pattern.”

“Dance is considered first as a representation and reinforcement of cultural pattern and only secondarily as an expression of individual emotion. Neither the expressive function of dance nor the emotional outlet it gives each dancer, whether modern choreographer or folk dancer, is denied. What we have seen in scores of films, however, leads inexorably to the conclusion that many aspects of movement, once thought to be idiosyncratic, vary by culture type rather than from person to person.”

“Choreometrics tests the proposition that dance is the most repetitious, redundant, and formally organized system of body communication present in a culture. The dance is composed of those gestures, postures, movements and movement qualities most characteristic and most essential to the activity of everyday and this crucial to cultural continuity. By treating these elements redundantly and formally, dance becomes an effective organizer of joint motor activity. Dance supplies the metronome to meter and becomes the regulator of the rhythm of social interaction. Dance captures, regulates, or orders the energy and attention of groups of people, and thereby acquires the weight of general community approval. Thus dance functions to establish and renew consensus at moments when a society, without further discussion or explanation, is ready to act in concert.”

Collecting the film sample, analyzing the footage, running the computer programs and evaluating the correlations represents a monumental effort in an anthropological tradition that valued comparative analysis and accepted generalization. Unfortunately this work came to fruition as the field was undergoing a sea change and became suspicious of cross-cultural comparisons and simplification of expressive culture. And anthropology divided into quantitative and interpretative factions. The quantitativist practitioners who might be expected to admire his precise observations and rigorous analysis were horrified at his expansive interpretations and extrapolated results. The interpretativists distrusted any system that reduced the magic of art to patterns that revealed themselves through computer analysis. Ironically, the filmed and videotaped sample of ethnographic dance has grown exponentially in the last thirty years making it possible to test the underlying assumptions of the system and answer the many questions about art and culture that it raises.

quotes are from

***Dance Style and Culture***, by Alan Lomax, Irmagard Bartenieff, & Forrestine Paulay in ***Folk Song Style and Culture*** Alan Lomax ed. American Association for the Advancement of Science, Publication # 88, Washington DC 1968.