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**The effect of *Kabuki* training on the Western performances of
Western acting students**

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University of Hawaii, 1985

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THE EFFECT OF KABUKI TRAINING
ON THE WESTERN PERFORMANCES OF
WESTERN ACTING STUDENTS

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By

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ABSTRACT

THE EFFECT OF KABUKI TRAINING ON THE WESTERN PERFORMANCES OF WESTERN ACTING STUDENTS

Robert William Bethune

This study develops a methodology for the analysis of live performance, based on work in Kabuki acting, Laban movement analysis, speech science, dance ethnology, and ethnomusicology, particularly the work of Ann Hutchinson, Cecily Dell, Milton Cowan, and Alan Lomax.

This method of performance analysis is applied to performances by Nakamura Matagoro II, Chief Instructor in Kabuki at the National Theater of Japan, who conducted a program in Kabuki acting at the University of Hawaii during the 1978-1979 academic year. The results show the nature of his styles of performance.

The same method is then applied to the performance patterns of a group of Western acting students participating in the program conducted by Matagoro. These students had prior experience in Western performance, but not in Asian styles. The goal of the analysis was to show what changes, if any, occurred in their Western performance patterns during their intensive study of Kabuki acting. To this end, all student performance patterns in Western material were compared to those of Matagoro, their instructor in Kabuki. These analyses show how the student performances changed over the course of the program.

The general conclusions drawn are that the group shows a dominant stability of performance pattern, that there is some assimilation of Kabuki performance patterns, that the students tended to place Kabuki and Western acting in different worlds, and that the assimilations shown by the students tend to be lasting.

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Chapter I
Introduction

The Kabuki-Hawaii program

During the academic year 1978-1979, a special program in Kabuki theater, known as "Kabuki-Hawaii 1978-1979", was conducted at the University of Hawaii at Manoa. Nakamura Matagoro II, Chief Instructor in Kabuki at the National Theatre of Japan, or his assistant Nakamura Matashiro, was in residence from September to March to teach Kabuki acting techniques. Other well-known Japanese artists were brought to Hawaii for varying lengths of time to teach Kabuki music and to assist in technical theater. Under Matagoro's direction, an adaptation in English of the well-known Kabuki classic Kanadehon Chushingura was presented in March and April under the title of The Forty-Seven Samurai. This production toured the mainland United States after closing in Hawaii.

This program offered a unique opportunity. A number of students enrolled in the program had substantial prior training or experience in Western drama and theater, while having little or no prior experience in Asian performance styles. The situation raised an intriguing problem: what changes would take place in the performance behavior of such students? A second question immediately presented

itself: how does one go about describing performance behavior? If the students picked up elements of Kabuki style, how would such elements be identified? The opportunity existed to make a contribution to the study of Kabuki acting style, and to the methodology of performance analysis.

Basic assumption of this study

This study proceeds on the basic assumption that intensive study of Kabuki acting techniques over the course of a year will tend to produce some level of assimilation of performance behavior, such that the student's performance behavior in the Western repertory will tend to show change that can be related to Kabuki performance style.

Such assimilation is not expected to take the form of wholesale adoption of Kabuki acting practices. The actors in this study all have substantial prior training or experience. One would expect that such background would produce an actor with a reasonably secure style and a certain sense of the interpretation of Western drama. Such an actor would not be expected to adopt the technique of Kabuki in a literal fashion. Rather, in this study one looks for the assimilation of overall characteristics in the manner of handling the voice and body.

To put it simply, one does not expect a performer working in a realistic modern American play such as The Dark at the Top of the Stairs to introduce mie, extreme vocalizations, Japanese dance technique, and so forth. However, one may expect alteration or assimilation of Kabuki performance patterns in a way related to the

Kabuki training, but one should expect these alterations or assimilations to be subtle.

This does not necessarily mean that the actor is expected to become more like a Kabuki actor. It may be that the actor will trend away from the Kabuki model. For example, an actor might decide that Kabuki and Western acting are different artistic worlds, as are Western acting and ballet. Such a decision might lead to a positive avoidance of anything Kabuki-esque, which could take the form of doing the opposite of Kabuki style.

Given this assumption, one must look at both movement toward Kabuki style, and movement away. To do this, one will need a tool that permits performance analysis. This brings up one of the principal problems of this study: the problem of how to analyze the performance patterns of an actor in behavioral terms.

The methodological problem

The methodological problem to be solved in this study is essentially a problem of comparing the student's performance behavior to the performance behavior of their teacher, Matagoro. Ideally, such a comparison should be done using a systematic, quantifiable, repeatable methodology, focusing on the actual vocal and movement behavior exhibited by the performer in the performance. Such a methodology ideally would be sufficiently general to analyze a wide variety of performances. It should translate a theory of performance behavior into an instrument for analyzing and comparing performances.

The first step is to examine extant literature on Kabuki performance in search of existing ideas for the description of performance behavior as exhibited by Kabuki actors. Then, using ideas from the areas of Laban movement analysis and speech science, one constructs a general method for describing performance behavior in terms of specific categories of vocal and movement behavior, a method that permits systematic comparison of different performances and statistical testing of the results of such comparisons. The literature used in the development of the methodology of this study is presented in Chapter II, the theoretical background for the methodology used is presented in Chapter III, and the system itself is given in Chapter IV. A number of numerical procedures are used in the analysis process. These are presented separately in Chapter V.

The next step is to analyze and describe Matagoro's performance behavior, using the methods developed in prior chapters. The nature of Kabuki acting becomes an important part of this analysis, since Matagoro's performance patterns are drawn from the well-developed traditions of the Kabuki theater. By describing Matagoro's performance patterns, one is in fact describing how one particular master actor shows established Kabuki performance patterns appropriate to the genre and the material performed. This material is presented in Chapter VI.

One must then describe the student performances. To do so, the same system used to describe Matagoro's performance will be applied to the performances done by the students. The process the students went through during the Kabuki-Hawaii program is described later on in this

chapter, as is the process they went through for this study. The analyses of their performances are presented in Chapter VII.

The nature of the student performances must be compared to the nature of Matagoro's performance in terms of the methodology developed in Chapter IV. By collecting samples of their performances on videotape in the first month of the program and again in the last month, before-and-after samples of their performances can be compared to samples of the performance of their principal instructor. In this way, the changes in their performing styles can be described and analyzed. The results are discussed along with the analysis of each student's performance in Chapter VIII; overall conclusions are presented in Chapter IX.

The computer programs used in the study form the Appendix. They carry out all data processing and table formatting operations. Written in Microsoft BASIC, these programs could be run on a wide variety of computers. Other researchers may find something of use in them.

The process of the Kabuki-Hawaii program

Throughout the Kabuki-Hawaii program, Matagoro used the traditional pedagogy of the Kabuki theater: observation and emulation. Matagoro or his assistant would perform the passage which the students were to learn. The students were then to attempt to perform the passage exactly as it was performed for them. Matagoro and his assistant would then correct the students, often by physically adjusting the posture and position of the student's body. As needed,

the instructors would repeat the demonstration of the material, and the cycle would begin anew.

Initially, the student would be expected to imitate the instructor's performance as closely as possible. Eventually, this restriction was loosened slightly; though never allowed to deviate from the patterns laid down by the instructor, the student was encouraged to bring something personal to the performance and to make the performance pattern laid down personal as well. This is a fine distinction, but a very important one. The learning process aimed at producing a living performance, not a lifeless reproduction of a model. Therefore, after the instructor was satisfied that the performance pattern had been properly learned, there was a shift in emphasis from imitation of the instructor's exact performance to emulation of the instructor's handling of the material.

The program began in early September. The first weeks were devoted to basic skills: walking, posture, basic Kabuki dance drills, sword handling, wearing the kimono, fan technique. During this period, the students absorbed principles of movement that were to support all their later character work. One student observed of this period that the principle difficulty was not to learn the Japanese movement patterns, which were kept quite simple, but to learn to do them without using the Western movement patterns born of a lifetime of habit.

After a relatively short time, the students began to work on short scenes from the adaptation of Chushingura. These scenes were studied in the original Japanese, as an aid to learning Kabuki vocal style.

The same pattern of demonstration and imitation was used to teach the vocal behavior patterns as was used to teach the movement. Movement patterns appropriate to each scene were also taught during this period. Each short scene was in fact drawn from a scene in the play itself, but usually involved only about a page of material, often as little as three to five lines of dialogue. These scenes were practiced and rehearsed daily.

Eventually, when the students were gaining a command of Kabuki vocal patterns, the transition to English translations of the short scenes was made. These English translations were drawn from the English adaptation of the play, then in progress. In mid-December, the students were examined by requiring them to perform the scenes they had been studying. Also, auditions were held in which the students were allowed to demonstrate their ability to perform the scene material they had studied for the role or roles that most interested them. As of the end of December, the basic decisions as to who would play what role had been made. Most major roles were double-cast, and everyone in the cast played minor roles. People cast in a major role alternated between that role and minor roles.

When classes resumed in January, the students began character study on the roles in which they had been cast. By February, a working version of the English adaptation of the play was in use, and the character work was based on the full-length scenes as they would be performed, barring revisions of the adaptation. From this time on, the work in class was essentially the same as the early stages of rehearsal, except that the students continued to build upon the basic

foundation of Kabuki acting technique while learning the details of their individual roles.

In early April, evening rehearsals began. The student musicians, who had been meeting separately, began participating in evening rehearsals. Daytime classes continued.

The production opened for a four-week run in May. At this point, the participation of the Japanese artists was complete, and they returned to Japan. The production had a very successful run at Kennedy Theater; extra performances had to be scheduled to accommodate audience demand.

After a brief dark period, during which the touring set was constructed, the production toured across the continental United States. The program finally ended with three performances of The Forty-Seven Samurai at Harvard University, and the dispersal of the cast.

The process of this study

This writer solicited subjects for this study in the first week of the Kabuki-Hawaii program. As soon as possible, those students who were interested were interviewed. The nature of the study was explained to each interested student. Those students who had the prior experience or background required were asked to prepare audition material of ordinary audition length. In all, there were ten students out of the thirty-three enrolled in the Kabuki-Hawaii program who had significant prior experience in Western theater but little or no prior

Asian theater experience. Of these, six students were willing to prepare and perform short pieces from the Western repertory to be recorded on videotape early and later in the program. In one other case, videotapes of a performance done prior to the program were available, and it was possible to videotape a performance done after the program was concluded.

Their performances of these scenes were videotaped in September. These scenes were then videotaped again in May. In each case, the student was allowed to perform the scene in whatever way came naturally to them. They were to think of this as if it were an audition situation, and to choose the kind of material they would choose for such a situation. Since the students selected for this study all had a certain amount of prior theatrical experience, such an instruction was easily interpretable. The videotapes collected through this process are described in Chapter VI.

A great deal of videotape was also recorded of the demonstrations done by Matagoro. Some of this material was collected at special sessions conducted for the purpose. The rest was collected during actual class sessions. This material, and other material which became available later, is described in Chapter V.

At the time this writer collected these materials, no method for analyzing them existed. Nor was any progress made toward a methodology until later in the Kabuki-Hawaii program when the first tentative experiments in analyzing Matagoro's performance began. Knowing that movement analysis would be important, the writer began studying Labanotation in September, and continued that study through May. The

first analyses of Matagoro were done in the most simplistic way possible, looking for such contrasts as motion versus holding still, speaking versus not speaking, and so forth.

Only upon reading Alan Lomax's Folk Song Style and Culture (see Bibliography) did the work of constructing a methodology for performance analysis begin in earnest. A number of Laban based studies, reviewed in Chapter II, also contributed a great many useful insights.

From the beginning, the intention was to develop a system capable of analysing a wide variety of performances. Knowing that the system would have to be able to deal with both Kabuki and Western acting encouraged this view, as did the desire to create a system that could be of use for other performance analysis projects.

A trial system was developed, which was similar to the present system, but much larger. It was tested by application to videotapes of American student performances in five different performance genres: Kabuki, Kuttiyattam, Sendratari, Peking Opera, and a production of Uncle Vanya done in a Western theatrical-realist style. These materials were chosen more or less fortuitously: they were available; the intuitive impression was they they were stylistically considerably different from one another; they represented a wide range of world cultures. At the same time, they were all performed by American students: an essential parallel to the problem of analyzing the materials gathered for this study.

The purpose of this trial experiment was to determine if the technique used in this study--measurement of performance patterns

through measuring a large number of separate parameters--would work. The goal of the trial system was to demonstrate the existence of stylistic differences between genres of performance known to be considerably different from each other. If this approach was capable of demonstrating such differences at the genre level, it would be reasonable to continue to refine the approach at the level of the performance of individual actors. If this approach could not convincingly demonstrate genre differences of style, there would be little point in using it on the work of individual actors.

The results of this trial experiment were encouraging. Each of the five performance studies yielded profiles that were immediately and obviously distinguishable by inspection. The results showed that the system could distinguish between styles on an overall genre basis with great clarity. It also brought out interesting and subtle similarities between the performance styles, indicative of the ability of the system to detect the underlying factor that all the performers were American students, not natives of the associated cultures.

The system was refined in the light of the trial experience, and the work of analyzing the student material was begun. From time to time further refinements were made, and the student analyses done up to that point were repeated. Eventually it became apparent that the process of refinement could have gone on forever. A more or less arbitrary halt was called, and the system finalized. Using this final version of the system, the student materials and the materials available on Matagoro were re-analyzed; the result of that analysis forms the data base used in this study.

The presentation of that data base in this study and the manipulations of it are done by computer, producing the charts and tables presented here. The programs used to carry out these operations are presented in the Appendix.

A number of different kinds of equipment were used in the course of this study. The bulk of the video recording was done using a Sony DXC-1610 portable color video camera and a Sony VO-3800 portable 3/4" videocassette recorder. On a few occasions when this equipment was not available, recordings were made on a Sony AVC-3400 1/2" EIAJ format video recorder/camera combination. For review, the recordings were copied on VHS videocassettes and played back on a Panasonic NV-8200 VHS deck with random access capability, which greatly simplified rapid location of program segments. Video playback was done through a Sony CVM-1250 color video monitor, using a Koss Pro-4A headset to review the audio portion of the videotape. Computer analyses were done on a Tandy Corporation TRS-80 Model III with 48K RAM.

Machine analysis of the recordings was not used. Of course, machine analysis of the video portion of the recordings was not possible. Machine analysis of the audio portion of the tapes was available, but was not used for the following reasons.

Machine analysis of an audio tape requires a recording of sufficient quality that extraneous noise is not a problem. Such recordings are difficult to obtain under conditions that reflect the normal circumstances of live performance. Providing a natural atmosphere for performance seemed more important than using machine analysis.

Audiences respond to performers, and vice versa, on the basis of direct visual and aural perception of their respective behavior. On the one hand, it seemed appropriate to use the same equipment to study performances as audiences use to perceive them--eyes and ears. On the other hand, the relation between data generated by a machine analysis and the experience of the audience is problematic. It may be very difficult to show that a given pattern apparent in a machine analysis is actually perceived by the audience or evokes a response from the audience.

Movement scores, such as Labanotation scores, were not used. It became apparent that for the purposes of this study a moment by moment analysis is not required, since the focus is on the characteristic behavioral elements shown by the performer rather than on the moment by moment behavior. Also, the Labanotation score would produce an extra layer of interpretation between the performer and the analysis, since the score would in fact be a product of an intermediate analysis of the movement by the writer of the Labanotation score. For this study, it is much better to maintain as close a contact as possible with the material of performance itself, to avoid introducing spurious observations and conclusions.

Summary

In sum, then, this study contains six major elements: a review of extant ideas on Kabuki performance, a generalized methodology for performance analysis, a study of the performance patterns of a

recognized master actor, studies of the performance patterns of his students, comparisons of student and master performances, and conclusions on the level and nature of assimilation of Kabuki performance patterns by Western acting students exposed to a long and intensive training experience in Kabuki acting style.

Chapter II

Literature

Kabuki

A considerable literature exists in English on the Kabuki theater. Brandon's Asian Theatre: A Study Guide and Annotated Bibliography (see Bibliography) lists fifty-odd works, including those devoted primarily to translations of plays. A complete review of this literature is not warranted here. For the purposes of this study, one looks to this body of literature for two things:

First, one must search for descriptions of the vocal and movement behavior of the Kabuki actor in performance. Since this study involves Kabuki acting style, one must turn to the existing literature on Kabuki acting in search of a model of Kabuki performance that one can apply to the material one collects on Nakamura Matagoro and his American students.

Second, one must search for a method of describing and comparing performance behavior. One must address the total behavior of the performer, both movement and voice. Actors do not restrict themselves to expression through movement or voice alone; they express themselves with the full resources of the body. One must ascertain whether the existing literature contains any model of Kabuki acting as performance

that one can adapt to this study. Such material is relatively uncommon. There are few studies in Western languages which offer the kind of information on the vocal and movement behavior of the Kabuki actor in performance needed for this study. Of these, five works have been particularly useful in the development of this study.¹

These are Scott's The Kabuki Theatre of Japan,² Leiter's "An Essay on Kabuki Acting,"³ Brandon's "Form in Kabuki Acting,"⁴ Iacovleff and Elisseeff's Le Theatre Japonais (Kabuki),⁵ and Ernst's The Kabuki Theatre.⁶

These five may be conveniently considered in two groups, according to the approach they take to Kabuki performance. In Scott, Leiter, and Brandon, one finds the "kata" approach, while in Iacovleff and Elisseeff and in Ernst, one finds what might be called the "observational" approach. In the following section, one defines these approaches and discuss the work of these writers.

¹ All references to these works are to the editions cited. Page numbers are given in the text.

² A. C. Scott, The Kabuki Theatre of Japan (New York: Collier, 1966).

³ Samuel Leiter, "An Essay on Kabuki Acting," Thesis University of Hawaii, 1964.

⁴ James R. Brandon, "Form in Kabuki Acting," in Studies in Kabuki, James R. Brandon, William P. Malm, and Donald H. Shively (Honolulu: University Press of Hawaii, 1978).

⁵ A. Iacovleff and S. Elisseeff, Le Theatre Japonais (Kabuki) (Paris: Jules Maynial, 1933).

⁶ Earle Ernst, The Kabuki Theatre (1956; rpt. Honolulu: University Press of Hawaii, 1974).

Kata system approaches

As Brandon and Leiter point out, in the Japanese literature on Kabuki, the question of performance style is usually discussed in terms of kata. The word kata literally means "form," and refers to the use of established patterns of movement and vocal behavior, music, costuming, make-up, dialogue, dramaturgy, sets, and properties. The kata patterns are very precisely set by the tradition of the acting families, different lineages having different kata for the same play. Specific movement and vocal kata are usually the business for a certain moment in a certain play; each actor playing the scene according to the kata of his lineage. In the kata system, one also finds various kinds of performance patterns, such as mie and roppo, which can be applied in many different scenes. Devices which structure dialogue in various ways, such as shichigocho and watarizerifu, are part of the kata system. The kata system has even more general levels, including terms for overall styles of performance and terms for various kinds of plays. Hence, the concept of kata embraces patterns of performance at all levels, from what is considered in the West as stage business, to what is considered in the West as dramaturgy, and including much of what is considered in the West as design.

Brandon, Scott, and Leiter approach Kabuki acting through exploration of the kata system. Each gives his definition of kata, sets forth the major subdivisions of the kata system, and gives examples of representative kata. The reader gains an impression of the nature of Kabuki acting through the accumulation of impressions

gathered from the examples provided. They give similar accounts of movement and vocal kata, discussing mie, roppo, and tate, among movement kata, and describing warizerifu, shichigocho, tsurane, and other devices for structuring dialogue. For example, they describe the movement of the head used in mie and give brief descriptions of limb movement and body position. Particular devices used in mie are given, such as the handling of the kimono during mie, and some indication of the relationship with the music, dialogue, and dramaturgy is given. Similar treatment is given to other major classes of kata, such as roppo and tate. In each class, examples from important Kabuki plays are given. None of the three gives an extended treatment of vocal delivery as such; they pay much more attention to various devices used to structure dialogue. Although all three remark on the unique sound of the Kabuki vocal performance, their discussions of vocal quality and diction are too brief to convey a strong impression of the sound patterns of the Kabuki actor.

A. C. Scott

A. C. Scott devotes Chapter VI of The Kabuki Theatre of Japan to "The Dance in the Theatre" and Chapter VII to "The Actor's Technique." He discusses dance under three headings: mai, or formal dance; odori, or popular dance, and shigusa, dance involving elements of mime. His discussion of kata is divided among five principal headings: mie, roppo, tate, ito ni noru, and serifu.

Scott is primarily concerned with surveying some of the special techniques which make Kabuki acting distinctive. He is less concerned with presenting a thorough technical analysis of performance behavior. Brief descriptions of performance patterns are mingled with associated information on the history of Kabuki, its social background, and its staging.

His approach to discussing performance behavior varies. In discussing mie, for example, he devotes only a few lines to describing the movement patterns of mie, but gives a full paragraph to the esthetic effects mie create. On the other hand, in discussing roppo, he devotes all his attention to the movement patterns involved, and deals with the esthetic effect in only one line.

Scott very usefully tends to give indications of rhythm, tempo, and dynamics, though occasionally he does omit these. Sometimes it is possible to gain some idea of the movement qualities involved in the performance patterns he describes through his attention to dynamics and through his description of esthetic effects.

His chapter on the dance is largely devoted to describing the staging of a number of dance plays. However, he does include some useful pieces of information on the movement behavior of the dancer. He stresses that the technique of the dancer is also very important in the movement technique of the actor, noting the close historical association between dance and Kabuki.

He mentions that mai and odori are distinguishable by rate and footwork. Mai, he notes,

consists of slow, dignified movements and the use of a special foot technique known as suriashi or sliding step. In this the foot is moved along the ground without lifting the heel. Odori, on the other hand, is characterized by more gay, rhythmical movement and swift footwork. There are different gestures of the hands and head for character types, and character portrayal is an important feature of this type of dancing (p. 84).

In this, the rate of movement, the rhythm of the movement, and the actual locomotory pattern are seen as distinguishing characteristics.

He gives an interesting definition of dance posture. "While standing, there should be a perpendicular line running from the neck to the heel. The line of the shoulders and line of the feet must be diagonally placed to the audience. A diagonal is regarded as fundamental and the dancer sets his whole body to the corners of the stage" (p. 87). There are two quite distinct concepts here: an internal relation of the parts of the body and an external relation to the performance space. The two are independent, as one could take a diagonal relationship to the stage regardless of the internal relationships in one's body. Scott sees this particular combination of these two factors as essential in dance posture.

On the same page, he mentions that Kabuki dance is usually accompanied by a text, and that the dancer must "know what the words are expressing, concentration on form at the expense of this deprives the dancing of soul. The dancer must know what he is dancing besides how he is dancing." Here Scott identifies a fundamental requirement for the dance movement: it must convey something to the audience in relation to the text that accompanies it, that "something"--cognitive, emotional, or esthetic--being conveyed by the dance movement.

Scott focuses on the movement of the head and face in mie. He describes senkai, the movement of the head in mie: the actor "moves his head several times with a circular motion, . . . and finally ceases the action either full face or full profile to the audience." He describes the eye pattern, nirami: the actor's "eyes are dilated as though about to leap from their sockets and the pupils slowly turn inwards." He mentions that a mie can be performed either sitting or standing. "A standing position is required for the most powerful type of mie and in this the heels may sometimes be together or sometimes apart; at other times the actor supports his body with one leg bent." His focus on the action and expression of the head and face, especially in the context of a movement pattern as rich in action as mie, underlines the importance of these areas in performance behavior (p. 105-106).

He emphasizes the motionless quality of mie: "it is the climax to all preceding movement . . . it must merge in the action which precedes and follows without any apparent effort." It would seem that this comment focuses on the control of rhythm and time in mie. Since the performer must meld a state of motionlessness with a preceding and following state of movement, there must be a progressive alteration of the use of rhythm and time, so as to build down, so to speak, to motionlessness, and then build back up to movement.

The section on roppo includes some description of tobi roppo as done by Benkei in Kanjincho and kitsune roppo as done by Tadanobu in Yoshitsune Sembonzakura. He concentrates here (p. 109) on arm gesture and footwork. In tobi roppo, "The actor performs a kind of hopping

step which commences slowly but increases in tempo. The right arm is thrust out beyond the player who inclines forward on one leg and the arm is flung back in a wide arc behind his head, as he changes to the other foot." In kitsune roppo, "A feature of this style is the leaping of the actor with arms bent and held high in front of his chest, hands with fingers pointing down to the ground rather in the posture of a begging dog." Here his focus changes from head and face to arms and feet. As valuable as this information is, it would be much more valuable had he described gesture, footwork, head and face in both cases.

Scott gives very little description of tate, being much more concerned with its dramaturgical role. However, he does make two points directly related to performance behavior: that tate is rhythmical and that it involves acrobatics on occasion, specifically tombo, "a high leaping somersault which requires great agility and skill" (p. 110). This gives helpful notice to expect aerial steps (jumps, leaps, etc.) in tate sequences. He notes, without specifics of behavior, that tate has a dancelike character, a remark that links tate with his indications of the nature of dance. When one recalls his observation of the linkage of dance and acting, one sees that he is dealing with entities that are complexly intertwined.

Scott gives a number of interesting descriptions of behavior in his section in ito-ni-noru. The key element of ito-ni-noru is that the performer works in close accord with the rhythm of the shamisen accompaniment.

"The rhythm expressed through the shamisen playing and narration of yoruri is interpreted outwardly in the movement of the actor; he matches his acting to the words of the narration and times himself by the shamisen, to which he is subordinate, every gesture is exaggerated, but at the same time creates a harmony of pattern with the music" (p. 112). As with mie, roppo, and tate, one sees the importance of rhythm in Scott's view of Kabuki acting.

Scott describes the effect of ito-ni-noru by remarking on its effect on one's perception of simple actions. "The simplest of movements . . . achieve an intensity which enrich the general dramatic effect and provide a symbolic quality which is divorced from realism." He gives an example of this, from the role of Osono in Hadesugata Onna Maiginu:

She moves about the room in time to the music carrying out all kinds of simple domestic actions, clears away the teacups, tidies the room, arranges the lamp and folds away her father-in-law's haori, a coat worn over the kimono. She gestures and weeps and moves about the room on several more errands, and finally sinks down beside the lamp in great distress. All this is pure ito-ni-noru, acting used . . . to give outward expression to feminine emotions. During the scene, Osono's actions are controlled by the music and match the descriptions of the narration which is broken at intervals by her own monologue and weeping, the latter invariably forming a climax to a particular passage.

The key element here, aside from the use of rhythm, is the use of everyday actions to convey affect to the audience. This aspect of acting is of considerable importance to this study later on.

He describes the use of the ito-ni-noru pattern in other contexts: kudoki, monogatari, teoi no jukkai, gochushin. Unfortunately, none of

these descriptions have the physical detail of his account of Osono; they merely note that the ito-ni-noru performance pattern is shown in various kinds of dramaturgical situations. He ends his description of ito-ni-noru by describing ningyo-ni-naru, the device in which the actor takes on the characteristics of a puppet. He cites the opening of Kanadehon Chushingura as an example: "the figures on the stage are sitting with bent heads when the play opens and they raise them one by one according to the announcement of the chobo," i.e., the narrator (p. 116). He also describes how the actor doing Yukihiime in Kinkakuji dances as if he were being handled as a puppet; however, he gives no physical details.

His discussion of Kabuki vocal production, under the heading "Serifu, the speech of the actor," contains useful descriptions of vocal behavior. In describing a speech by Yosaburo in Genyadana, he emphasizes the pitch and rhythm dynamics of the actor's voice, which

rises and falls, races through a sentence or pauses to draw the words out in long emphasis in such fashion as to bring a variety of colour to the whole speech. In the first line . . . there is great emphasis on the two words 'Shigane koi,' which are almost hurled out, with a powerful intonation, there being a long emphasis on the word 'koi,' the next three words 'no nasake ga' follow in a slightly lower but more or less even tone. The first syllable of the word 'ada,' i.e. 'a,' drops considerably, the following syllable 'da' being raised to a sharp final which closes the line with a snap.

He notes that "In all true Kabuki serifu the use of rhythmical metre and conventional forms of intonation is common in some degree

. . . it is often distorted to make a rhythmical sound pattern rather than a straightforward literary statement" (p. 117). He also notes that pitch "rises and falls with an emphasis on certain endings" (p. 119). One will have occasion to refer to similar phenomena often in this study.

Samuel Leiter

Leiter's "An Essay on Kabuki Acting" is very similar to Scott in most respects. As does Scott, he discusses the major kata, such as mie, roppo, tate, and so forth. However, Leiter focuses attention on differences in kata that exist between acting families and between individual actors.

He notes that the acting traditions of the various lineages are very precisely set; only major actors attempt to introduce their own kata. The younger actors are expected to be faithful to the kata handed down in the lineage. Leiter analyzes the kabujikken scene in Terakoya as an example of how different actors play the moment when Matsuomaru inspects the severed head of his son, and describes in some detail the data of various well-known actors.

Many of his performance descriptions are concerned with supporting and locomotory behavior: sitting, standing, walking, kneeling, and so forth. In ordinary circumstances, characters either stand or kneel. Leiter notes the convention by which a character may be portrayed as standing while the actor actually sits on or rests against a high stool or other support high enough to create the desired effect.

Special use of support is involved in mie, when a variety of asymmetrical leg positions and leg gestures occur. Turns may be executed in place, as in the Noh pattern (p. 187). He notes that Kabuki actors move in several different ways: on their feet using ordinary steps or the suriashi sliding step, or on their knees, in a kind of gliding movement. This variety of possible supporting behavior is used for effect, as when characters use contrasting patterns. He notes how contrasting walking patterns convey character type.

Thus the actor must learn to walk with the large, striding steps of aragoto characters, as well as with the mincing steps of the onnogata. The walking of old men, bent and weary or bright and jaunty, of young men and girls, graceful and delicate, and of the entire range of character types must be perfected by each actor (p. 162).

This conveys the range of walking patterns used, and conveys the stylized, conventional qualities of those patterns as well.

He has a number of interesting observations on the use of the hands. Women are portrayed as keeping the hands in relatively closed positions, men as using open or even splayed hand positions. Characters of both sexes may be portrayed in the grip of powerful emotion by quivering, shaking, or fluttering hand gestures.

Leiter gives a number of good descriptions of arm gestures as well. Lovers in double-suicide plays are described as "fluttering their arms pathetically" (p. 165) in a fashion reminiscent of the hand gesture described above. He details the mime of the actor portraying seppuku principally through describing arm gesture. He gives a number of other examples of arm gesture.

He notes that the actor "reacts only where and as tradition says he must for a certain role." Furthermore, facial reaction is generally not executed while another actor has focus. Reactions are delayed until the end of the sequence. Female characters are portrayed with restricted facial expression, as required by etiquette, according to Leiter (p. 183).

It is very clear in Leiter that movement occurs in all areas of the body in the Kabuki actor. Feet, legs, arms, hands, torso, head, and face may all come into play at one time or another. A Kabuki character may have movement patterns specific to the character, as does the young woman Hanako in Musume Dojoji. The many examples Leiter gives of movement in each area of the body underline the necessity of paying close attention to all body areas when analyzing movement.

Leiter is very helpful on Kabuki vocalization. He falls into the trap that catches other authors, in that he spends much of his section on Kabuki voice describing the literary conventions of Kabuki plays. However, he also gives some useful information on actual vocal production.

He points out that Kabuki vocalization has a definite relationship to the structure of the Japanese language in general. In particular, the characteristic rhythm of the Kabuki vocal pattern is an accentuation of the characteristic rhythm of the language itself. He notes the very common pattern of elongating the final word of a line while raising the pitch of the voice, then trailing off slightly toward the end. He remarks that the onnogata usually shows a falsetto voice that "fluctuates gracefully up and down the vocal scale in a

strongly rhythmical manner" in the more stylized plays, while it "approaches realistic speech in sewamono" (p. 207). He also notes that some female characters speak in lower, rougher voices close to the natural tone of the male actor who portrays them. He further notes the very common pattern in which the voice "will dramatically climb to falsetto for a brief moment, after which it will return to the lower register" (p. 208). Unfortunately, his explanation of the production of falsetto voice in the vocal tract is quite inaccurate.

He mentions the very special vocal behavior used by child actors in Kabuki, who "speak in a high and stylized falsetto. The vowels are lengthened considerable and a high pitched monotone is produced" (p. 208). Although this would indicate a very stylized vocal pattern, it may not be quite as stylized as it sounds. The writer has had occasion to notice that small Japanese children drawn from the audience on Japanese variety-show television programs speak in almost exactly the same fashion as their counterparts on the Kabuki stage. The Kabuki stylization is based on behavior actually exhibited by real children.

He gives a very interesting account of the vocal behavior involved in the characterization of the fox in Yoshitsune Sembonzakura. According to Leiter, the fox deepens his voice and slows his delivery to seem human, and to the degree that he shows his nature as a fox, lightens his voice and quickens his delivery, until at the end, when he is fully revealed as a fox, "His speech becomes extremely light and rapid, in a high pitched voice, symbolizing his fox-personality. His voice ranges through several weird fluctuations as he recites his story" (p. 220).

He gives a very useful list of common vocal characterizations:

Young men: high pitched voice which fluctuates into a more masculine tone in dramatic speeches.
Young lovers: high pitched voices with tenor-like range.
Court nobles: high pitched tenor voice with slides to baritone and back again to tenor on certain words.
Evil men: rough, grumbling bass voice
Regular samurai: normal voice which may move into a higher tone at climactic moments.
Super-characters: powerful voice utilizing the entire vocal scale.
Young women and princesses: very high falsetto delivered in light and delicate tones.
Middle-aged women and evil women: more masculine tenor quality.
Old women and old men: usually a normal voice. When an old actor plays an old woman he may use his natural voice if it is not too gruff (p. 213-214).

He notes that changes in voice occur when characters change their nature--good to bad, man to woman, animal to man, and so forth.

James R. Brandon

For this study, the value of Brandon's "Form in Kabuki Acting" lies in the excellent analysis of the kata system he presents. Descriptions of particular performance patterns are presented in his analysis of the kata system, but are not a principal focus.

Brandon points out that "The actor's vocal and movement techniques are the central elements of most kata, but production elements such as costuming, makeup, and scenic effects are thought of as extensions of the Kabuki actor's technique, and they too are usually discussed as part of the kata of acting" (p. 65). This observation-cum-definition

identifies performance behavior as the center of the kata system. Performance behavior is also the center of the system presented in this study; in this respect the kata system has much in common with the system presented here.

Brandon describes three levels in the kata system. First, he discusses the kata which refer to kinds of performance style: danmari, aragoto, wagoto, maruhon, and shosagoto. Second he discusses kata which may be employed in one or more of these performance styles, including mie, roppo, tate, watarizerifu, warizerifu, and tsurane. Finally, he discusses kata as the individual interpretation of specific moments in specific plays, focusing on the functions served by changes in the stage business made by individual actors.

On the broadest level of kata, the level of the five performance styles, one finds that each style can be characterized by particular behavior patterns. Danmari is characterized by an absence of verbal expression, pantomimic movement, slow-motion pacing, and the use of a tableau as ending. Aragoto is characterized by exaggerated, vigorous, powerfully masculine movement using a broad stance with feet at a ninety-degree angle, and high and reverberating vocal production with tremendous volume. Wagoto contrasts with aragoto, typically showing delicate, effeminate movement, with a soft, yet resonant voice. Maruhon style is typified by rhythmic coordination with the gidayu accompaniment, the use of pantomimic movement (fushi), the use of movement sequences drawn from puppet choreography (ningyomi), and the alternation of the text between the chanter and the actors.

Finally, shosagoto is the danced style that incorporates an eclectic variety of movement patterns from sources as diverse as the Noh, the popular dance of the Edo and earlier periods, and pantomimic movement of a different kind from danmari.

Each of these combinations of behavior is unique to the particular style it typifies. Certain elements are found in more than one style; for example, pantomimic movement is found in both danmari and shosagoto. However, since danmari is slow-motion and does not use the voice, while shosagoto has a variety of tempos, different musical accompaniment, and may include vocal work.

Despite the existence of a specific behavioral pattern that typifies each individual style, and despite his observation that movement and vocal behavior are "the central elements" of kata, Brandon devotes much of his attention in the description of the five styles to the "production elements" that he describes as "extensions" of the actor's pattern. This emphasis shifts the focus away from the performance of the actor onto his costuming, makeup, and so forth. In this study, the emphasis is the opposite; one will concentrate on his descriptions of performance behavior, and generally ignore the production elements.

On the second level of kata, that of particular performance patterns, Brandon deals with six categories of performance behavior: mie, roppo, tachimawari, de and hikkomi, other movement kata, and vocal kata. He goes on to discuss sound effects, costume and makeup, and staging. Here, the discussion will be limited to the kata concerned with actual performance behavior.

Brandon identifies mie as consisting of a circular movement of the head and limbs leading to a pose which is held for several seconds and then relaxed. He points out that there are many variations on this basic pattern, and gives several examples, such as the eight climactic mie in Kanjincho, Saba Goro's mie at the end of Musume Dojoji, and the tenchijin mie from Sayaate. He points out that the wagoto and onnogata performers do not perform full mie. Brandon's discussion of roppo is quite brief. He mentions examples of tanzen, tobi, katate, and kitsune roppo, and of these describes only tobi roppo: "The actor moves down the hanamichi in great leaps and bounds, his arms and legs literally flying in six directions" (p. 89). This at least gives an idea that the movement involves aerial steps and some kind of complex limb movement.

Brandon notes that there are two types of tachimawari: slow-motion danced scenes of murder, and stylized dance fights in which a group attempts to capture the protagonist of the scene. He defines tate as the movement kata of these group battles. He points out, "The essence of tate movement is effortlessness" (p. 93), an important observation on the qualities of the movement. He also notes the presence of acrobatic air work, as did Scott and Leiter.

Under de and hikkomi he describes the performance on the hanamichi of Sukeroku, from the play of the same title, and of Ukyo in Migawari Zazen. Sukeroku is described as "swaggering," and presumably stamping: "wooden clogs raucously announcing his presence" (p. 94). He pivots to permit the audience to take a good look at him after stopping at

the shichisan; apparently he separates the action of turning from the action of travelling to the shichisan. Lord Ukyo is described as "dancing comically" to the shichisan, where he "stops and poses . . . He mimes smelling the sleeve of his kimono and looks back into the distance . . ." (p. 94-95). This indicates not only a separation between turning and travelling, but also the use of focus to convey looking at a distance object. These are useful observations of behavior patterns. These kinds of patterns will prove very useful to this study later on.

Under "other movement kata" Brandon discusses shomen engi and tsumeyori: "full-front acting" and "closing in." These patterns are very interesting in terms of focus. Shomen engi is a pattern characterized by playing "directly facing the audience." The actor remains full-front and apparently focuses directly on the audience while playing in this manner. Tsumeyori is a pattern in which two actors or groups progressively close in on each other along a line parallel to the curtain line, thereby heightening the conflict between them (p. 100).

The "vocal" kata he describes are watarizerifu, warizerifu, tsurane, yobi, yakuharai, and sutezerifu. These are not actually vocal, in the sense of the sound of the voice; they are rather literary devices or conventions. For example, watarizerifu and warizerifu are not patterns of vocal production. Rather, they refer to ways of dividing text between actors. In watarizerifu, "a single line of dialogue is divided among several actors, with the final phrase delivered in unison" (p. 101). In warizerifu, "lines alternate between

only two characters and . . . the characters are unaware that their spoken thoughts are meshing with those of another person" (p. 103). The only information in this section on actual vocal behavior is to be found in the section on yakuharai, in which Brandon notes that, "It is spoken in twelve regular beats with a pause at the end of each phrase; for emphasis the actor may also pause after the initial seven syllables and then prolong each syllable of the following five" (p. 106). One may recall that Leiter also noted the prolongation of trailing syllables.

Observational approaches

Writers who do not make the kata system the foundation of their work rely upon observation, and inevitably, comparison with the performing arts of Europe and North America. Iacovleff, Elisseeff and Ernst are acute observers; their descriptions are evocative and concise. However, the tendency to compare Kabuki to the theater of the West can be unfortunate. Ernst directs most of his comparisons to the realistic spoken drama of English speaking countries; the comparison suffers because that drama differs both in means and ends from Kabuki. In contrast, Iacovleff and Elisseeff tend to draw comparisons with opera and ballet. Since the Kabuki depends on stylization, music, dance, and the creation of esthetically beautiful visual and aural effects, comparison to Western opera and ballet is more appropriate. In both cases, however, the reader grasps that the Kabuki is not like the theater one knows, but cannot see what kind of theater it must be.

Iacovleff and Elisseef

Iacovleff and Elisseef give a detailed account of movement patterns of the face, head, and hands. They accompany their account with very well-done sketches of the hand positions and facial expressions shown by the actors they observed. These drawings are valuable studies of well-known Meiji actors; these sketches are often more informative than the photographs provided by more recent authors.

For Iacovleff and Elisseef, the facial expression of the Japanese actor centers in the eyes; they take particular note of the pattern of nirami. (The translations from the French which follow are my own.)

The most curious element of Japanese acting is the employment of voluntary strabismus. In samurai and katakiyaku roles, the custom is that in moments of emotion, the actor turns only one eye, that which is most in view of the public. There are two reasons for this practice: the first is the tragic expression given by showing the white of the eye; the second is of a psychological nature and demands an explanation.

When we wish to follow the movements of someone very attentively, we look at his eyes: boxers and fencers know this well. In the theatre, likewise, the spectators attend to the eyes of the actor before observing the rest of his movements. The use of the eye by the Japanese actor takes advantage of this fact. When he performs a choreographic phrase and his body immobilizes itself momentarily in a well-studied pose, his face freezes and the eye which is the most exposed to the spectators--according to whether he looks left or right--turns inside. In this way the actor turns his attention aside and permits the spectator to relax his attention (p. 48).

This is a most interesting idea: that nirami is the first step into the relaxation of the mie which follows the execution of the movement.

Iacovleff and Elisseef note that everyday etiquette puts great restraint on the movement of the lips, this restraint being carried to extremes on stage in the roles of courtesans. They further observe that in warrior roles, the actor's mouth often takes on a grimacing expression, "the corners of the mouth are turned down and the lower lip thrust forward. The makeup reinforces this expression because it appears to make the corners of the mouth fall still lower" (p. 48).

They see the movement of the head as the finishing touch on the movement pattern of the actor, adding that the movement of the head in Kabuki includes special circular patterns not a part of everyday movement:

the movements of the head complete the mimic technique of the actor: the head is turned to the left and the right after having described a special circular movement. These movements, accompanied by slow rocking of the head, present great difficulties for beginning actors, as they are never encountered in actual life. They correspond to the sudden, mechanical displacement of the heads of the puppets (p. 50).

The hand of the Kabuki actor is always in a state of tension; it creates an impression of surfaces in space as in Benkei's exit, when "it seems to press against an invisible barrier." It expresses inner concentration, as in the role of Matusomaru, whose hand, the finger and thumb pressed together, "is not completely closed, but rather forming a ring, makes known the effort of his soul." The hands of the onnagata are very expressive; "it is principally in the feminine roles where the least psychological nuance is translated by subtle movements that the use of the hands is most highly developed" (p. 51).

Earle Ernst

Ernst devotes Chapter VII of The Kabuki Theatre to "The Actor." He begins by considering the role of dance in Japanese theatre history from the myth of Amaterasu through the use of dance in Noh to the history of early Kabuki. He notes that rhythmic movement has been an important part of Japanese life. He points out that the movement of the puppets in the doll theatre is also rhythmic, and influenced the formation of the aragoto acting style. For Ernst, "the three greatest influences upon Kabuki dance movement were the Noh, folk and popular dance (zokyoku) and the movement of the dolls in the doll theatres" (p. 168). He points out that Kabuki dance movement is less abstract than that of most Western dance, since it is derived from the movement of everyday life, shaped and molded by rhythm and design into an esthetic form. He notes that Kabuki dance tends to build up to a pose; line reading tends to follow the rhythm of the movement and depends upon it. For Ernst, the actor uses space to create a sense of the volume of a sharply defined area and preserves at all times the expressive space around himself. Hence the lack of contact, even in fighting scenes.

Ernst considers the mie as "the ultimate physical expression toward which all Kabuki movement tends" (p. 178). He notes the resemblance of mie to sculptures of Buddhist guardian deities, particularly in the use of a balanced stance with antagonistic muscles in tension, producing a grim, intense expressiveness that is basically defensive in character. He then gives several examples of mie.

Describing group mie leads him to consider stage grouping in general. He considers that the use of grouping on the Kabuki stage is based on the use of the downstage plane and the full-face position of the actor. Hence a triangular or pyramidal formation usually is strongest on its downstage side, unlike the practice in the Western theatre of making the upstage position focal by turning the down stage actors into three-quarter closed positions. The Kabuki grouping also tends to set off each actor as a separate individual, a characteristic feature of the line reading as well, in which each speech is self-contained.

For Ernst, the Kabuki actor need not be concerned with becoming part of a stage milieu; rather, he uses the setting as a background against which he is seen in relief. For Ernst, both the habit of playing directly to the audience and the general absence of trompe d'oeil scene painting tend to confirm this view, since both of these tend to break the fourth-wall illusion.

Ernst considers the Kabuki actor to have three kinds of time at his disposal: "the time which is devoted solely to functional theatrical use," the time "during which the action of the play progresses," and that time during which the time of the play is suspended so that the actor may devote himself to showing the nature of this character (p. 189). For him, time is visually fragmented between characters, such that other actors on stage do not react visibly until the action of the working actor is complete. For Ernst, another way in which Kabuki fragments time is by playing actions so that each component part of the action is separated from the other

parts. Thus, in a fight scene, the hero can battle a group one or two people at a time, rather than all at once (p. 189).

For Ernst, the use of rhythm, design, space, and time create a sense of detachment between the performer and the role. Ernst sees this detachment as rather similar to the attitude of a Western musician to his music. "The actor performs through the medium of the theatrical figure in much the same way that the accomplished pianist performs through the medium of the piano; however close he approaches to complete control of his medium he never identifies himself with it" (p. 202).

Summary of the kata approach

Scott looks at a number of different aspects of performance behavior; rhythm, tempo or rate, locomotory pattern, arm gesture, internal relation of the body, relation of the body to space, pitch, volume emphasis, the use of everyday actions. These are useful categories and the observations he makes through applying them are also useful. However, nowhere does one find a complete portrait of a performance, delivering a full account of the behavior of the actor through these categories. Each aspect of performance is discussed separately, and different examples are used in each case.

For this study, the useful information in Scott is dispersed, unsystematic, and difficult to use in comparing one performance with another. He leaves too much out of even his clearest examples, and he does not provide a structure that would permit his observations to be

readily compared with the observations of others. This is not intended as criticism of Scott; rather it highlights the difference between his goals and the goal of this study. Nevertheless, one cannot use his work as a resource for the methodological problems to be solved here.

Leiter's descriptions of vocal and movement kata are excellent so far as they go. He is particularly good at showing how similar, or even identical, kata are used in a variety of situations for a variety of purposes. Like Scott, however, Leiter limits his descriptions; any given moment is generally only used as an example of one or two categories, such as supporting movement, arm gesture, hand gesture, facial expression, and so forth. Again, one misses a technique for presenting a complete description of performance behavior such as will be needed in this study. For example, it would be very interesting and useful as well to know what movement patterns go along with the vocal patterns in the list reproduced above.

Brandon's descriptions of the vocal and movement behavior involved in various kata are limited to the most characteristic aspects of the kata he describes, which need not include actual performance behavior. For example, in his description of the aragoto style, he focuses his description on the esthetic effect created by the aragoto stylist, not on the actual performance behavior involved. This is also the case in his discussion of "vocal" kata. Again, in the section on de and hikkomi, Brandon gives a very useful description of the movement of Sukeroku and Ukyo. However, even this description is couched in such a way that a reader who is not already familiar with Kabuki performance style will find it difficult to imagine the manner of performance

involved in these characterizations, since Brandon's descriptions of actual behavior are sparse and his analytical framework does not permit comparison of the performances he describes with behavior known to the reader.

Summary of the observational approach

Iacovleff and Elisseef are very perceptive and evocative, but they do not frame their excellent observations in an analytical system that permits comparing their observations with others. In this respect, they suffer from the same methodological flaw as the kata system authors. They do, however, have something to offer in a methodological way: their observations are attempts to directly describe the behavior of the actor, considering the movement of the most expressive parts of the actor: head, face, hands. They have relatively little to say, however, about the less impressive, but no less important function of the torso, the legs, posture, locomotion, and so forth.

Ernst's approach is that of an esthetician. He seeks fundamental esthetic categories, such as rhythm, design, space, visual arrangement, time, and detachment that can be used to describe the effect produced by the Kabuki actor. He analyzes specific performance patterns such as mie, tachimawari, and so forth by relating them, not to the kata system, but to his fundamental esthetic categories, showing how a given pattern embodies one or more categories in particular form. In so doing, he shows the relation of these patterns to each other and to the aims of the theater form, thus giving the

reader an understanding of the effect of the performance as a whole.

However he does not relate his esthetics to the means by which they are produced: the voice and body of the actor. Voice in particular is almost entirely neglected. There is very little description of actual movement patterns. Without an understanding of how the Kabuki actor uses his voice and body to create the esthetic results Ernst describes, his esthetician's approach leaves an important gap in the understanding of Kabuki acting style.

Conclusions

The kata system approach in general is not suited to comparative analysis of performance behavior. It is not appropriate to describe the performance of Western material using the kata system; therefore one cannot use it to compare the performances of the student actors in this study to the performances by Matagoro. It is difficult to compare two Kabuki performances using the kata system, since it only permits one to identify the kata employed by each actor. It contains nothing to identify differences in the performance of the same kata. Therefore, even though the kata approach yields a number of valuable descriptions of performance behavior, it cannot be used to solve the methodological problem faced in this study.

The work of the kata system authors contains more specific detail on actual performance behavior. As sources of such information, one will have occasion to refer to them from time to time. However, their work does not contain a system that meets the needs of this study for

performance analysis. The organization of their work is based on the kata system, a system applicable only to the Kabuki theater. The kata system is clearly the wrong system to use for the analysis of Western theater.

The work of the observational writers is suggestive of possible relationships between Western theatre and Kabuki. However, these relationships are at the level of esthetics, not of performance behavior.

In Iacovleff and Elisseef, for example, the fascinating details of the use of the hands by Kabuki actors certainly direct one's attention to areas of performance behavior that might otherwise be overlooked, areas that would be important in comparing Western and Kabuki acting. But the contrast with the theater of the West is drawn in terms of an esthetic concept of tension, not in terms of the contrasting use of the hands by Western actors.

Likewise, Ernst contrasts the use of rhythm, design, time, space, and similar esthetic categories in Kabuki to the use of similar esthetic elements in Western theater, but without discussion of how an actor uses his voice and body to actually accomplish the creation of those elements.

For this study, therefore, although the writers discussed above have a great deal of interesting and valuable information to impart, their work is of limited usefulness for the present study. On the one hand, the kata system that cannot be applied to the Western theater work of the subjects in this study. On the other hand, one finds a system that does not connect to the physical behavior of the actor.

There is a further methodological problem: their descriptions of performance behavior are not comparable in a precise way to each other or to other studies that might use similar ideas.

Although all of the above writers base their remarks on observations of performance behavior, there is no way to specify the performance behavior they observed in a way that permits systematic comparison of fresh observations to their data. Therefore, an independent observer wishing to correlate his results with theirs has no way of knowing whether the behavior observed differs from that which they observed, by how much, and in what manner.

To find ways and means of specifying performance behavior in systematic, quantifiable, and verifiable ways, one turns to the literature on human voice and movement, primarily drawn from the work of audiologists and speech therapists. Here one finds research work concerned with describing vocal and physical behavior, both perceptual and physical, in ways that will provide useful insights into the methodological problem of this study. In addition, certain categories of vocal analysis found in this literature have direct applicability to the description of vocal performance in the theater.

Voice

The literature on the human voice is far too large to discuss thoroughly here. Even a survey of the literature on pitch, volume, and quality would be beyond the scope of this study. It must suffice to cover the material that contributes directly to the methods used here. In searching for methods of describing the voice and patterns of vocalization, the work of speech scientists, particularly speech pathologists and speech clinicians, turns out to be a major resource. This tradition goes back to the early part of this century and continues to flourish today, with ever-increasing instrumental and technical sophistication. In this tradition, the work of Milton Cowan, William H. Perkins, Michel and Wendahl, and I. P. Brackett forms the basis of the vocal analyses in this study.

Milton Cowan

Milton Cowan's 1936 monograph, "Pitch and Intensity Characteristics of Stage Speech,"⁷ is a unique and pioneering study. It represents an early combination of several trends apparent in the preceding literature: the use of electrical, mechanical, and photographic devices for measuring and recording aspects of the speaking voice; the attempt to correlate aspects of the speaking voice

⁷ Milton J. Cowan, "Pitch and Intensity Characteristics of Stage Speech," Archives of Speech, December 1936, pp. 1-92. References to this work are to the edition cited. Page numbers are given in the text.

to the cognitive and emotional content of the utterance; the use of graphical representations of speech parameters against time; the attempt to deal with types of speech naturally occurring outside the laboratory. Despite the great advances in both technique and knowledge in speech science over the forty-five years since Cowan's monograph, his work is still perhaps the only quantitative study of theater voice in existence. No study of stage speech since Cowan's has capitalized on the great strides in instrumentation and technique since 1936. The issues he raised with respect to voice in the theater have remained unaddressed.

Cowan analyzed the speech of ten Broadway actors appearing in a variety of dramatic literature during the 1934-35 season. Although all ten seem to have been well-known professionals at the time, none are especially noteworthy from today's perspective. Perhaps the best-known is Mary Morris, who studied under George Pierce Baker, worked with the Provincetown Players during O'Neill's work there, played Abbie in the 1924 production of Desire Under the Elms, and was a member of the Group Theater. The plays used are much better known today, including works by Kaufman and Hart, Rice, O'Casey, O'Neill, and Shaw.

Cowan's analyses of pitch were obtained by recording his performers on phonograph discs at 78 rpm, then playing back the recordings through a phonophotography system that created an enlargement of the phonograph groove on film. He then carried out measurements of the resultant curves. His intensity measurements were done by measuring the amplifier output, again through a phonophotographic apparatus. Although crude by today's standards, his

equipment and procedures represented a significant advance in his time, reportedly achieving a measurement accuracy of over 99%.

Cowan presents his data in the form of "graphical speech scores." These scores consist of graphs of pitch and intensity plotted against a common time scale and keyed to the text. The resultant graph indicates the intonation of the utterance with surprising clarity. By studying the relation of the pitch and volume curves to the text and to the time scale, it is possible to obtain a clear idea of the interpretation of the line by the actor.

Cowan offers a number of conclusions about stage speech which may be summarized as follows. Stage speech is distinguishable from everyday speech by a greater range and variability in both pitch and volume. The average pitch level is uniformly distributed around a mean for any given speech, but the mean may vary considerably from one speech, or from one individual, to another.

More voiced sounds occur, and are sustained longer, in emotional material such as tends to be found in the dramatic repertory. While classifying types of pitch change is of little value, very consistent pitch patterns were found for all his actors, almost all phrases beginning with a rising pitch and ending with a falling pitch.

His conclusion included no consideration of differences in style among his various actors, although his discussions of the readings obtained from his actors include some remarks on stylistic similarities and differences. From these remarks, and from examination of the speech graphs, it is clear that a wide variety of styles of performance were represented in his study, from the old-school

declamation of St. Clair Bayfield to the rather realistic rendition of Candida by Margaret Wycherly. The difficulty Cowan found in describing characteristic pitch and intensity patterns may have been due to this stylistic variety. The recordings on which Cowan based his work may still be in existence; if so, his study and those recordings, with modern analysis techniques, would provide valuable material for work in historical acting styles of the mid-1930's.

For the present study, Cowan provides a number of valuable ideas. Most importantly, he based his work on a descriptive, case-study approach to an eclectic range of material drawn from actual theatrical practice. His actors were working professionals; the material they chose was drawn from their current professional repertory. Although such an approach sacrifices strict comparability of results, it avoids the artificiality of a contrived laboratory situation and forces the researcher to deal with the full complexity of live performance.

Next in importance, Cowan chose to analyze materials of audition length--38 to 200 seconds. In this way, he obtained a sample adequately reflecting the speech of the actor while small enough to be analyzed by the cumbersome process he used. Cowan worked with a small sample of actors, analyzing a small amount of material in depth.

Last but not least, Cowan willingly attempted the application of quantitative research procedures to theatrical performance. Particularly in the performing arts, the use of quantitative procedures has been neglected. Cowan's careful definitions, systematic measurement, use of recordings, and clear presentation of data set a standard for studies of performance behavior.

Since Cowan

Three recent essays have proven valuable in attacking the problem of describing vocal quality for the purposes of this study.⁸ They are: Perkins's "Vocal Function: A Behavioral Analysis,"⁹ Michel and Wendahl's "Correlates of Voice Production,"¹⁰ and Brackett's "Parameters of Voice Quality,"¹¹ all of which appeared in 1971. These three essays have in common an approach to the problem of defining and describing vocal quality by understanding and examining the relationship between the behavior of the vocal anatomy and the vocal quality produced in which differences in vocal quality can be understood in terms of the physical behavior of the vocal tract.

William H. Perkins

Since Cowan's 1936 study, enormous progress has been made in understanding the human voice. Nevertheless, the problem of describing

⁸ All references to these works are to the editions cited. Page numbers are given in the text.

⁹ William H. Perkins, "Vocal Function: A Behavioral Analysis," in Handbook of Speech Pathology and Audiology, ed. Lee Edward Travis (Englewood Cliffs, NJ: Prentice-Hall Inc., 1971), p. 483.

¹⁰ John F. Michel and Ronald Wendahl, "Correlates of Voice Production," in Handbook of Speech Pathology and Audiology, ed. Lee Edward Travis (Englewood Cliffs, NJ: Prentice-Hall Inc., 1971), p. 481-503.

¹¹ I. P. Brackett, "Parameters of Voice Quality," in Handbook of Speech Pathology and Audiology, ed. Lee Edward Travis (Englewood Cliffs, NJ: Prentice-Hall Inc., 1971), p. 481-503.

vocal quality has proved more or less intractable. Cowan evaded the problem by discussing pitch and intensity only, considering vocal quality as merely a function of pitch and intensity. A great many terms and concepts of vocal quality have been used, leading William H. Perkins to conclude, "some of the difficulty in understanding vocal functioning stems from mongrel notions, especially with the notoriously difficult term vocal quality, whose denotative referents are indistinct and whose conceptual ancestry is undistinguished" (p. 483).

Perkins's essay is an effort "to lay a foundation for the scientific study of normal vocal functioning" (p. 482). The core of his essay is the specification of five parameters "necessary and possibly sufficient to account for all the ways that voice is produced" (p. 482). He begins his analysis by noting that voice has at least three kinds or levels of phenomena: acoustic, physiological, and psychological. The voice clinician's interest is primarily in the psychological aspects: how the subject perceives voice and learns vocal behavior. The clinician's goal is to teach his subject to modify his vocal behavior. As Perkins points out, pitch and intensity present relatively fewer problems than quality, since pitch and intensity can be regulated voluntarily by most speakers. How does one specify the behavior which changes the quality of the voice?

Perkins's strategy is to formulate defined parameters that describe vocal quality as a multi-dimensional phenomenon. His parameters are chosen to meet five criteria. First, they must involve clearly stated behavioral responses that the subject can regulate.

Second, each parameter should be analytically necessary, though it need not be sufficient. Thirdly, the parameter must be quantifiable in some way. Fourthly, each parameter must be capable of independent variation. Finally, each parameter must be readily identifiable upon listening to the voice.

Having set forth these criteria, Perkins then defines his five "psychological dimensions of vocal regulation" (p. 492). These are pitch, loudness, voicing, vocal mode, and vocal constriction. He then shows that each of these five meet his five criteria. For this study, one is most interested in his definitions of the three parameters that clearly fall into the area of vocal quality as the term will be used in this study: voicing, vocal mode, and vocal constriction.

Perkins points out that sound is produced by introducing pulsations into the airflow from the lungs. To the degree that the airflow is in the form of pulsations, voicing is present; to the degree that the airflow is in continuous, non-pulsated form, voicing is absent. He measures voicing by setting up an ordinal scale from no voicing (pure continuous airflow) to full voicing (no breathiness or sound of air turbulence).

For Perkins, "Vocal mode refers to the behavior by which the vibratory modes of vocalization are regulated" (p. 493). He distinguishes three vocal modes: pulsated voice, heavy voice, and light voice. He measures this dimension by arranging these three terms in a nominal scale and points out that his other parameters can vary within each mode and overlap from one mode to another, thereby satisfying the criterion of independence.

He defines "subjective vocal constriction" as the subjective impression, in either speaker or listener, of the relative openness or constriction of the vocal tract (p. 494). The most open position corresponds to a yawn, the most closed position to a swallow. He measures this parameter on an ordinal scale from open to closed.

Perkins does not intend that his five characteristics suffice for complete definition of any and all vocal characteristics. He does insist that all five are necessary in order to describe vocal quality. He sees his set of parameters as the starting point from which to develop a more powerful system. His parameters also offer an approach to the problem of describing vocal quality that circumvents the problems of the old terminology. We shall see these five scales again when we lay out the methodology for this study.

John F. Michel and Ronald Wendahl

Michel and Wendahl's "Correlates of Voice Production" follows an approach somewhat similar to Perkins. They seek to identify "a tentative list of what we believe to be parameters of voice that have an influence on perception and function." However, they cast a wider net than Perkins, defining twelve parameters. The nature of these parameters are not all immediately obvious. Briefly, Michel and Wendahl define them as follows (p. 468):

1. Vital capacity: the maximum amount of air that can be exhaled after maximum inhalation.

2. Duration of blowing: the maximum length of time an oral flow of air can be sustained.
3. Modal frequency: the fundamental frequency most often used in spontaneous speech.
4. Maximum frequency range: the range that encompasses the highest and lowest frequencies available, using all the modes of phonation.
5. Duration of phonation: the length of time an individual can phonate after full inhalation.
6. Volume/velocity flow: a combined measure of the amount and speech of air flow during phonation.
7. Glottal waveform: the amount of time the glottis spends in each part of the vibratory cycle--opening, staying fully open, closing, staying fully closed.
8. Sound-pressure range: the range of intensities available to the speaker, from the softest soft to the loudest loud.
9. Jitter: variation in frequency while the subject tries to hold frequency constant.
10. Shimmer: variation in loudness while the subject attempts to hold loudness constant.
11. Effort level: the degree of effort that seems to be made during phonation.
12. Transfer function of the vocal tract: all changes made in the speech signal after the glottis.

Some of these scales are not useful for this study, since they require measurements that cannot be made on an actor in performance. Such measures as vital capacity, duration of blowing, duration of phonation, volume/velocity flow, and glottal waveform certainly affect the sound of the voice, but are not heard as variables by the audience and are not under the control of the actor. They constitute, rather, measures of the vocal instrument, giving an idea of what an actor has to work with.

However, several concepts can be found in this set of scales that will prove useful for the present study. Modal frequency gives a definition of the characteristic pitch of a speaker: that frequency which occurs the most often in his utterance. Modal frequency and maximum frequency range give the beginnings of a description of the

pitch of the performer's voice, in that a performer with a given range will sound much different depending on the modal frequency shown. Another actor showing the same range, but a different modal frequency, will also sound different from the first actor. Likewise, holding modal frequency constant while changing frequency range will alter the sound of the voice.

Michel and Wendahl include sound-pressure level range, a measure of volume range. However, they do not take the step of measuring the modal volume as they do the modal pitch. Since a performer uses volume expressively as well as pitch, it seems that such a measurement is a logical step. Such a measure would be constructed on the same lines as their measurements of pitch.

Shimmer and jitter are similar to the parameters known to audio enthusiasts as wow and flutter. While very interesting measures of the vocal instrument, they are of little use in evaluating actual performances, since performers rarely hold their voices steady enough for long enough to get a good idea of how much of these quantities exist. Also, a recording of sufficient quality to permit measurement of these quantities is very difficult to obtain under performance conditions.

Michel and Wendahl cover a multitude of sins under their twelfth category. The "transfer function of the vocal tract" covers a very broad territory, especially the area of resonance behavior that is deeply involved in the communication of emotion and nuance. It covers much of what Brackett is concerned with in his "Parameters of Voice Quality."

I. P. Brackett

I. P. Brackett begins his consideration of vocal function with the process of exhalation. He notes that in quiet breathing, no alteration is made in the vocal tract, which therefore allows the flow of air to proceed without producing sound. Changing the vocal tract to produce increased pressure results in turbulence--the sound of a sigh. The larynx is the first point in the vocal tract at which voluntary valving is possible. Brackett discusses the behavior of the larynx under four headings: valving, frequency generation, energy generation, and noise generation.

Abduction is movement of the vocal folds away from the midline between them; adduction is the movement of the folds toward the midline. As Brackett notes, "Various positions of the vocal folds account for different acoustic outputs." If the vocal folds are partially adducted but do not vibrate, the resultant turbulence produces a whisper. If the folds are adducted further, they vibrate, but still allow laryngeal turbulence; the resultant quality is often termed breathy. When the folds are optimally adducted, the glottal waveform is constant, there is little laryngeal turbulence, and sufficient resistance to air flow to produce vibration of the desired intensity. The resultant quality is clear. If the folds are too strongly adducted, the resultant tone is harsh or strident, as in angry yelling.

Brackett deals with frequency generation in terms of the vibratory behavior of the larynx. The vibration of the larynx is complex. It

generates not only the fundamental frequency, at which the whole structure vibrates, but also the segmental frequencies at which parts of the structure vibrate. The listener perceives the result as a single sound, not as a composite. Pitch, therefore, is a complex phenomenon. Two voices having the same fundamental frequency but different segmental frequencies may seem to have different pitches. In addition, actual speech involves changing both fundamental and segmental frequencies.

The vocal folds have more than one mode of vibration. In vocal fry, only a small fraction of the vocal fold opens at any one time, and only the edges of the fold vibrate, producing a buzzing or sizzling sound. There is a minimum of air pressure from the lungs, and maximal resistance to air flow in the glottis. It is frequently heard at the ends of sentences or on a dropping inflection, or in case of fatigue.

For Brackett, the falsetto is not fully understood. Two modes of vibration seem to be involved. In one, the oscillation occurs in only half of the vocal fold. In the other, the whole length of the fold vibrates, but only at its margins. The falsetto voice is higher in frequency due to the reduction in the mass or length of the vibrator; the amplitude of the falsetto voice is limited for the same reason.

Full-fold vibration occurs in normal speech, or chest voice. The whole mass of the vocal fold vibrates along its entire length. Brackett points out that as frequency increases, less of the vocal fold vibrates fully, though some motion is still evident along the full length. The resultant tone is what one would consider normal for the ordinary speaking voice.

Taken together, these modes of phonation provide a range of frequencies available to the speaker. There is overlap; some frequencies are available in more than one mode. The range of frequencies a speaker shows regularly is smaller than the potential range available to him; within the use range, any given speaker will have a median pitch level that is shown more often than any other. As Brackett points out, research has shown that most pitches are available to most men, women, and children alike, although cultural expectations certainly do cause men, women, and children to use different pitch ranges. However, due to the fact that the location of the use range in the potential range may vary, and because the position of the median pitch may vary in the use range, different individuals may differ in their handling of pitch in rather complex ways, even though they share the same potential range.

The larynx vibrates with more or less energy, and the amount of energy generated in the larynx directly affects loudness. Brackett notes that variation in loudness is usually accompanied by variation in other parameters, but he also points out that such behavior is not required by the functioning of the vocal tract. It is possible for a speaker to vary loudness independently of the other parameters if desired.

Having thus described the role of the larynx in sound production, Brackett moves on up the vocal tract to the cavity system. The pharynx and the oral cavity are always linked; both can be altered in size and shape. Such changes alter the resonant characteristics of the vocal tract so that either high frequencies are amplified relative to low,

low frequencies are amplified relative to high, or high and low frequencies are kept in balance. Relative amplification of high frequencies produces an oral quality, while relative amplification of low frequencies produces a guttural or throaty quality. Normal tone is the result of keeping high and low frequencies in balance.

The size and shape of the nasal cavity remain constant. The coupling of the nasal cavity to the rest of the system can be opened or shut by the action of the tongue and velum. Given a healthy nasal tract, nasal resonance peaking in the 200-300hz band will occur to the extent that nasal coupling is permitted. Some phonemes are dependent upon nasal resonance for recognition, such as n, m, and ng. Most phonemes are not dependent on nasality; if nasality is present on such sounds, it becomes a factor affecting vocal quality, particularly when nasality occurs on non-nasals that are not adjacent to nasals. Negative nasal coupling, also known as denasality, occurs when the nasal cavity cannot be coupled. M, n, and ng become b, d, and g--the sound of a bad cold. Denasality does not usually occur without an organic cause. Falsetto and fry voice have relatively little energy in the 200-300hz band. Nasal resonance is correspondingly less in those vocal modes relative to full-fold voice.

Brackett goes on to note that certain combinations of vocal quality have stereotyped connotations in American culture. The shrew, with a very constructed, nasal voice; the immature young man with a breathy, oral voice; the punch drunk boxer with a guttural, denasal voice--these are all examples of such stereotyped connotations.

Conclusion on the voice literature

There is much useful information on the workings of the voice in the existing literature, both at the level of machine instrumentation and studies and at the level of perceptual analysis. It is now possible to relate the perceptual impression of vocal behavior to very specific actions of the vocal apparatus with considerable confidence. Vocal analysis can therefore be done on an existing conceptual base, one moreover that is not altogether foreign to existing ideas about the voice in theatrical circles. Many of these ideas have come to the theater from this very tradition, albeit by circuitous routes in some cases.

Movement

There are two studies serve as the most important written sources for the movement methodology of this study:¹² Dell's A Primer of Movement Description¹³ and Hutchinson's Labanotation.¹⁴ However, it is important to realize that only partial understanding of movement analysis is possible if only printed sources are used. First-hand experience of the movement patterns and qualities conceptualized in Laban movement theory is necessary. The writer studied movement notation with Judy Van Zile at the University of Hawaii during 1978-1979 and attended intensive classes in movement and spatial dynamics taught by Peggy Hackney at the University of Hawaii during 1979-80. The direct experience of movement and movement analysis in these classes has shaped the movement methodology of this study much more than any printed source.

Nevertheless, there are valuable written materials in the field. For the purposes of this study, it has not been necessary to go back to Laban's original writings. The interested reader should consult Bartenieff's "The Roots of Laban Theory: Aesthetics and Beyond" for an excellent, though brief, discussion of Laban's major theoretical

¹² References to these works are to the editions cited. Page numbers are given in the text.

¹³ Cecily Dell, A Primer For Movement Description (New York: Dance Notation Bureau, 1970).

¹⁴ Ann Hutchinson, Labanotation (New York: Theatre Arts Books, 1970).

themes, especially as seen in his early work. In The Mastery of Movement, Ullman gives a detailed exposition of the development of Laban's work. (See Bibliography.)

Laban's work has been developed extensively by his followers. His theories have been applied and extended in dance, anthropology, physical therapy, social science, and child development--even aptitude testing. Each researcher has adapted Laban's ideas to specific purposes. Even so, there are essentially three subdivisions of Laban movement theory. Each researcher's work tends to fall fairly neatly into one of these three areas. They are the theory of movement notation, the theory of movement dynamics, and the theory of spatial dynamics.

Each of these areas has been named, the names usually being written with capitalization: Labanotation, Effort/Shape, and Space Harmony or Choreutics. The use of these labels will be avoided in this study wherever possible. They have come to be treated in a rather sanctified manner, as if they were registered trademarks or theological dogmas, a usage reflecting a certain true-believer spirit among researchers in the field. The labels and the attitude accompanying their use are a positive obstacle to the development and application of movement analysis in the Laban tradition.

Movement structure

When one speaks of Laban's theory of movement notation, one refers to the system for structural description of movement. There are

also notational systems in use for the theories of movement dynamics and of spatial dynamics, but these need not be of concern here. Furthermore, it is not necessary for this study to explore the notation system itself. The interested reader is referred to Hutchinson and to the various publications of the Dance Notation Bureau for further information on notation.

The goal here is to understand the concepts that underly the notation system. In the following analysis, I have endeavored to follow Hutchinson throughout; my contribution is only to separate the concepts of structural movement description from the notation that embodies them.

Structural description of movement is the analysis of what body parts move, to where or along what paths they move, and the timing, duration, and rhythm of their movement. The body is considered as an ensemble, rather like a symphony orchestra; indeed, a fully developed structural score is quite like a symphonic score in principle.

Ordering of space by a cross of axes

Just as all parts of an orchestra share the musical elements of time and pitch, all parts of the body share the movement elements of time and space. Just as the musician constructs a structure of pitches such as the diatonic system in order to talk about music, one sets up a spatial structure in order to talk about movement. Space is ordered by a three-dimensional cross of axes that is centered in the center of weight of the performer.

The axes are the forward-and-backward, or "saggital" axis, the right-to-left or "lateral" axis, and the up-and-down or "vertical" axis. There are three levels, high, low, and middle, and eight principal directions: forward, backward, left, right, left forward diagonal, right forward diagonal, left backward diagonal, and right backward diagonal. The combination of these eight directions and the three levels, plus the intersection of the cross of axes considered as "center," give twenty-seven main directions in space.

A brief exploration of the system must suffice. If one stands erect and raises one's right arm until the right hand is stretched out directly in front of the shoulder joint, the arm fully extended and level with the ground, that is "forward middle." Now, if one keeps the arm fully extended and level with the ground, swinging it through a ninety-degree arc to the right, one comes to "right middle." Swinging it forty-five degrees toward "forward middle" brings it to "forward right diagonal middle." Now, if one mentally locates the point in space that is directly overhead, and takes one's hand directly to "up" from "forward right diagonal," again, one swings the arm through ninety degrees. Now, taking it forty-five degrees back toward "forward right diagonal middle" brings it to "forward right diagonal high." "Up" can also be called "place high," and "down" can be called "place low;" the center of weight indicates the location of "place." One can follow the same exercise to the left starting with forward, and to both sides starting with backward. Substitute moving one's hand down instead of up, and one will find the "low" directions that correspond to the "high" directions.

Directional "clefs"

Pitch seems very definite until one looks at it in various ways. A low note on the treble clef is a high note on the bass cleff, and a middling note on the viola clef. In like manner, directions seem very obvious until one looks at them in different ways. For example, if one lies on his back on the floor and stretches his hand over his head, is that "up"? Or is "up" toward the ceiling, as when the one was standing?

Just as music has different clefs for different purposes, structural movement description has different directional systems. Each one is a cross of axes: the body cross, the room cross, and the standard cross. In the body cross, up is toward the head, down is toward the feet, left and right is toward the left and right sides of the body. According to the body cross, a person who is lying on his back moves his hand toward "up" by laying it on the floor above his head. In the standard cross, up is away from gravity, down is toward gravity, and left and right are determined relative to the body of the performer. In the standard cross, a person lying on his back on the floor takes his hand "up" by extending it toward the ceiling. Finally, in the room cross, up is toward the ceiling, down toward the floor, forward toward whatever is defined as the front of the room, and backward, right, and left are determined relative to those directions as defined in the room.

When one wishes to describe the movement of the body as a whole, the center of weight is used as the point of reference. For example,

if the body as a whole moves from place to place, the center of weight is said to "take a path." The body turns around the center of weight; turning around the vertical axis is called "pivoting," turning around the lateral axis is "somersaulting," and turning around the saggital axis is called "cartwheeling." Combinations of turning and paths produce complex patterns.

A part of the body either supports the weight of the body or does not. Any part of the body that bears the weight of the body is called a "support." A support has to rest on a surface of some sort. If the body part can break contact with the surface without requiring an adjustment of the body, then for this study that body part is not a support. For example, a person sitting on the ground may have his hands resting on the ground beside him; if they can be lifted without moving the rest of the body to take weight, they are not acting as supports. Movement of a body part that is a support may also be referred to as a support; in this sense, "support" can mean either a supporting body part or a supporting movement of the body.

Movement of a body part that is not a support is a gesture. Obviously, one can gesture with the hands, but one must keep in mind that one can also gesture with the face, the head, the torso, the legs--anything that does not bear weight at the time.

Physical structure of the body

For the purposes of structural description, the body is divided into parts as follows. The largest units are the head, torso, arms,

and legs. The head consists of everything above the shoulders; for convenience, it can be regarded as part of the torso when it merely "goes along for the ride" rather than moving in its own right. The torso includes everything from shoulders to hips, bearing in mind that the shoulders can move as if they were part of the arms, due to the flexibility given the shoulder area by the clavicle. There are four main areas in the torso: shoulders, chest, waist, hips. The arms and legs are divided at the joints: upper arm, forearm, hand, and fingers; thigh, calf, foot, and toes. It is possible, in the notation system, to label any segment bounded by a joint, or even any surface of that segment. Such detail is not necessary for this study.

Turning and flexure

There are fundamentally only two kind of movements of the parts of the body: turning and flexure. Turning occurs when a body part moves around an axis or center in a circular fashion. Flexure occurs when a body part is contracted or drawn in, and also when a body part is thrust out or extended.

Turning occurs in three ways: rotation, twisting, and circling. Rotation occurs when a body part moves circularly around its own axis in such a way that all parts of the moving part sweep out equal arcs. Rotation is the normal mode of turning for the head, hand, pelvis, and whole leg. Twisting is a circular motion around an axis in such a way that the free end of the moving part sweeps out a larger arc than does

the attached end. Circling occurs when a body part moves so that the free end sweeps out a circle with the point of attachment at the center of the circle.

Flexure also occurs in three ways: flexion, folding, and shifting. Flexion is bringing the free end of a body part closer to the point of attachment by displacing the intermediate joint. The free end moves on a fairly straight line. Folding is bringing the free end of a body part closer to the point of attachment by bending an intermediate joint without displacing it. The free end circles on the intermediate joint, following an arc toward the point of attachment. Shifting occurs when a body part is moved as a unit through flexibility at the point of attachment. Shifting occurs in the movement of the head, the arm, and the parts of the torso.

Rhythm

Movement involves space and time, just as music involves pitch and time. As in music, the use of time is a question of rhythm. In "free" rhythm, the relative sequence and duration of movement is not related to a proportional unit of time. Hence, the sense of a recurring beat is weak or nonexistent. When a recurring beat is used, the beats will be grouped in multiples of prime numbers. Such a time structure is "metrical." A performance done in a metrical time structure has a readily apparent rhythm, while a non-metrical performance has a much subtler, much more variable pulse.

Ensemble in movement structure

The above modes of movement can be used in sequence and in combination to create an enormous repertoire of movement possibilities. Much as a symphony orchestra can use a variety of modes and rhythms within itself at one time, so the body can show a diversity of movement structure. Even without considering any other factor, the study of movement structure reveals a fascinatingly rich reservoir of performance possibilities.

Movement dynamics

The principal printed source for the use of movement dynamics in this study is Dell's A Primer for Movement Description. Hutchinson and Dell are complementary, because structure description and movement dynamics are complementary. The one deals with what movement occurs, and the other deals with how it occurs. A holistic view of the bodily work of the performer can only emerge by considering his movement from both perspectives.

Effort

Dell begins with the effort factor. For her, this aspect of movement has to do with how the performer handles his exertion. There are four aspects of effort: flow, weight, time, and space. Each aspect is bipolar; flow varies between free and bound, weight varies between

light and strong, time varies between quick and sustained, and space varies between indirect and direct. Dell puts a very strong emphasis on the qualitative nature of these entities. They refer not to the physically measurable tension, force, duration, and distance involved in a movement, but to the way a performer deals with tension, force, duration, and space. Hence, although they are not quantitative, they are by no means fictional or illusory. As Dell points out, the various factors in the environment and psychology of the performer that influence his behavior produce the quality, as well as the structure, or his structural and dynamic behavior.

Flow

Dell notes Kestenberg's definition of the flow factor as the existence of complementary or opposing relationships between agonist and antagonist muscle groups. Complementary tension corresponds to the state of free flow, no tension existing that would tend to oppose the movement. When opposing relationships exist between muscle groups, the flow of movement is thereby inhibited, and the resulting movement quality is that of bound flow. For Dell, tension is always present as a prerequisite of human activity. Therefore, the distinction is not between the presence and absence of tension, but between the effect of different tension relationships on the quality of movement.

Weight

For Dell, the weight factor is related to the extent to which the mass of the body is used to exert force. As in the flow factor, where the movement of the body was freed or restrained depending on the action of opposing muscle groups, in the weight factor the mass of the body is either actively employed or actively held back, depending on much more complex muscular interactions. The active use of weight creates the impression of strength; the restraint of weight creates the impression of lightness.

Time

Dell's emphasis on the qualitative nature of factors of movement dynamics is especially strong in her discussion of the time factor. As an example, she discusses the time quality of a runner on the starting block, waiting for the gun. For her, the runner has a very urgent attitude toward time, which is expressed in stance, tension, and in any possible movement, even though the runner is actually holding still, not moving at highspeed (in a quantitative sense) until after the gun sounds. In like manner, she gives the example of a ballet dancer holding at the top of a leap; even though the tempo may be very fast, the dancer shows sustainment, trying to hold the top of the jump, stretching out time for effect. As another example, she points out that in flamenco dance, one attitude toward time is expressed in the feet, and quite another in the hands.

Space

The space factor deals with the quality of one's attention to the space surrounding the body. Directness refers to the quality in which one channels one's attention into a particular direction or toward a particular point in space. Dell gives two examples of directness: focusing intently on a person in order to communicate something to them, and spotting a narrow opening in a crowd that permits one to dash through quickly. Indirectness refers to the quality of taking in many directions and foci more or less simultaneously. Dell gives the examples of looking for an object in the dark and easing one's way through a dense crowd by taking advantage of many small openings. Dell also emphasizes that visual attention is not the whole story; one can display directness toward something that lies behind one or toward a noise whose source is not visible.

The spatial quality may even be evident in movement that is not related to spatial problems. For example, one could be trying to remember a melody, following it in one's mind, while unconsciously making indirect gestures. Then, when the missing note is recaptured, one might zero in on it, unconsciously making a direct gesture expressive of the direct mental effort.

Effort intensity

For Dell, the intensity of any effort factor may vary. Thus, one might see highly bound flow, as in a person holding back strong

emotion. One might see the intensity of the bound flow decreasing as the person calms down. The intensity of flow may be neutral, meaning that it is not especially free or bound. The other three factors work the same way.

To give my own examples, pushing a car requires high intensity strength, while pushing a pram requires only low intensity strength. A mother searching for her wayward child near a construction site might show only moderate directness when she finds it, but if she finds it in danger, the intensity of directness will be markedly higher.

Effort combinations

For Dell, a performer does not show all or even most of these qualities at any one time. A performer shows some combination of the effort factors that relates to the performance task at hand. It is also quite possible to just sit there and exist, with no strong effort statement. She notes that for Laban, each combination of the effort factors had its own connotative significance. However, as she observes, "verbal discussion and speculation about these combinations is unproductive without experiencing in movement the differences among the combinations."

Interpretation of effort

It is very difficult to talk about the four effort factors in strictly objective terms. Movement shapes personality and is shaped by

personality in return; the effort factors describe aspects of movement that are fundamental to one's personal adjustment to one's environment. One's attitude toward these aspects of movement is a result of an emotional commitment to or investment in those aspects of movement which are part of one's own personality. This emotional involvement with certain aspects of movement is often below the level of awareness. Thus, certain biases creep into the work of any movement theorist or observer. One projects one's own favored movement qualities onto the subject and avoids seeing movement qualities one does not share or appreciate. Theorists allow an evaluative tone to show itself when describing the effort qualities. Every measure has been taken to keep such biases out of the present study; however, I have no doubt that the reader versed in movement analysis will find biases that have escaped all the measures taken.

Shape

As Dell points out, in order to consider effort by itself, one makes an abstraction from actual movement. In reality, movement does not happen without a change in the spatial form of the body and its relation to the surrounding space. Analysis of shape proceeds from the consideration of these changes.

Three factors are involved in the analysis of shape. They are shape flow, directionality, and shaping.

Shape flow refers to movement through which the body grows or shrinks in space. The body may be seen to be opening, growing,

unfolding, moving out or away from itself. On the other hand, it may seem to be shrinking, folding in, closing up, or moving into or towards itself.

Directionality is the quality of movement that reaches out along a path that links the body to its environment. Especially in an esthetic context, there need not be an actual target for the movement, so long as there is a quality of extending or retracting along a definite line relative to the space around the body.

Shaping is three-dimensional adaptation of the body to the space around it, or the creation of three-dimensional form in space by the body. Shaping movement that contracts the body volume is called "gathering;" when it expands the body volume, it is called "scattering."

The movement of the body occurs in a volume known as the "reach space" or "kinesphere." This is the volume which can be reached without moving the whole body through space--the maximum extension of the body. Dell distinguishes three areas on the kinesphere: near, middle, far. Near space is the area very close to the body; middle space is that which can be reached with bent limbs, and the far space requires limb extension.

Ensemble in effort and shape

Dell notes that one "can describe the stream of movement as continuous changes in effort and continuous changes in shape." Once again, it may be helpful to remember a metaphor of the body as an

orchestral ensemble: in the analysis of movement structure, it was an ensemble of parts; in the analysis of movement dynamics, it is an ensemble of effort and shape qualities. Clearly, this view considers the movement of the performer to have an enormous richness, through the interaction and combination of a large range of independent behavior.

Spatial dynamics

The principal printed source for the theory of spatial dynamics is still Laban's original work, Choreutics. The focus of this work is on the geometrical properties of the use of space by the moving body. Due to the complexity and length of the work (which often reads more like a textbook on solid geometry than like a book about movement), and to the fact that it is not extensively used in this study, only a brief treatment of its major points can be undertaken here.

It will be recalled that for structural description, space is defined by a cross of axes meeting in the center of weight. The same cross of axes is the fundamental concept of spatial dynamics, where it is known as the "dimensional cross." If one restricts one's movement to the three basic axes, one can execute movements which are straight up or down, straight side to side, or straight forward or backward. In order to move from one axis to another, one must return to the center, since no other connection between the axes is yet provided.

The next step is to connect the endpoints of the three axes of the dimensional cross, which creates an octahedron. Movement along the

sides of the octahedron permits peripheral transitions between the movements of the dimensional cross.

There are three combinations of the dimensional axes, each combination defining a plane. The vertical and lateral axes define the vertical plane, the vertical and saggital axes define the saggital plane, and the lateral and saggital axes define the horizontal plane. In addition, there are four diagonal axes that pass through the center of weight equidistant from all three planes. By connecting the corners of the planes, one forms an icosahedron.

These four geometric forms--cross, octahedron, cube, and icosahedron--form the basic categories of spatial dynamics. Movement is described by relating the pattern of the movement to these geometric forms. A large number of movement patterns can be generated by systematically seeking coherent combinations of the movements derivable from the geometric forms. There are a number of parallels drawn by Laban between the movement patterns so generated and the system of musical scales. For example, movement and musical "scales" are formed by drawing on an underlying set of elements; they can be transposed; transpositions tend to create distinct tonalities.

Spatial dynamics is the least developed area in the Laban tradition. Although the geometrical basis of the theory is clearly defined, the significance of the various kinds of movement patterns that seem to be associated with the different geometric forms remains problematical. Although in this writer's experience there are perceptible differences or modalities between various spatial

patterns, the nature and source of those differences remains unclear. A great deal of careful study will be required before the full development of spatial dynamics can be realized. It is clear to what extent differences in spatial dynamics evoke affect, esthesis, or cognition, and what kinds of dynamics evoke which responses.

For this reason, spatial analysis according to spatial dynamics has not been attempted in this study. There are, however, certain spatial features which are useful analysis categories.

The placement of visual focus is a very important and very communicative part of a performer's behavior. One often knows a good deal about what a character is thinking by noticing the direction of focus shown by the actor. Where looks the performer, there looks the character.

The kinesphere size shown by a performer can also tell much about the character being portrayed. There are many consensually validated interpretations of kinesphere size. For example, one contracts when cold, frightened, miserable, lonely, dejected, and otherwise in a poor state or condition. In such situations, the arms are kept close to the body, the head is pulled in, and the whole body may be curled up. One expands when happy, warm, pleased, or contented. An example might be the way one stretches out in a warm bed in the morning.

One can consider the kinesphere as having various zones, each occupied by different zones of the body: the torso, the limbs, the distal segments (hands and fingers, particularly). Characterizations differ in the use of the various kinespheric zones; for example, a fidgety, busy character might be conveyed by much distal movement.

Touch is an important factor in characterization. The manner and frequency with which a performer makes or does not make physical contact with his environment or his fellow performers may tell much about the nature of the character portrayed.

Ensemble in spatial dynamics

In spatial dynamics, one sees the concept of the body as an ensemble from a fresh viewpoint. Beginning with structural analysis, in which the body was seen as an ensemble of moving parts; one then proceeds to movement dynamics, in which the body is seen as an ensemble of constantly changing effort and shape qualities. Finally, in spatial dynamics, one sees the space in which the body performs shaped into an ensemble of geometric forms. In an actual performance, there is an orchestration of simultaneous, independent, mutually related expressive elements, capable of enormous variety, subtlety, beauty, and expressiveness.

Ethnographic studies

There are studies in dance ethnology and ethnomusicology that have contributed a great deal to this study, especially in terms of the organization of a large number of analysis concepts into a coherent system.¹⁵ In 1968, Martha Ann Davis and Claire Schmais studied Doris Humphrey's "Water Study" using Laban movement theory and adaptations from *Choreometrics*.¹⁶ In 1977, Jill Gellerman did a study of the Mayim dance that compares the dance of three different groups of Hasidim using a systematic Laban movement theory framework.¹⁷ She finds very interesting relationships between variations in dance performances and variations in the contextual culture. Elizabeth Kagan's 1978 "Toward the analysis of a score: a comparative study of 'Three Epitaphs' by Paul Taylor and 'Water Study' by Doris Humphrey" uses an analytical framework based on Laban movement theory.¹⁸ Suzanne Youngerman's 1978 study of Doris Humphrey's "The Shakers" is

¹⁵ References to these works are to the editions cited. Page numbers are given in the text.

¹⁶ Martha Ann Davis and Claire Schmais, "An analysis of the style and composition of 'Water Study'," in Research in Dance: Problems and Possibilities (New York: Committee on Research in Dance, 1968).

¹⁷ Jill Gellerman, "The Mayim Pattern as an Indicator of Cultural Attitudes in Three American Hasidic Communities," in CORD Dance Research Annual IX (New York: Congress on Research in Dance, Inc., 1978).

¹⁸ Elizabeth Kagan, "Toward the Analysis of a Score: A Comparative Study of 'Three Epitaphs' by Paul Taylor and 'Water Study' by Doris Humphrey," in CORD Dance Research Annual IX (New York: Congress on Research in Dance, Inc., 1978).

the most recent of the studies I wish to discuss here; like the others, it uses a systematic Laban-based methodology.¹⁹ Finally, Alan Lomax's seminal book, Folk Song Style and Culture, containing the results of the Choreometrics and Cantometrics projects, provides much of the methodological inspiration for the above writers, and for this study as well.²⁰ This study was published in 1968, but the methods and principal findings were first presented in December 1966. It is therefore the earliest, yet probably the most important, of the studies reviewed here.

It may seem odd to include two studies of Doris Humphrey under the heading of "ethnographic" materials. The word "ethnographic" usually applies only to cultures quite different from our own, and usually only to cultures which one regards as technologically inferior to our own. Of course, one must realize that the study of American modern dance is as ethnographic an endeavor as is the study of Japanese Kabuki theater. The fact is that the study of the performing arts can not avoid being ethnographic in character, since all performing arts are the product of a contextual culture, and have their full meaning only in that culture. Consciously or not, the methods and findings of any study of performance reflect this fundamental fact. To the extent one understands the performance, one gains insight into the culture.

¹⁹ Suzanne Youngerman, "The Translation of a Culture into Choreography: A Study of Doris Humphrey's 'The Shakers' Based on Laban analysis," in CORD Dance Research Annual IX (New York: Congress on Research in Dance, Inc., 1978).

²⁰ Alan Lomax et al, Folk Song Style and Culture, (Washington, DC: American Association for the Advancement of Science, 1968).

Since all of the studies above bear a relationship to Lomax, one must turn to Lomax first, then return to the studies above to see what these writers did with the impetus from Lomax.

The present study owes its methodological inspiration to Lomax. While his goals are considerably different from the goals of this study, the example of his methods provided the key to the development of the methods used here.

Lomax sought to correlate the song styles found in the many cultures of the world with features of the social organization of these many cultures, such as their principal way of meeting their subsistence needs; the complexity of organization they show in carrying out subsistence operations; their level of social solidarity, cohesiveness and stability; and the kinds of interpersonal relationships they feature, including sexual relationships and child-rearing patterns.

His procedures for doing this are too complex to review in detail here. However, one may note that the essence of his procedure is to describe the stylistic elements of a given culture's song styles and to compare that description with the descriptions of all the other song styles from all the other cultures in his study. He then groups the song styles in his study on the basis of his descriptions of stylistic elements, and finds that the groupings that result parallel known and accepted groupings made on the basis of social and economic criteria. In short, he found that the characteristics of a culture are reflected as reliably in the way they sing as in any other aspect of the way they live.

In order to carry out his study of song style, Lomax had to solve essentially the same methodological problem that faces this study. He had to find a systematic way to compare performances by differing performers of differing materials from differing cultures so as to group performances into styles and styles into style groups. The example of his procedures for doing this form the major contribution of his work to this study.

When a number of different things are to be compared, a frame of reference must be provided. In Lomax's study, the frame of reference is found by looking at the options open to the performer. If one is to sing, how many ways can it be done? How many kinds of vocal quality are there? How many kinds of rhythm? How many kinds of vocal blend? How many degrees of text redundancy? And so forth.

The more answers one finds to these questions, the more aspects of song one discovers that can be used to describe a given song performance. The best source of different ways to sing is the study of how people can sing, given the physiology of the human body, and how people actually do sing in different times, places, and cultures. By studying song both physiologically and cross-culturally, one can devise a list of variables that reflect the many different ways that singers can and do perform.

With such a list of possibilities in hand, one can then go down the list and see which possibilities have been chosen by any given performer. By applying the same list of variables to two different performances, a comparison can be made by noting the points of similarity and difference between them.

Thus, one devises a list of questions to ask about each and every performance one studies. The answers to the questions vary in relationship to the style of the different performances. The pattern revealed in the whole set of answers constitutes a description of the performance style.

Lomax and Grauer devised a set of 37 song traits. Each song trait varies over a range of several possibilities, some as few as three, some as many as thirteen. The possibilities for each trait are arranged in logical progression to form a scale, and the 37 scales thus formed are arranged in a logical progression of their own. One can then listen to a song performance and go down the set of scales, choosing the most appropriate option on each to describe what one hears. The result is a kind of profile of the style, a systematic representation of the behavioral choices of the singer.

Lomax and his associates used this rating system on a sample of 3525 songs drawn from the widest possible variety of world cultures. Their system of analysis produced 37 data points for each song. The number of songs per culture varied, depending on the availability of materials. Since 233 cultures were used, the average number of songs per culture works out to about 15. It took two raters two and one-half years to rate all the samples; this works out to about 10-20 listening sessions per song.

If such a system is to work certain points must be observed. First of all, the various traits must be independent, at least potentially so. If one trait is actually dependent on another, the two will merely vary together as if they were one trait, so the system will be

uneconomical. Secondly, each trait, and especially each option on each trait, must be clearly and easily recognizable. This is best achieved by carefully limiting the scope of each scale and each option on the scale so that the behavior represented by that option is simple and easily recognized. Finally, the range of options for each scale must be based on some objectively determinable standard, reflecting the facts of world-wide practice and the capabilities of the human body.

Within a given trait, all reasonable logical and physiological possibilities, as well as all practices known from a world-wide sample of performance, should be included. Only in this way can one avoid constructing a set of scales that cannot accommodate behavior foreign to the culture of the one who constructs them.

Although this seems terribly demanding, it is not in fact very difficult if each scale is carefully limited. For example, Lomax's 24th scale is "tempo." He offers six choices: extremely slow, quite slow, slow, medium, fast, very fast. For an observer having an acquaintance with a wide variety of music from many cultures, the range of tempo that exists on a world-wide basis is not hard to evaluate, and since only the tempo of the music need be considered, any given song could be rated relatively easily with respect to the six choices given.

It may be objected that using such a rating system is too prone to error and requires perfect consistency of the rater. However, the reliability of such ratings is open to objective testing. Lomax and his associates had such tests carried out by independent researchers.

His tests show that naive listeners (listeners with no prior experience of exotic music) can achieve 85% reliability after only a short training period. This score means that if two (statistically representative) judges rate the same material, the probability that the two will agree on any scale is 85%. The confidence level reported is beyond the .001 level, which is extremely high.

If naive listeners can do that well, it stands to reason that trained observers with considerable experience both with their system of analysis and with exotic material generally can do at least as well, if not better. One may therefore conclude with Lomax and his associates that such a rating-scale system can in fact produce reliable results.

It is also important that Lomax's system does not depend on instrumentation. The rater works by ear, just as does the audience. While some aspects of Lomax's system require musical training, there is nothing in his system that a person with healthy hearing cannot do with the unaided ear. This tends to ensure that the aspects of song used in the rating system are at least available to the actual audience of the song style.

Since this point is crucial both for Lomax and for this study, the words of his associate Normal N. Markel are worth quoting at length. His statement has equal validity for both the Lomax study and this one:

Within the theoretical framework in which we are operating there are available only two reasonably workable, relevant techniques of analysis: acoustic and perceptual. An acoustic analysis consists of the translation of the air waves set into motion by the act of speaking into electronic

information and the kymographic recording of this information. Perceptual analysis consists of the translation of the air waves into psychological categories. Some feel strongly that anything analyzed by the human brain is, by definition, non-scientific, but the important scientific issue is not who or what analyzes the raw material under investigation but the reliability of the measurements. The question of reliability is essentially this: can another investigator using the same procedures come up with the same measurements of the raw material? The results of our consensus studies indicate that our measurements of the paralinguage in folk songs are reliable. A particular reliability score means that if another group of trained judges rated the same material, the correlation between the ratings for the two groups would be at the level of that reliability score. Such correlations would be statistically significant beyond the .001 level of confidence and there is, therefore, no question that the parameters of paralinguage which we have measured in folk songs can be rated reliably.

It might be objected that Lomax's system imposes Western musical concepts on non-Western music. Such a criticism overlooks the practical fact that a number of the possible ratings in Lomax's system do not occur in Western music; therefore the system can hardly be described as purely Western. On a more theoretical level, the function of Lomax's system, or any other system that might be devised to fill the same function, is essentially arbitrary. So long as the frame of reference remains consistent, the comparisons derived from it will be useful, provided that the system meets the conditions set forth above. All one asks is a benchmark, which Lomax's critics cannot provide. Finally, it would seem to be a forgivable tendency for a Westerner, writing for other Westerners, to express himself in a Western idiom.

From the viewpoint of this study, there is one rather strong criticism to make of Lomax. He assumes that only what one can hear

is important to song performance. Whatever movement may accompany the performance is ignored altogether. His inclusion of the parallel project on dance style carried out by Bartenieff and Paulay, known as Choreometrics, actually reinforces this criticism, since while Cantometrics systematically ignores movement, the Choreometrics project systematically ignores all vocal aspects of the performance. Yet it is common knowledge that many performers sing and dance at the same time. In general, vocalization and movement are complementary activities. Although for convenience one takes voice and movement as separate entities, in fact there is only a single entity--performance behavior--in which movement and voice form a unified ensemble. Cantometrics and Choreometrics both miss the physical unity of performance.

There is a further difficulty with the existence of two systems of analysis in the Choreometrics and Cantometrics projects. The two analysis systems are not mutually compatible; i.e. it would not be possible to simply combine them into one scale set. The Choreometrics scales are methodologically quite different from the Cantometrics scales. In many cases, they measure more than one trait at a time. In some cases, rather than defining a trait and logically ordering the range of possibilities that can be imagined or in fact observed in actual performances, the Choreometrics scales define both a trait and relationships between that trait and another, independent trait, and specify the particular relationship that is observed. Also, the Choreometrics system does not represent a comprehensive sample of the available possibilities of performance. Rather, it represents a

pre-selected list of variables which Bartenieff and Paulay assume to be important. While the variables they selected are undoubtedly valuable to consider in many instances, this limitation on the nature of the behavior they looked for imposes a corresponding limitation on the nature of the behavior they found. This in a sense biases their results quite strongly. The Choreometrics system is essentially limited to movement dynamics. Very little attention is given to movement structure; certainly not enough, at least in this writer's view, to fully describe a movement style. No consideration at all is given to vocal performance.

Therefore one must report that although Lomax is the inspiration for the methodology of this study, his work does not actually provide a ready-made model. The methodology developed in this study resembles Lomax's work in a number of ways, but where Lomax essentially presents two different methods, one for movement and the other for voice, the methodology in this study must encompass both areas. Furthermore, while the systems in Lomax are specifically geared to their respective arts, the performances that must be analyzed in this study are for the most part neither song nor dance. Acting is a somewhat different breed of performance, and the system used here must inevitably reflect that fact. Ideally, however, the system developed here should be capable of dealing at least to some extent with song and dance, since actors may do either or both, while the systems in Lomax generally are not relevant to the description of acting. A more universal system of analysis than those Lomax used is sought here, one that reflects the physical unity of performance behavior.

Davis and Schmais

Davis and Schmais identify the Choreometrics study as the inspiration for their own work. "From this work we learned that the first step in analyzing a dance composition should be to search for and define the most salient movement variables in the dance."

This is indeed the methodology of Bartenieff and Paulay. Unfortunately, it is methodologically unsound. The decision as to what constitutes the "most salient movement variables" should be the consequence, not the starting point, of the analysis.

However, this objection does not mean that nothing of value emerges from Davis and Schmais. Quite the contrary; their analysis of "Water Study" is quite interesting and illuminating. Their results are all the more interesting for being derived from a very simple set of parameters.

Their parameters are level, shape flow, effort flow, group relationship, and group formation. Level is "distance from the floor in terms of the body, e.g., 'knee high,' 'standing low,' etc." Shape flow is "growing and shrinking of the total body shape. This parameter is recorded in nine degrees of change from hyper-extension to total body closing or folding." Effort flow is "the ongoingness of the movement, more or less controlled . . . recorded . . . in three degrees of free and three of bound." Group relationship is "types of spatial-temporal relationships between the dancers. In the dance there are three types of canon, two types of mirroring and one type of paralleling in which the same movement is done by two groups

simultaneously but on different levels." Group formation is used to refer to the "four main floor patterns the dancers create . . . curved line, straight line, randomly scattered over the floor and clumped close together" (p. 106).

They present their data in a set of graphs and diagrams. The graphs unfortunately do not specify what the horizontal axis means; only the vertical axis is labeled. On most of the graphs, it would seem that the mysterious abscissa represents time, but this is by no means always clear.

The principal finding of their study is that "Water Study" implements a wave-like rhythm suitable to the metaphor of the title on four different levels. There is an overall swelling and subsiding that occupies the entire duration of the dance; the whole dance forms one complete wave. Within this large wave, each major section of the dance has a swelling and subsiding character; the first two sections end higher than they began, the middle section ends at the same level that it began, and the latter two sections end lower than they began, thus creating the large wave that is formed by the piece as whole. Within each major section, there is a sequence of wave-like phrases. Finally, within each phrase, there is a moment-to-moment variation which also has a wave-like character.

Through the application of a very simple set of parameters, Davis and Schmais were able to make very interesting observations about the choreographic structure of a well-known work by a significant American choreographer.

Jill Gellerman

Gellerman's study of the Hasidic Mayim dance is not only an interesting study of the dance, but an excellent short introduction to Hasidic culture as well. She does an excellent job of showing the relationships between the dance and the culture.

Gellerman, like Davis and Schmais, identifies Choreometrics as the direct forerunner of her work. She states that her methods follow the models of Choreometrics and Labanotation. "After three . . . performances were collected on video, observed repeatedly for general impressions, and recorded in Labanotation and Effort/Shape analysis . . . a set of structural and stylistic movement parameters was defined and developed into two profile sheets." She provides no further information on how her parameters were chosen.

Regardless of how her parameters were chosen, her choice is instructive in itself. She uses thirty-one categories in twelve groups, divided into five structural groups and seven effort/shape groups. Her system can be outlined as follows:

I. Structure

1. Timing (4/4, 2/4) and tempo (metronome beats/sec)
2. Grouping (floor pattern)
3. Use of supports:
 - a. Active or inactive
 - b. Rotation
 - c. Weight shift

- d. General direction of travel (left, right, forward, backward)

4. Use of Gesture

- a. Parts held versus parts that move
- b. Direction and level of movement
- c. Rotation (feet parallel or turned-out)
- d. Flexion and extension
- e. Relationship (apparently deals with touch)
- f. Spread of movement
- g. Retentions

5. Focus

II. Effort/Shape

1. Body attitude

- a. Body (torso and head posture)
- b. Effort (predominant effort qualities)
- c. Space (planar relationships in stance)

2. Gesture/posture

3. Efforts

- a. in the arms
- b. in the legs
- c. main states/drives

4. Phrasing (an impressionistic description)

5. Flow flux (how the flow of movement changes)

6. Shape (type of shape behavior seen)

7. Space

- a. Kinesphere/territory (size of)

b. Tensions/dimensions/planes (dominant planes)

c. Spatial form (octahedron, etc.)

This system bears a striking resemblance to the movement portion of the system used in this study (presented in Chapter IV). This relationship is all the more interesting, since no effort was made to model the system used in this study on Gellerman, nor was this writer aware of her work during the course of development of the system used here. The resemblance only came to my attention while preparing this literature review. It would seem that Gellerman's system and that presented here are parallel solutions to parallel problems under a common influence from Lomax.

Through applying this system of movement analysis, Gellerman is able to demonstrate systematic differences between the dance of three groups of Hasidim, and to relate those differences to differing interpretations of Hasidic culture and values between the three groups. Like Lomax, she finds that the subjects of her work dance the way they live, and vice versa.

One must make the same criticism of Gellerman that one does of Choreometrics: she systematically ignores the vocal aspects of the performance. She does this in spite of the fact that the Mayim dancers sing while they dance. Gellerman even goes so far as to reproduce the sheet music with lyrics for the song sung for the dance, "Ush'avtem Mayim." Yet she makes no effort to include their vocalization in her study, despite the fact that Lomax's work would surely encourage the hypothesis that the Hasidim would sing the way they live, just as they dance the way they live.

Elizabeth Kagan

Kagan's study of "Three Epitaphs" and "Water Study" was done in order to discover why these two works "seemed to be so different and yet have something vital in common" (p. 75). In her quest for the reasons for this relationship, she uses a variety of concepts from Laban movement theory. She presents Labanotation scores of selected phrases from the two pieces, and presents structural information about the pieces in tabular form, but in the text, she does not discuss them in structural terms as a rule. She makes use of effort and shape concepts, and makes much use of the spatial forms from Choreutics: cube, octahedron, icosahedron. Her system can be outlined as follows:

I. General structural description

1. Rhythm (4/4, breath rhythm)
2. Groupings (floor shapes)
3. Spatial path (across the floor)
4. Use of supports
 - a. Support relationship (unilateral, bilateral)
 - b. Rotation (feet parallel or turned-out)
 - c. Type of weight shift (walk, run, pivot, etc.)
 - d. General direction
 - e. General level
 - f. References to center of weight
5. Use of gestures
 - a. Limb relationship (bilateral, parallel, etc.)
 - b. Parts used (written for in Laban score)

- c. General directions
 - d. Rotation
 - e. Flexion-extension
 - f. Shift
 - g. Succession
 - h. Hold
 - i. Part leading, inclusion, etc.
- 6. Order of action (locomotion follows/precedes gesture)
 - 7. Focus

II. Effort-shape variables

- 1. Body attitude
- 2. Kinesphere
- 3. Gesture, posture
- 4. Dimensions, planes
- 5. Spatial form
- 6. Vertical, inclined; stable-mobile
- 7. Central, transverse, peripheral
- 8. Gather-scatter

Kagan's findings generally confirm Davis and Schmais, so far as "Water Study" is concerned. Kagan finds that in comparing "Water Study" to "Three Epitaphs," there is a basic structural similarity, in that both are based on the breath; however, in "Three Epitaphs" "the dynamic stress is on exhalation and collapse;" while in "Water Study" it is on "inhalation and rebound" (p. 85). She finds that contrasting space and effort qualities reinforce the contrasting nature of the two dances. Her basic quest for the seeming unity in diversity between the

two pieces is satisfied through the discovery of the contrasting use of the same basic movement dynamics in the two works.

Suzanne Youngerman

Suzanne Youngerman "compared the image of the Shaker people projected by Humphrey's choreography with the picture of this religious group which can be derived from historical research." She notes that although Humphrey never saw a Shaker dance, her choreography is acclaimed as a portrayal of the nature of Shaker emotional life. For Youngerman, Humphrey is able to do this through the use of "certain ideas about the correlation between psychological states and movement behavior" that can be found in "part of the stock of Western movement symbolism" (p. 94).

Youngerman does not set up a system for profiling the performance as do the preceding studies. She deals with her analysis in essay form. Her categories are few; she makes the most use of the four effort factors. She, like Kagan, takes occasional note of structural pattern, but pays much more attention to effort/shape concepts and to concepts from Choreutics.

She identifies a number of particular symbolic relationships, organized into two strongly contrasting systems which in alternation convey different cognitive, emotional, and esthetic contents. The tension between these two different systems and the differing contents they convey is crucial to the overall communication conveyed by the dance.

For Youngerman, the focus of the dance is the contrast between mortification of the body and the release of the spirit from its carnal burden. The body-oriented aspect of the choreography manifests itself through emphasis on motor rhythm and non-space-oriented movement. The spiritual quality is revealed through the suppression of weight as a dynamic element of the movement sequence in favor of attention to space. In terms of effort choices, movement using combinations of strength, quickness, and bound flow, without attention to the environment, emphasizes the passionate, body-oriented character of much of the ritual; while use of combinations of time qualities, bound flow, and direct or indirect spatial attention with weight exertion de-emphasized, helps to create an atmosphere of visionary spiritual searching (p. 98).

Youngerman's exploration of Humphrey's choreography in terms of Laban movement theory amply demonstrates the relation between performance behavior and cognitive, emotional, and esthetic communication. Her study does not have the experimental format of several of the studies reviewed here, yet through the consistent and systematic application of Laban movement theory, she is able to offer a detailed and illuminating study of Humphrey's portrayal of Shaker society--a study that reveals the sources of the impact of the dance, just as a penetrating critic can systematically reveal the sources of power in a work of literature.

Conclusion

We began this chapter in search of a method for systematically describing, analyzing, and comparing performance behavior. We have seen that no existing model will answer the needs of this study.

We find that the existing literature on Kabuki performance contains many useful and interesting observations of performance pattern and analyses of Kabuki style, but does not contain any methodology that permits systematic comparison of one Kabuki actor to another, or of Kabuki and Western acting.

We find that Laban movement theory presents useful and useable concepts to describe movement, and speech science presents valuable concepts to describe the voice. We further find that researchers such as Lomax, Bartenieff, Paulay, Davis, Schmais, Gellerman, Kagan, and Youngerman have presented studies that organize concepts from speech science or Laban movement theory into effective and analytical systems.

However, there is no model in these studies that addresses the full range of behavior of the performer, both voice and movement. One finds, as indeed is reasonable, that the dance ethnographer's model does not deal with the voice and the musicologist's model does not deal with the dance. Unfortunately, the two cannot readily be combined, since they use incommensurable methods.

This study requires a system for considering the total performance behavior of the live performer. Since no such system exists in the extant literature, the task in the following chapters is to formulate such a system suited to this study.

Chapter III

Method of performance analysis

The scale set

The basis of the methodology used in this study is a set of 70 scales, each defining a range of variation for a single behavioral trait. There are six steps on each scale. In each case, the first step, number 0, is used to indicate that the scale is inapplicable to the behavior under analysis. For example, the vocal scales would be inapplicable to a performance in which the voice was not used. The remaining steps, 1 through 5, indicate the manner or degree of the given trait. In each scale, steps 1 through 5 follow a logical progression.

Depending on the trait to be described, the scale is either quantitative or nominal. Quantitative scales, often having scale values of none - slight - moderate - marked - extreme, should be considered to represent continuous variation of the trait described, the scale values acting as relatively arbitrary divisions of the scale. Nominal scales are usually lists of possible states of behavior, such that the adoption of one state rules out the others. The states are arranged in a logical order, but the scale does not represent a continuum.

Performance sample

In this study one refers to the body of performance material that is analyzed at one time as the "sample" of performance. Often, one takes a manageable excerpt from the performance, and treats that excerpt as one sample. In this study, many of the performances are complete, short audition pieces, constituting a complete performance in and of themselves. Also, while many of Matagoro's classroom demonstrations are not complete performances of a scene, they are complete in the sense that he performed them in such a way as to create a definite sense of beginning, middle, and end. Using the term "sample" permits the application of one convenient label to any segment of performance one wishes to study.

The sample of performance may be of any size desired. Choosing a small segment out of a performance enables one to study behavior that is not representative of the performance as a whole, while choosing large segments of the performance gives one a profile representing the more usual performance style. Very frequently, one finds that the performer will alternate between one style which is shown during most of the performance, and other behavioral patterns which are used during certain important segments of the performance. Such a situation can be analyzed by comparing the style of these high points to the more general style which contrasts with it. Such a comparison uses analyses of small sections of the performance, and compares them to the performance regarded as a whole. In short, varying the sample size is a valuable tool for analyzing performances.

In attempting to describe a very long performance, it is valuable to break down the performance into shorter samples, analyze these samples separately, and then compile the results. In this study, this has been done by listing all the values found for each scale and reporting the most common value. The analyses of Matagoro in Chapter VI and of Carol Honda in Chapter VII were prepared in this way.

Normative profiling

The analyst records the most appropriate description of the behavior most frequently encountered in the sample of performance under examination. The profile of the performance that results from such an analysis represents the norms of that performance: the behavior pattern most typically encountered during the performance. It shows the basic pattern from which the performer may vary, using contrast for effect.

A problem may arise when certain phenomena are rare but important. In such a case, the passages in which such phenomena occur should be isolated and analyzed separately. One will then find that the overall pattern can be seen as a norm, with the rarer variation contrasted against it. An example of this kind of contrast is presented in the study by Youngerman discussed above. It must be emphasized that in this method it is not possible to include both the norm and the variation in one analysis. To do so distorts the description of the performance sample under analysis by substituting the variations for the norm.

Profile format

One describes a sample of performance by choosing the most appropriate scale point for each of the 70 scales. By graphing the points chosen on each scale versus the scale numbers, one can create a visual profile of the performer's behavior pattern. In this study, these profiles are presented as figures. For examples of these figures, the reader may turn ahead to Chapters VI and VII. The name of the performer and the performance appear as the title of the figure. Movement scales are on the left, voice and phrasing to the right. The number and title of each scale are given, followed by a bar showing the numerical rating given to that scale for that performance. Index numbers from one to five appear above each of the columns of scales. Scales rated zero (not applicable) have an empty space instead of a bar. The visual pattern created by the bars acts as a visual representation of the basic performance pattern of the performer in the material analyzed.

Profile interpretation

A number of such profiles are presented in this study. When reviewing such a profile, it is important to remember that the curve one sees is not meaningful in itself, the way the shape of a curve of, say, velocity over time has meaningful, mathematical relationship to the phenomena it depicts. The particular shape the profiles take is not meaningful in this way, since each number from one to five

represents something different on each scale. Rather, the difference between one curve and another has meaning; by comparing one profile to another, the areas of similarity and difference become visually apparent.

No profile should be interpreted as an evaluation of the quality of an actor's performance. This scale set contains no judgements about performance quality. If one had two samples of performance, and if one decided that one was good and the other was bad, one could use the methodology of this study to elucidate the differences between them. However, the decision as to what constitutes good and bad performance rests with the user of this system, not with the system itself.

As a practical matter, it seems that the length of the sample to be analyzed depends on the amount of material the analyst can keep fresh in mind at one time. Most of the analyses for this study were done on samples of less than ten minutes duration. Such a sample would usually have to be reviewed at least four times and perhaps as many as a dozen times. It cannot be denied that this procedure is time-consuming.

Development of the scale set

A set of scales would have to be impractically large to fully represent all aspects of movement and voice. The present set has been developed by trial and error through attempting to describe a large number of performance samples representing a wide variety of performance genres, including most major Western and Asian

performance forms. Study of the sources discussed in Chapter II yielded a scale set of 175 scales--a desperately cumbersome monster. Gradually it became apparent that the scale set could be whittled down in a number of ways.

Often, two or more scales measured the same behavior in different ways. Such scales were combined or reformulated. The resulting scale then gives one a measure of the behavior in question without redundancy; this preserves the economy of the system without sacrificing useful information.

A number of scales turned out to be too broad; an essential criterion for inclusion in the present set is that each scale deal with a very narrowly defined aspect of behavior. In this way one avoids looking for global qualities, such as "energy" or "concentration" or "identification with the character," that can be shown through many incommensurable behavior patterns. Such qualities are best investigated by analyzing the behavior patterns that reveal them, through analyzing specific aspects of behavior.

Some scales simply did not show their usefulness in comparing different performances. A scale has to show some variation in order to be useful. For example, one could set up a scale for the amount of ear wiggling observed, only to discover that no actor in the study ever wiggled their ears. Such a scale tells one something, in that it eliminates ear wiggling as a category of possible behavior, but it is of no use in comparing different performances, since it turns up no differences to compare. Therefore, scales that dealt with behavior that either never happened or always happened the same way were

eliminated in favor of scales that dealt with behavior that differed from one sample to the next.

A number of scales were eliminated because they simply recorded the presence or absence of specific movement patterns or techniques, rather than dealing with how the performer used the possibilities of the body. For example, in Kagan's system, one considers whether the performer walks, runs, hops, and so forth; in this study, it is more valuable to consider how weight is transferred; whether the weight transference occurs during walking, running, or hopping is much less important. The scales in this set usually deal with how a performer does what is done, not with the actions in themselves.

Considerations such as these led to the reduction and reformulation of the scale set to its present form. While there is still room for improvement, the present set is a useful and rather powerful tool for discovering how a performer does what is done, and how two different performances differ--or in some aspects, show no differences.

Cultural bias

The present scale set does not pretend to be anything more than an operationally useful set of concepts that can be used to analyze a wide variety of performances. It may one day be possible to formulate a set of universal, culture-free categories of movement and vocal behavior equally applicable to all cultures. The present scale set has no such delusions of grandeur. It represents the application of two

very specific traditions of analyzing movement and vocal behavior to the problem of producing systematic descriptions and comparisons of performance behavior. Since these systems, and the researcher using them, developed in the cultural milieu of North America and Europe, they undoubtedly carry with them biases common to the cultures of those areas. Hence, the present scale set is hardly culture-free. However, there are certain factors which reduce the impact of cultural bias.

First, each defined trait is considered independently. The overall pattern only emerges as a result of the separate judgements made about each individual scale. The pattern is frequently rather a surprise to the analyst. Even though the scale set is the product of a Western tradition, the application of the set to the work of an Asian performer produces profiles that are unlike those derived from samples of Western performance in a number of ways. In short, although the set is not culture-free, it does reflect the differences that exist between performers of differing cultures.

Second, each scale can be defined in terms of the anatomy and physiology of the human body. There is a fundamental continuity across cultural boundaries in skeletal, muscular, and neurological structure and function that arises from common membership in one biological species. By basing the analysis on those aspects of the human body that are shared across culture boundaries, this scale set brings out the differences in how the body is used. These behavioral differences represent learned behavior, a product of the culture in which the learning takes place. By examining the differences in learned behavior

against the background of the physiology through which those behaviors are expressed, one can use the physiology of the human body as a common frame of reference, against which behavioral differences stand out. Although each trait in this system represents a Western conception of physiological function, the physiology involved is the general heritage of man.

Finally, each trait in the scale set deals with concretely observable phenomena. In most scales, relatively little interpretation is required to determine the proper choice of scale value. Many of these scales do deal with phenomena that are somewhat difficult to observe, or that require a certain amount of training to recognize. Nevertheless, the proper value for a given scale over a given sample of performance is generally evident upon review of the material.

In short, there is relatively little room for the operation of cultural bias. Instead, one finds that cross-cultural similarities, based on the commonalities between cultures mentioned above, have a tendency to emerge, just as they do in the Choreometrics and Cantometrics projects, and in the studies by Kagan, Gellerman, Youngerman, and Davis and Schmais reviewed in Chapter II. If one believes in the family of man, such results are most gratifying.

Subjectivity

The judgements made in the course of applying this system to a particular performance might be said to be "subjective" rather than "objective," in the sense that these judgements are made on the basis

of perceptual analyses of performance behavior by the eyes and ears of the analyst. However, it is important to realize that there is a very sharp distinction to be drawn between a measurement made by perceptual analysis of a phenomenon and a "subjective" judgement, as the term is used in connection with, for example, an improperly "subjective" methodology.

The difference arises from the nature of the terms in which a perceptual analysis is expressed. If a perceptual analysis is expressed in terms that cannot be rigorously defined, such as "good" or "beautiful" or "graceful," then such a judgement is clearly subjective and has no place in a study which intends to produce systematic, replicable results. Such a judgement is laudatory or derogatory, not analytical.

However, if a perceptual analysis is expressed in well-defined terms, it is possible to determine whether a given analysis is in fact correct or not. In this case, the charge of "subjectivity" cannot be leveled, even though the descriptions in question are derived purely through perceptual means. Such descriptions are open to independent testing; on the basis of the definitions used, one can independently determine whether the analysis is correct or mistaken. In matters of taste there is no dispute; but analysis based on a well-defined set of concepts can be judged for correctness.

The descriptions of performance behavior offered in this study are couched in the terms defined in the following chapter. These definitions are derived from the traditions described in the preceding chapter. It is possible that these descriptions may in some cases be

incorrect, since circumstances did not permit independent validation of these observations. However, the descriptions of performance behavior presented here are not "subjective," in the above sense.

Therefore, the situation is not that of describing something as "good" or "beautiful." Rather, it is like describing something as either square, circular, or triangular. Such an observation is verifiable according to the definitions of geometry. Likewise, the observations of performance behavior offered here are verifiable according to the definitions offered below, definitions drawn from Laban movement study and speech science. Another analyst, following these definitions, should reach approximately the same conclusions, at least up to the level of movement description. Of course, interpretation of those results may produce differences between analysts.

In many cases, a second level of interpretation of performance behavior is offered, in which there is an attempt to describe the meaning or effect of the behavior found in a particular passage or performance. There is a good deal of subjectivity at this level, since these descriptions are based on the familiarity of the writer with the traditions and material involved, not on a carefully created body of definitions.

However, these interpretations are offered primarily as a way to better communicate the nature of the performances described. The conclusions of this study, based upon the comparisons between Matagoro and the student actors, do not involve this level of analysis. They are based on the objective criteria defined in the following chapter.

Practical behavior and expressive behavior

The choice of behavior open to a performer often depends on a task which the performer must carry out. If an actor portrays a maid who clears the dishes, she must pick up the props, put them on a tray and remove them from the stage, much as would a maid in an actual room. The physical requirements of this task place limits on the choices of behavior open to the performer. Depending on the nature of the performance, these limits may be tight or loose.

Hence, in many cases, the behavior one observes has two components--practical and expressive. "Practical" here has approximately its theatrical meaning, in which one speaks of a "practical" prop, i.e. one that can be used by the performer, as opposed to a prop that is not built to be used. The practical component of behavior is that which is indispensably necessary to the execution of the task at hand. The expressive component is whatever modification can be made to the practical component to evoke a response appropriate to the performance.

This is not a distinction between form and content. Rather, it distinguishes two different levels of content. To return to the maid--suppose she is in a state of profound grief. The actress might choose to portray this through a very contractive use of space. Nevertheless, she will have to expand in space in order to pick up the props. Assuming a skillful use of the body, that reaching out will be done so to stress a contractive use of space; she will extend only in order to pull in again. Hence, the practical component of the

movement, through which she shows that the character carries out the duties of a maid, will be strongly modified by the expressive component, through which she shows the emotion of the maid. Both aspects of the maid are part of the content of the performance. What the maid is doing is largely cognitive information, conveyed through practical behavior. The emotion expressed by the maid is largely affective information, conveyed through modifications imposed on the practical behavior, tending to elicit (in this case) sympathetic affect in the audience. There could in addition be an esthetic communication, eliciting aesthesis in the audience, perhaps related to the simplicity or harmony of movement in her performance.

To describe performance behavior properly using the system presented here, the analyst should discount the practical component of the behavior described as much as possible. One attempts to determine what the basic, necessary, practical movement unavoidably involves, and then compare that irreducible minimum to the behavior actually exhibited. This requires a reasonably accurate understanding of the cognitive content of the performance so that one can correctly assess what behavior is indispensably required by the action. One can then turn one's attention to the modifications introduced by the performer to determine how the performer is using the means of expression available.

This requirement is not difficult to meet in practice. It merely asks that the observer be sure to be aware of the concrete, particular nature of the stage action. If a performer is pantomiming milking a cow, the observer must be aware that the performer is milking a cow,

not handling prayer beads. Generally, ensuring that one has a good grasp of the plot of a scene suffices to ensure that one can correctly analyze the nature of the practical movement used in a sample of performance.

"None" versus "not applicable" as scale ratings

In this scale set, any scale can be rated "not applicable." Since many scales also have "none" as an option, some confusion may arise. Each scale is used to record the observer's perception of a certain kind of behavior by the performer. When the circumstances of the performance make the behavior in question impossible or imperceptible, the proper choice is "not applicable." When the behavior in question is physically possible, but the performer chooses to avoid using it, the proper choice would be "none." In short, when the scale includes both options, "none" and "not applicable" correspond to "doesn't" and "can't." When the scale does not include "none" as an option, "not applicable" covers both "doesn't" and "can't."

None, slight, moderate, marked, extreme

A number of scales in this system share a none - slight - moderate - marked - extreme rating scale. This scale has been used as much as possible to facilitate comparing profiles and to give a common terminology to as many scales as possible. There are a few cases in which this system has been used to deal with behavior that is

essentially bipolar in which one pole can be defined as the absence of the other. Thus, in scales 05 and 21, gestural quality can be defined as the absence of posturality. Complete gestural behavior would be rated as behavior lacking all posturality, and the appropriate choice would be "none."

Frame of reference

It is not possible to analyze a performance in absolute terms, as if it existed in a vacuum. There is always a frame of reference, explicit or implicit. In this study, the frame of reference is the range of choice open to the performer. Usually, the frame of reference should be the range of behavior physically available to the performer, regardless of esthetic suitability. However, there are cases in which the genre or the performance places strong limitations on the behavior that is permissible. In such an instance, one may have to modify the rating in order to more reasonably describe the behavior as it appears. For example, in a performance where no one speaks very loudly, an actor who spoke at a medium level might seem louder than is actually the case, by contrast. It might, therefore, be appropriate to describe that volume level as medium loud rather than medium, since that better describes the effect. However, one arrives at such a description by first analyzing the physically available possibilities, and only then modifying the rating somewhat to compensate if necessary.

In like manner, one discounts the effect of costume, makeup, scenery, and so forth. It can be observed that these accessories are increasingly dispensable as the skill of the performer increases. Since they are not essential, in this study one ignores them unless they clearly limit the options available to the performer.

Summary

This chapter sets forth certain fundamental factors that must be considered when laying out a system for systematic analysis and comparison of performance behavior. It addresses the idea of using a set of rating scales to describe definite samples of performance, and describes how the result profiles can be structured. It goes on to show how the scale set presented in the next chapter was developed, and discusses certain factors that enter into the interpretation of analyses produced by this approach, such as cultural bias, subjectivity, practical versus expressive behavior, and frame of reference.

Whatever its imperfections, the essential feature and primary advantage of this approach is repeatability and comparability. Others may have major criticisms of this methodology on any number of grounds, but the value to studies of the performing arts of an approach that aims at verifiable observation and systematic comparison of performance behavior cannot be overstressed. It is only by such a systematic approach that the real stuff of theater--the performance--can be addressed.

Chapter IV

A manual of performance analysis

This chapter is devoted to describing the scale set used to analyze the performances of Nakamura Matagoro II and the students in this study. This scale set is divided into four major divisions, corresponding to movement structure, movement dynamics, voice and phrasing respectively. The scales are numbered continuously for the convenience of those wishing to locate a particular scale rapidly. Under each scale number, the reader will find either an N, indicating a nominal scale, or a Q, indicating a quantitative scale.

Movement structure

The first section of the scale set describes the structural movement behavior exhibited by the performer. It focuses on how the body, seen as an ensemble of moving parts, moves those parts relative to each other, and how the whole ensemble moves through space. One works around the body toward the center, starting with the face and head, proceeding to the arms and legs, and ending with the torso.

The movement of the head and face are considered under the topic of facial expression. The section on gesture is primarily concerned with the arms, although leg gestures may be considered also. The

section on support and locomotion is concerned with the legs, the feet, and the center of weight. Finally, aspects of the movement of the torso are grouped into a section of their own.

Facial expression

Facial expression is a function of tension in the facial muscles, changes in that tension, and movement of the head as a whole. One must separate facial tension from changes in facial tension, since a facial expression may not move the parts of the face relative to each other, but rather may mean holding a pattern of tension for a period of time. In fact, such a mask-like use of the face is seen in several Asian performance forms.

For the purposes of this study, the face is divided into the area of the eyes and the area of the mouth. The movement of the facial muscles may be distributed over the whole face, or, at the other extreme, may consist of the movement of only one separate part of the face. Finally, much facial expression does not involve movement of the facial parts themselves, but is actually produced by movement of the head as a whole.

The facial tension described need not be continuously evident. Often, a performer keeps his face relaxed much of the time, only showing facial tension from time to time. This scale describes facial tension when it occurs, as it occurs. The relative presence or absence of facial tension is considered under scale 04, facial activity.

01. Facial tension

N 0 Not applicable

1 Mouth

2 Eyes

3 Mouth dominant

4 Eyes dominant

5 Whole face

Step one describes facial tension entirely concentrated in the area of the mouth. Step two describes concentration of facial tension entirely in the area of the eyes. Steps three and four describe uneven distribution, with some tension evident in both areas of the face, but weighted toward one area or the other. Step five refers to a nearly equal distribution of facial tension over the whole face.

02. Eye movement

N 0 Not applicable

1 None

2 Brows

3 Lids

4 Ball

5 Whole eye area

Within the eye area, a performer may distribute muscle tension and movement selectively. Step one denotes a lack of muscle tension in the eye area. Steps two, three, and four refer to selective tension or movement in the brows, eyelids, and the balls of the eye respectively. Step five refers to tension or movement in more than one part, usually all three, since if two parts are affected, the third tends to be affected as well, even if only slightly.

03. Mouth tension

- N 0 Not applicable
- 1 None
- 2 Lips
- 3 Cheeks
- 4 Jaw
- 5 Whole mouth area

This scale is parallel to the scale on eye tension. Step one describes a lack of muscle tension in the mouth area; steps two, three, and four refer to selective tension in the given part. Again, muscle tension in a given area causes displacement of the area from rest. As before, step five refers to tension in more than one area.

04. Facial activity

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

This scale considers the amount and frequency of facial tension, regardless of where it occurs in the face. Step five describes the use of the full potential of the facial muscles, involving maximal displacement of the facial features.

05. Facial posturality

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

This scale measures the degree to which all the facial features participate in facial expression. Extreme posturality would mean that all of the facial features participate in a fluid or unified way, such that no feature seems independent of the others. The opposite extreme would mean that each feature seems completely independent of the others, seeming to move by itself without affecting or involving any other part. This scale is independent of the degree of facial activity.

06. Head movement

N 0 Not applicable

1 None

2 Horizontal

3 Saggital

4 Lateral

5 Compound

The movement of the head as a whole can be described in terms of the plane in which it moves. The head moves in the horizontal plane when rotating from side to side, in the saggital plane when nodding backward and forward, and in the lateral plane when rocking from side to side. Shifting of the head can occur in any of the three planes. When the motion of the head involves more than one plane at the same time, the movement is described as compound.

Gesture

Gesture is most often a matter of hand and arm movement. If leg gesture seems to be important, it should be considered along with arm gesture. In this study, gestures of the torso are dealt with separately, as are gestures of the head. In the area of limb gesture, one is concerned with the overall amount of gesture, the relationship between the limbs during gesture, and the modes of turning and flexure used during gesture.

07. Amount of gesture

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

For this scale, both the size of the gestures and their frequency should be considered.

A great many effects can be created by the control of this factor alone. An excellent case for the study of quantity of gesture is the Baryshnikov production of "The Prodigal Son," as videotaped by the Public Broadcasting Service. Each character has his own level of gesture quantity: the father is almost statue-like in the rarity of major gestures, so that each monumental movement carries tremendous weight. In contrast, the son swoops, twists, flutters, waves, and twirls his limbs like some crazed bird, while the low-life characters of the taverns and brothels he visits are demonically, maniacally gestural. The son joins them in their crazed pursuit of pleasure, joining them also in the frantic quantity of gesture used, but as he learns his moral lesson, he grows more and more tranquil, until finally the reunion is a virtual study in single, studied gestures of a monumentality second only to the father's.

08. Limb relationship

- N 0 Not applicable
- 1 Single
- 2 Parallel
- 3 Mirror
- 4 Opposing
- 5 Skew

When one limb gestures and the other does not, the gesture is a single gesture. When both limbs move in the same plane, they may move in the same direction, in which case the gesture is a parallel gesture. When the limbs move in complementary directions--for example, one up, one down; one left, one right--the gesture is a mirror gesture, since the one limb executes approximately the mirror image of the movement of the other. When the limbs move so that they could touch, or do touch, being directed toward one another, the gesture is an opposing gesture. When the limbs both move, but not in the same plane, the gesture is skew.

09. Turning

N 0 Not applicable

1 None

2 Rotating

3 Twisting

4 Circling

5 Compound

Some gestures do not involve turning--hence the provision of step one, none. When the free end of the limb turns the same arc as the point of attachment, rotating occurs. When the free end of the limb turns a larger arc than does the point of attachment, twisting occurs. Both of these kinds of rotation occur around the long axis of the limb. Circling, however, is the form of turning in which the free end describes an arc having the point of attachment as the focus of the arc. A given arm gesture may involve combinations of these, in which case the gesture would be described as compound.

10. Flexure

- N 0 Not applicable
- 1 None
- 2 Shift
- 3 Flexion
- 4 Folding
- 5 Compound

When the limb moves along its axis through motion confined to the joint at the point of attachment, making use of the flexibility of that joint, the limb is said to shift. Only the shoulder, neck, and torso can shift, and since one considers the motion of the neck and torso elsewhere, only the shoulder need be considered here. Flexion refers to moving the free end of the limb along a straight line running from the free end to the point of attachment by displacing and bending an intermediate joint. Folding refers to moving the free end along a curved path toward the point of attachment by bending the intermediate joint without displacing it. A combination of these is called compound.

Support and locomotion

A part of the body that supports the weight of the body is called a support. When standing, the supports are the feet; when kneeling, the knees; when sitting, the hips; when lying down, the torso, and so forth. When two or more supports are involved, weight can be transferred between them, either while moving the center of weight through space or while remaining in place. Aerial steps occur when the supports are momentarily freed of weight entirely, so that the body breaks contact with the ground. The body can turn as a whole around the center of weight, either in place or in relationship to taking the center of weight along a path.

11. Supports

- N 0 Not applicable
- 1 Feet
- 2 Knees
- 3 Hips
- 4 Torso
- 5 Heads, hands, shoulders, etc

For Hutchinson, a part of the body is a support only when weight must be shifted onto another part of the body before the support can be moved. Hutchinson also allows for partial supports in which the weight is held off the body part, but not completely. For the purposes of this study, a part of the body must clearly bear weight to be considered a support. Any in-between state will be considered a gesture here. When kneeling, the support is considered to be the knees even if the performer settles back on the ankles or the heels. Leaning on the hand while kneeling or sitting does not mean that the hand becomes the support. The hands, head, etc. become supports only when either the center of weight is above the head, or no other part of the body bears weight.

12. Weight transfer

N 0 Not applicable

1 Shift

2 Slide-shift

3 Step-shift

4 Slide-step

5 Step

Weight can be transferred onto a new support in a variety of ways. A shift occurs when neither support moves during the weight transfer. In a slide-shift only one support moves, and it maintains contact with the floor. In a step-shift both supports move, but neither leaves the ground. In a step both supports leave the ground, though not at the same time.

13. Aerial steps

- N 0 Not applicable
- 1 One to the same
- 2 One to the other
- 3 One to two
- 4 Two to one
- 5 Two to two

There are five kinds of aerial steps. In each kind, the body momentarily loses all contact with the ground. The performer may take off on one support and land on the same support again (step one). The take-off can be on one support and the landing on another (step two). The performer may take off on one support and land on two (step three) or do the reverse (step four). Finally, the take-off and the landing may both use all supports (step five).

14 Path

- N 0 Not applicable
- 1 Straight
- 2 Curved
- 3 Compound curve
- 4 Circle
- 5 Spiral

The path taken by the center of weight during locomotion can be one of several geometric forms. A straight path is the most direct path between two points, even if a deviation to avoid an obstacle is involved so long as each section of the path uses the most direct route. A curved path is an arc having a single focus. A compound curve is a succession of arcs having different foci. A circular path is a curved path that returns to its starting point; it need not be a perfect geometric circle. A spiral is a curved path in which the performer steadily approaches or moves away from the focus of the curve.

15. Turning

- N 0 Not applicable
- 1 Pivot in place
- 2 Pivot in motion
- 3 Revolve in place
- 4 Revolve on a path
- 5 Circular path with constant front

This scale describes the relationship between turning and taking a path. A pivot is a turn less than 360 degrees; revolving means turning through at least 360 degrees. To turn in place is to take no path while turning; to turn in motion means to turn while taking a path. A circular path with constant front occurs when the performer takes a circular path while constantly facing the same way in the performing space. By so doing, one executes a complete turn relative to the center of the circular path.

16. Floor contact

N 0 Not applicable

1 Toe

2 Ball

3 Side

4 Heel

5 Full foot

The foot can make contact with the floor in a number of ways. For the purposes of this study, if less than the full foot is on the ground, one chooses the most appropriate description of the part of the foot that does touch.

Torso

For the purposes of this study, the torso is considered to have five units: two shoulders, the rib cage, the abdominal area, and the hips. The torso can tilt, rotate, twist, bend, or execute combinations of these actions. The visual effect of torso movement varies, depending on the degree of flexibility and mobility the performer permits his torso to exhibit. As in the face, movement can seem to be the separate movement of individual parts, or, at the other extreme, the fluid movement of unified whole.

17. Torso units

- Q 0 Not applicable
- 1 One unit
- 2 Two units
- 3 Three units
- 4 Four units
- 5 Five units

The various units of the torso may be articulated in different combinations. A one-unit torso seems to have no inner articulation, though it may show some flexibility as a whole. A two-unit torso appears to articulate at a single, definite point; a three-unit torso articulates at two points, and so forth.

18. Torso movements

N 0 Not applicable

1 Tilt

2 Rotate

3 Twist

4 Bend

5 Compound

The torso can move in various ways. The torso is usually carried with the shoulders more or less directly over the hips. A displacement of this alignment, without any other flexure or turning in the torso, is a tilt. Rotation means that both ends of the torso turn through the same arc. Twisting means that one end of the torso turns further than the other end. A bend in the torso may occur at a single articulation or through shaping the whole torso into a continuous curve. A compound movement of the torso combines two or more of these actions.

19. Flexibility

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Depending on the genre and the performer, more or less flexibility is shown. In this scale, none means that torso flexibility is held to a bare minimum. Usually such a performer avoids torso flexure unless it is absolutely necessary for the execution of some task. At the other extreme, the maximum possible use of torso movement, using the full available range of movement, would qualify as extreme flexibility on this scale. As discussed below, flexibility as used in this scale contrasts with mobility, as defined in the next scale.

20. Mobility

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Even if the performer permits himself little torso flexibility, it still can rotate and tilt to a considerable degree. In such a case, the whole torso moves around, while not moving the parts of the torso relative to each other. Moving the whole torso is defined for this study as mobility, in contrast to flexibility, which refers to moving the parts of the torso relative to each other. Hence, this scale measures how much the torso is moved as a unit, the extreme case being one in which the performer uses the full range of movement physically available.

21. Posturality

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Posturality is the quality of movement in which the separate parts of the body seem to move as a fluid, unified whole. Movement is postural to the extent that such a quality is exhibited. When this quality is not exhibited, its counterpart, gesturality, is seen. Gestural movement has the quality that each separate body part seems to have a life of its own, moving without affecting or involving other body parts. Of course, most movement represents a balance between these two complementary states. Hence, in this scale, one refers to posturality only. A state in which posturality is not seen (none on the scale) would be one in which all movement was fully gestural. In like manner, a state in which full posturality is the rule (extreme on the scale) would be one in which no gestural movement is exhibited.

Movement dynamics

In analyzing movement dynamics, one focuses on the manner in which movement is executed, rather than on what movements are performed. Three areas are involved: first, how the performer directs his effort, second, how one treats the shape of the body volume and the spatial relationships of the parts of the body, and third, how the performer relates to the environmental space around the body.

Effort

There are five aspects to the performer's use of effort: flow, weight, space, time, and activation.

Flow refers to the manner in which the performer controls the release of energy, showing free or bound flow.

Weight refers to the manner in which the performer controls the application of weight to the environment, showing strength or lightness.

Space refers to the manner in which the performer channels effort in the surrounding space, showing directness or indirectness.

Time refers to the manner in which one expends effort from moment to moment over the duration of a movement, showing quickness or sustainment.

Activation refers to the manner in which one handles weight with respect to the body, rather than with respect to the environment, showing activation or passivity.

22. Flow

- N 0 Not applicable
- 1 Very free
- 2 Free
- 3 Neutral
- 4 Bound
- 5 Very bound

The release of effort may be more or less inhibited, or more or less uninhibited. A neutral state is also possible, in which the release of energy is not particularly one way or the other. Inhibited, or bound movement, has the quality of exact control, of precise stoppage. It need not seem tense or rigid, merely controlled. Uninhibited, or free movement, has a sense of release, a sense that the energy is allowed to flow out and find its own stopping point. It need not seem frantic or wild.

According to Kestenberg, the flow factor is a product of the moment-to-moment interaction of agonist and antagonist muscle groups. To the degree that muscle groups oppose each other, flow will appear bound; to the degree that muscle groups complement each other, flow will appear free.

23. Weight

N 0 Not applicable

1 Very light

2 Light

3 Neutral

4 Strong

5 Very strong

To exert force on the environment, the performer must move the weight of his body through space. The amount of physical force the performer exerts depends upon the moving mass of his body and the acceleration applied to it. Through the use of his weight, a performer can make an effect on his environment. However, the performer also uses his weight when carrying out movement that is expressive, rather than task-oriented. The use of weight is described as either light or strong. Lightness refers to a quality of restraint in the handling of weight, a sense of delicacy or deftness; only a measured amount of force is generated. The strong weight quality refers to the active application of weight--forcefulness, a sense of power or energy. It should be borne in mind that the energy of the performer need not actually affect anything in his environment in order for the movement quality to be evident in the movement of his body.

24. Space

- N 0 Not applicable
- 1 Very indirect
- 2 Indirect
- 3 Neutral
- 4 Direct
- 5 Very direct

A performer channels his effort in space whenever one moves. The manner of doing so may be direct, indirect, or neutral. Direct effort involves the concentration of energy toward a particular point or along a particular direction. Indirect effort involves the distribution of energy among several directions or points of focus at the same time. The observer must distinguish between genuine indirectness and rapid changes of directness. True indirectness involves simultaneous, not sequential, involvement in a number of spatial directions.

25. Time

- N 0 Not applicable
1 Very sustained
2 Sustained
3 Neutral
4 Quick
5 Very quick

A performer controls the time structure of his movement, accelerating, decelerating, or remaining constant. In particular, though holding the actual rate relatively constant, through momentary relative acceleration or deceleration, one creates a sense of contraction or expansion in time. The sense of expansion in time is sustainment; the sense of contraction in time is quickness. Through modulation of time by momentary acceleration and deceleration, without necessarily a fundamental change of rate, one can create distinctive movement qualities.

The degree to which these qualities are present does not depend directly on the degree of modulation of the time structure. Rather, it depends upon the context of the movement and the nature of the time structure being used. Furthermore, the actual size of the modulation need not be large, since the effect will be in geometric proportion to the size of the change. Therefore, even a small modulation will produce a large enough change in the time structure of the movement to generate a change in the qualitative impression of the movement.

26. Activation

- N 0 Not applicable
- 1 Very passive
- 2 Passive
- 3 Neutral
- 4 Active
- 5 Very active

In addition to the qualities associated with weight, the manner in which a performer uses his weight shows the qualities of passivity or activeness. Movement which is not on a plane level to the floor either rises away from the pull of gravity or falls toward the pull of gravity. The quality of active weight derives from a preponderance of effort devoted to overcoming gravity in order to lift the body or parts of the body, or to restrain the tendency of the body to fall. The quality of passive weight derives from allowing the body to give in to gravity through devoting only a minimal amount of effort to overcoming the gravitational pull. The quality of active weight appears as a tendency to rise; the quality of passive weight appears as a tendency to fall.

Shape

We are accustomed to thinking of the human body as a solid object having a definite size and shape. When analyzing movement dynamics, it is useful to reverse the customary mode of thought and regard the human body as rather amoebic. Through folding and unfolding the limbs and torso, the shape and size of the volume occupied by the body is capable of dramatic change. Like an amoeba, though limited by the solid skeleton, the shape of the volume occupied by the human body can expand, contract, put out extensions, and adapt itself to spaces and to forms in space. In movement analysis, the study of how a performer uses the form of his body volume is the study of shape. The observer is concerned with three aspects of shape: shape mode, shape size, and the directions and planes along which the body molds itself.

27. Mode of shape behavior

- N 0 Not applicable
- 1 Flow only
- 2 Flow with some directionality
- 3 Directionality
- 4 Directionality with some shaping
- 5 Shaping

Flow refers to non-directional expansion and contraction of the body, as in the expansion and contraction of the torso in breathing, the movement of a sleeping baby, or the vague movements of someone quietly waiting or reading.

Directionality appears when the body expands or contracts along a particular direction. A directional movement does not involve a three-dimensional adaptation. The body volume puts out an extension, like an amoeba reaching out. The body can also contract directionally, pulling away from a particular point or along some definite direction.

Shaping appears when movement adapts to three-dimensional space, or creates a three-dimensional form. The adaptation may be to a solid object, or it may be to an existing or fictional space. The space to which the body adapts itself need not be actual; mime effects, for example, show fictional spaces through shaping.

The scale provides steps for each modes in order of increasing complexity, and for two mixed states in which the less complex behavior predominates, but the more complex behavior is present.

28. Size

- N 0 Not applicable
- 1 Very contractive
- 2 Contractive
- 3 Neutral
- 4 Expansive
- 5 Very expansive

A given performer will exhibit a tendency either to grow, to contract, or to remain the same. When the tendency is to contract, to keep oneself small, outward or expansive movement will be kept to a minimum. In like manner, if the tendency is to expand, movement that reduces the size of the body will be minimized. In either case, a movement that tends in the other direction will soon be counteracted. In the neutral state, a balance of expanding and contracting tendencies will be maintained.

29. Directions

- N 0 Not applicable
- 1 Vertical
- 2 Lateral
- 3 Saggital
- 4 Variable
- 5 Compound

Directional movement involves expansion of the body volume along some direction. Very often, the direction chosen approximates one of the principal axes used to define the space around the body in structural analysis. These are the vertical axis, running straight up and down; the lateral axis, running right and left; and the saggital axis, running forward and backward. For this study, this scale is referred to the body cross, in which up is headward. If one axis is clearly preferred, the observer records which one. If the preferred axis changes frequently, the observer may use step four, variable. If the preferred direction is a combination of axes, the observer uses compound.

30. Planes

- N 0 Not applicable
- 1 Lateral
- 2 Saggital
- 3 Horizontal
- 4 Variable
- 5 Compound

When shaping movement occurs, the movement often lies predominantly along one plane. Three principal planes are defined by the three axes in scale 20. The lateral plane is formed by the vertical and lateral axes; the saggital plane is formed by the vertical and saggital axes, and the horizontal plane is formed by the lateral and saggital axes. Steps four and five, variable and compound, are defined as they are in scale 29.

Space

The volume around the body in which movement takes place is called the kinesphere; for this study, one considers the size of the kinesphere and the location of movement in the kinesphere. Spatial retention that covers several concepts found in the theory of structural description to specify relations between the performer and a point or direction in space. Finally, there is a scale devoted to visual focus and another to active touch.

31. Visual focus

N 0 Not applicable

1 Space

2 Self

3 Stage

4 Performer

5 Audience

Looking at nothing in particular shows space focus. Focus on oneself, the costume, props, and so forth shows self focus. Visual attention to sets, properties, or stage objects (real or imaginary) other than people shows stage focus. Directing attention to other people on stage shows performer focus. Looking at people in the audience shows audience focus.

32 Kinespheric size

- Q 0 Not applicable
1 Very small
2 Small
3 Medium
4 Large
5 Very large

As one moves, one fills up the space around one's body--a space of any size desired, up to full extension of the limbs. Here, one describes the most usual size of the kinesphere.

33. Kinespheric zone

- Q 0 Not applicable
1 Central
2 Central/limb
3 Limb
4 Limb/distal
5 Distal

The kinesphere is divided into three zones. The central zone is the torso; the limb zone is the arms, legs, and head; the distal zone is the hands and feet. Zones may overlap as shown. The amount of space in each zone varies with the overall size of the kinesphere.

34. Active touch

- N 0 Not applicable
- 1 None
- 2 Self
- 3 Stage
- 4 Performers
- 5 Audience

In scale 31, one considers what the performer looks at; here one considers what is touched. The scale is defined the same way. Only active, deliberate touch is considered; accidental contact is not included.

Touch can be a very interesting contrasting factor between performance styles. One will note in the analyses to follow that the Kabuki actor has a very different attitude toward touch than does the Western actor. As Ernst noted, the Kabuki actor tries to maintain a certain space around himself; an avoidance of direct physical contact is a corollary. The Western actor in a realistic style, by contrast, values that same kind of physical contact as a way of heightening his presence in the scene.

35. Spatial retention

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Spatial retention refers to maintaining a relationship to a point or direction in space, or to maintaining a spatial relationship in one's own body. For example, one might point in one direction, then turn in another while leaving one's hand pointing the original way. Again, one might keep one's hand on one object while reaching for another. Visually, one might move relative to an object while fixing one's gaze upon it. One might gesture with an arm, then freeze the joints and pivot, bringing the arm to bear in a new direction, but maintaining the spatial form assumed during the original gesture. All of these are examples of spatial retention. In general, for spatial retention to occur, a spatial relationship must be established, then a new relationship must develop while the old one is maintained as precisely as possible.

Voice

For the purposes of this study, the analysis of vocal behavior is divided into four areas: quality, diction, pitch, and volume.

Quality

Vocal quality is a term that means many things to many people. In this study, it has a relatively restricted meaning. Here, vocal quality refers to the characteristic timbre of continuous tone, regardless of pitch and volume, and without considering the effects of consonant formation. If two different people pronounce and sustain the same open vowel tone, the differences between them will be the product of differing vocal quality.

In this study, the parameters of vocal quality are defined in terms of the behavior of the vocal apparatus. Certain vocal-tract behaviors are thought to produce certain vocal qualities. However, the observer has access only to the sound produced by an actor, not to the actor's throat itself. How is the observer to know what the performer's vocal tract is doing?

The observer must learn to recognize the characteristic sounds produced by various vocal-tract behaviors. The most direct way to do this is to learn to produce those sounds himself. In this way, one will learn to distinguish the various sounds through having direct experience of the behavior that produces them. What one can reliably produce in one's own throat can be recognized in the voice of another.

This writer had the benefit of excellent vocal coaching while pursuing various degrees in theater and participating in various theatrical productions. Most of the behaviors discussed in the following section will be familiar to anyone with a similar background, though the terminology may differ.

Each definition of each vocal parameter will be accompanied by instructions on how to produce the various sounds associated with that parameter. So far as is possible in print, these instructions may assist those without prior background in voice to explore the sounds discussed here for themselves.

The parameters of vocal quality used in this study are phonation mode, tightness, nasality, noise, and breathiness.

36. Phonation mode

- N 0 Not applicable
- 1 Fry
- 2 Fry/full-fold
- 3 Full-fold
- 5 Falsetto

The vocal folds vibrate in three ways, each with a different sound. Fry is the mode of phonation in which the vocal folds are adducted so that there is only a small opening near the center of the vocal folds, vibration being confined to the edge of the opening. The resultant sound has a burbling or popping quality. Fry can be experienced by steadily reducing the pitch and volume of an open vowel, while keeping the throat quite relaxed, until a change is noticed in the tone. The sound heard after the tone changes is fry. Full-fold is the sound of the normal, everyday speaking voice. The vocal folds vibrate throughout their mass and length. Most people have no difficulty producing full-fold voice. Falsetto is the sound produced when the vocal fold is restricted by either only allowing half the fold to vibrate, or restricting vibration to the edge of the fold. One can produce falsetto by producing a steadily rising open vowel with a relaxed throat until the tone changes, often after a break in which no sound is produced. The scale includes steps for each of the three vocal modes, and two steps for alternation between two adjacent modes.

37. Tightness

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

The vocal tract can change shape and size considerably. The state of maximum constriction can be experienced by holding the throat in the position reached in the middle of a swallow. Although vocalization in that state is actually impossible, the attempt will prove quite instructive as to the quality of the most strangled, constricted sounds that can be produced. The state of maximum openness can be experienced much more comfortably by vocalizing during a yawn. Care should be taken to ensure that the yawn is fully phonated, with as little breathiness as possible, in order to fully experience the sound of a wide-open throat.

38. Nasality

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

One must discount the sounds in the language of the speaker that may require nasal resonance for proper enunciation. Secondly, one must discount the nasality that may be heard on normally non-nasal sounds when adjacent to a nasal. Finally, it must be recognized that certain sounds, especially unvoiced sounds, cannot have nasal resonance at all. In this study, when a performer exhibits nasality only on intrinsically nasal sounds, the appropriate scale choice is none. As the level of non-phonemic nasal resonance, not due to adjacent nasals, rises, the higher steps in the scale are used. The extreme case would involve thoroughgoing and unmistakable nasal resonance on all normally non-nasal voiced sounds.

Nasality is easily produced in a number of ways, one of the simplest being to talk with a fully relaxed throat, but with the teeth closed, only the lips parted to permit some sound to escape through the mouth. In that condition, virtually the only path available for most of the sound is through the nose.

39. Noise

- Q 0 Not applicable
- 1 None
- 2 Slight
- 3 Moderate
- 4 Marked
- 5 Extreme

The sound produced by the voice is not a simple waveform, but rather a very complex spectrum with energy at a number of different frequencies. Harmonic sound has frequencies in mathematical relationship. When no mathematical relationship exists between the various frequencies of a sound spectrum, the resulting sound is inharmonic. In the voice, both types of sound occur simultaneously, producing a composite.

For example, the sound of z (as in sizes) is a composite of harmonic and inharmonic sound. The harmonic sound comes from the vocal folds, the inharmonic buzzing noise comes from the vibration of the air passing over the tongue just behind the teeth. On the other hand, the vocal folds themselves can produce both types of sound at once, as in the voices of Jimmy Durante or Kirk Douglas.

When inharmonic sound is heard only on sounds that require it, the degree of noise is described as none. To the degree that inharmonic sound is heard on sounds that do not require it, the higher steps on the scale apply. The extreme case denotes a voice in which all sounds are very noisy indeed.

40. Breathiness

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Breathiness is the inverse of phonation. Extreme breathiness, as in a whisper, means little or no vocal fold vibration, all sound being produced by air turbulence in the vocal tract. As the proportion of phonated sound increases, a certain amount of air-turbulence sound remains in the form of unvoiced consonants. Therefore, the observer must discount air-turbulence sound except on voiced sounds.

Diction

Diction refers to the manner in which sounds are formed. Quality refers to the characteristics of the tone of the voice, particularly as influenced by the behavior of the larynx. Diction refers to the characteristics of phoneme formation, especially as influenced by the behavior of the teeth, lips, and tongue. Most behavior considered under diction is short-term, affecting a sound or a syllable; the vocal quality used by a performer can usually be heard over a whole utterance, if not over a whole performance.

41. Lengthening

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Lengthening refers to the length of time a sound lasts beyond the duration required for recognition of the sound. Lengthening would be described as none when all sounds are clipped down to the bare minimum required for phoneme recognition. Normal English speech usually has slight or moderate lengthening, depending on the dialect. Marked or extreme lengthening can be found in various styles of stylized vocalization found in performance genres such as Noh. Lengthening is independent of tempo, since different styles may leave different amounts of space between sounds at the same tempo. Furthermore, contrasting use of tempo and lengthening can be employed for effect, as in the use of very slow, very clipped speech to convey a low estimate of the mental capacity of the listener.

42. Accent

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Accent refers to emphasizing a syllable or word through contrastive use of pitch, volume, or duration. Languages differ in the kind and amount of accent used. However, for this study, accent is evaluated on an absolute scale. None would describe speech without accent of any kind. English speech usually uses slight or moderate accent, depending on the dialect and the situation. Passionate speech may use accent to such a degree that intelligibility is sacrificed to expression of affect.

43. Attack

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Attack and accent are similar, but should be carefully distinguished. Accent is the contrastive treatment of a syllable or word as a whole. Attack is the contrastive treatment of the beginning of a sound, through more forceful use of the articulators. Attack effects on vowels are limited; most attack effects occur on consonants. One way of listening for attack and accent is to listen for stressed vowels when evaluating accent, and for stressed consonants when evaluating attack.

To initiate a sound, the vocal tract must usually execute some kind of movement. For many sounds, such movements must be done with a certain minimum amount of force; otherwise, the intended sound will not be recognizable. For this study, only the degree of forcefulness above the minimum required for phoneme recognition is considered. Any amount of attack above that level would be described by the appropriate choice of slight, moderate, marked, or extreme. Most English speakers usually use slight or moderate attack, depending on the dialect and the situation.

44. Consonantal precision

- Q 0 Not applicable
- 1 None
- 2 Slight
- 3 Moderate
- 4 Marked
- 5 Extreme

When consonants cannot be distinguished, speech becomes unintelligible, since only the vowel content of the syllable can be recognized. At the other extreme, precise enunciation of consonants can be exaggerated far beyond the requirements of clarity to create a stylism of its own. Slight to moderate precision is typical of everyday speech; stage speech usually requires a higher degree of precision.

Pitch

Although pitch is related to the fundamental frequency of vibration of the vocal folds, the relationship is not direct. A number of factors influence the perception of pitch, including phonation mode, resonance, and inharmonic noise. To describe the use of pitch requires more than a graph of fundamental frequency against time. One must also know the performer's potential and use ranges, his rest pitch, the way the use of pitch is structured, and the degree of vibrato or melisma employed.

45. Width

- Q 0 Not applicable
1 None
2 Slight
3 Moderate
4 Marked
5 Extreme

Width refers to the size of the difference between the highest and lowest pitch actually used by the performer, relative to the extent of his potential range. None would refer to the case in which the performer essentially restricted himself to a single pitch; extreme would refer to a performer who actually uses the full extent of his potential range, or nearly so.

48. Center

- Q 0 Not applicable
1 Low
2 Medium low
3 Medium
4 Medium high
5 High

The center of the potential range and the center of the use range do not necessarily match. In this scale, one notes the position of the center of the use range in the potential range. According to Brackett, the potential ranges of men, women, and children overlap more than they differ, most pitches being available to most people. However, as common experience shows, men, women, and children do not tend to actually use the same pitch range. By locating the use range differently in a potential range which is to a large extent held in common, men, women, and children speak as the culture expects them to speak. Of course, a great deal of variation occurs between individuals. Here again, noting the position of the use range in the potential range is a useful way of describing the individual's use of pitch. In this study, one estimates the potential range by listening to the performer's speech on and off the stage, noting age, sex, and the pitch of the voice in all three vocal modes.

47. Rest pitch

Q 0 Not applicable

1 Low

2 Medium low

3 Medium

4 Medium high

5 High

Performers often use a certain particular pitch level, the rest pitch, more often than any other. This scale describes the location of the rest pitch relative to the center of the use range.

48. Structure

Q 0 Not applicable

1 Spoken

2 Spoken/chanted

3 Chanted

4 Chanted/sung

5 Sung

In ordinary speech, vocal pitch is unrestricted. In song only certain pitches may be used. In between, one finds styles of chanting with variable permissible ranges. This scale describe spoken, chanted, and sung styles with allowance for overlapping or intermediate states.

49. Vibrato

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Vibrato is rapid, small variation around a main pitch or pitch curve. All such small-scale pitch variation, such as tremelo, glottal shake, and shimmer, is lumped together under this heading. Vibrato is taken in a broader sense than its usual musical meaning.

50. Slide

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Often, a performer glides through intermediate pitches when changing from one pitch to another. Such behavior is called slide in this study. The term encompasses glissando, melisma, and the like.

Volume

The analysis of volume parallels the analysis of pitch. The performer has a potential range, a use range, and a rest level, just as in pitch analysis. In evaluating volume, one must bear in mind that perceived loudness depends on many factors including the size and acoustics of the performance space and the distance from the performer.

51. Width

- Q 0 Not applicable
- 1 None
- 2 Slight
- 3 Moderate
- 4 Marked
- 5 Extreme

This scale is used in the same way as its counterpart in the pitch section. The scale measures the relationship between the use range and the potential range. If the performer confines himself to one volume level only, one would use step 1, none. If the performer used the full volume range available to him, extreme would be the appropriate choice. Of course, one must keep both ends of the scale in mind. Extreme refers to the use of very soft volume levels as well as very loud ones.

52. Center

Q 0 Not applicable

1 Soft

2 Medium soft

3 Medium

4 Medium loud

5 Loud

The center of the performer's use range will not necessarily match the center of his potential range. In this scale one describes where the center of the use range falls relative to the potential range.

53. Rest level

Q 0 Not applicable

1 Soft

2 Medium soft

3 Medium

4 Medium loud

5 Loud

Within the use range, the performer may tend to prefer a given volume level. That level, to which a performer tends to return, is the volume rest level. It is rated as soft or medium or loud relative to the use range, not the potential range.

54. Volume change

Q 0 Not applicable

1 Very smooth

2 Smooth

3 Medium

4 Abrupt

5 Very abrupt

When a performer changes volume, one may jump to a different volume level, or he may use in-between levels to smooth out the change. In this scale, one describes the effect of the performer's handling of volume change. The amount of change has an effect on the impression created, since a large change seems more abrupt than a small change, assuming both changes take the same amount of time. This is true even if the same number of intermediate levels are used in the jump.

Phrasing

Phrasing is the manipulation of the structure of a performance. A performer constantly makes new choices of vocal and movement behavior. A phrase consists of the span of time in which the overall behavioral pattern is kept relatively constant. The end of a phrase is marked by rapid alteration of the behavioral pattern, involving changes of behavior distinctly greater than the changes occurring within the phrase. Often, there is a brief transition period between phrases while a new pattern establishes itself, since no pattern of behavior can become evident instantaneously. It is possible that the new pattern may be the same as the old pattern, a brief transition period serving as a time marker. In any event, a phrase continues until a change occurs that significantly alters the pattern established in the phrase; when the change of behavior occurs, the pattern briefly becomes fluid, then a new pattern--or a resumption of the old pattern--becomes evident. Phrasing is often multi-layered, such that smaller changes in pattern form subphrases which create a structure within the main phrase. Although there is no theoretical limit on the degree of subphrasing, presumably there is a limit on the degree of subphrasing that any given performer can manage.

Vocal phrasing

These scales focus on phrasing in pitch and volume.

55. Shape

N 0 Not applicable

1 Flat

2 Ramp

3 Oscillating

4 Peak

5 Valley

This scale describes the shape of the pitch and volume pattern. A flat shape neither rises nor falls. A ramp either rises or falls continuously. An oscillating phrase fluctuates around a fairly constant level. A peak phrase rises to a high point and falls away. A valley phrase descends to a low point and then rises. Speech has much fluctuation; one looks for the underlying path. If a definite high or low occurs, the phrase is a peak or valley. Without a high or low, but with the end at a different level from the beginning, it is some kind of ramp; if it ends at the same level, it is flat or oscillating. A flat phrase is monotone; oscillating phrases have an active, lively sound. The emotion conveyed should not be confused with the pitch pattern. A flat phrase in a very high or low range may convey high emotional intensity; it is not monotonous though it is monotone.

56. Duration

- Q 0 Not applicable
1 Very short
2 Short
3 Medium
4 Long
5 Very Long

A very long vocal phrase runs to the limit of the performer's breath. The medium phrase is one of comfortable length. The very short phrase lasts only long enough to establish a vocal pattern, then ends.

57. Emphasis

- Q 0 Not applicable
1 Very early
2 Early
3 Middle
4 Late
5 Very late

Often a phrase will contain a moment of significant contrast in one or more vocal parameters, creating a moment of emphasis in the phrase. This scale describes where such moments occur, early being toward the beginning of the phrase, and late toward the end.

Movement phrasing

The description of duration and emphasis in movement phrasing is similar to describing duration and emphasis in vocal phrasing. However the shape of a movement phrase is a complex matter that cannot be dealt with in a single scale. In this study, the shape of the movement phrase is described by considering where movement begins in the body, how it passes through the body, and what kind of spatial transitions occur in the process of moving.

58. Duration

Q 0 Not applicable

1 Very short

2 Short

3 Medium

4 Long

5 Very long

Movement phrasing may relate to the breath as does vocal phrasing, but there is no reason why it must do so. Therefore, a different approach is required. For the purposes of this study, a very short movement phrase is one just long enough to establish a pattern of movement behavior. A short phrase is about double that length, a medium phrase is about four times as long, and so forth. In this way, the length of the phrase depends upon the performer's use of time.

59. Emphasis

- Q 0 Not applicable
1 Very early
2 Early
3 Middle
4 Late
5 Very late

This scale is used in exactly the same manner as scale 57, its vocal phrasing counterpart. As in vocal phrasing, emphasis is a significant alteration in the behavioral pattern that does not break the bound of that pattern and start a new phrase. The scale steps are defined as in scale 57.

60. Passage

- N 0 Not applicable
- 1 Disjoined
- 2 Linked
- 3 Successive
- 4 Rippling
- 5 Simultaneous

There are various ways in which the flow of movement can pass through the body. Disjoined passage refers to a movement in which the flow of movement passes from one body part to another body part not adjacent to the first. Linked passage refers to movement which passes from one body part to an adjacent part in such a way that relatively little overlapping movement occurs. Successive passage occurs when movement flow between adjacent body parts involves a definite overlap. Rippling passage occurs when overlapping movement flow is maximized. Simultaneous passage occurs when the moving body parts seem actuated by the same movement impulse at the same time.

61. Initiation

- Q 0 Not applicable
- 1 Central
- 2 Central/limb
- 3 Limb
- 4 Limb/distal
- 5 Distal

Movement can begin anywhere in the body. A movement impulse that results in drawing the hand to the torso might begin in the torso as in a reaction to a threat to the body center; it might also begin in the hand, as in a reaction to touching something hot. One describes the location where the movement impulse begins by using the same terms as in the analysis of kinespheric range (scale 33). It should be borne in mind that movement which predominantly takes place in one zone need not actually originate in that zone.

62. Transition

- N 0 Not applicable
- 1 Vague
- 2 Reversal
- 3 Cyclic
- 4 Plane
- 5 Skew

A movement of the body or of its parts must take a path through space. When that path changes, a spatial transition occurs. When the path itself is indefinite or very small, the transition may not be clear. Such a transition is called vague. Reversal denotes a transition in which the new path retraces the old path. Cyclic describes movement that returns to the start of the old path by a new and different path. A plane transition is one in which the new path leads to a new destination, but lies in the same plane as the old path. When both a new plane and a new destination shape the new path, the transition is called skew.

Phrase structure

The preceding sections on vocal and movement phrasing describe how the performer forms individual phrases. However, the effect of phrasing is strongly dependent on how phrases are linked, layered, varied, and decorated, how fast they are executed, and what rhythms are involved. In the following section, both movement and vocal phrasing should be considered together for each scale.

63. Elaboration

- Q 0 Not applicable
1 None
2 Slight
3 Moderate
4 Marked
5 Extreme

Elaboration is short-term minor variation of the behavior pattern that does not create sub-phrases within the phrase. An extreme degree of elaboration creates a sense of complexity, a richness of texture, through the short-term variation of many behavioral elements. When there is no elaboration, the performance seems austere, plain, highly economical, stripped down to the barest essentials.

64. Compounding

- Q 0 Not applicable
- 1 None
- 2 One degree
- 3 Two degrees
- 4 Three degrees
- 5 Four or more degrees

Compounding is the layering of phrases within phrases. When no compounding occurs, the performance is a succession of plain phrases. If a phrase has subphrases in it, but no sub-subphrases, there is one degree of compounding. Each layer of subphrasing corresponds to one more degree of compounding. For example, four degrees of compounding would describe a basic phrase with four layers of subphrasing. Such complex phrasing often means that different parts of the body are phrasing in different ways at the same time.

65. Overall rate

Q 0 Not applicable

1 Very slow

2 Slow

3 Medium

4 Fast

5 Very fast

The overall rate is the rate including all pauses, phrase breaks, etc. Overall rate lumps all such variation into one question: considering the amount of behavior to be executed, how fast does the performer get through it? Very slow performance creates the impression that a very long time passes with very little happening; conversely, very fast performance creates the impression that a great deal happens in a a very short time--often, more seems to happen than actually does.

66. Phrase rate

Q 0 Not applicable

1 Very slow

2 Slow

3 Medium

4 Fast

5 Very fast

The phrase rate is described in the same way as the overall rate, except that only the rate within phrases is considered. The effect on rate of pauses, phrase breaks, and the like is left out. To put the matter into question form once more, this scale asks, given a certain amount of material that makes up one phrase, how fast does the performer get through it? Phrase rate is usually faster or the same as overall rate. However, a pattern of very slow phrases with very fast transitions might produce a phrase rate slower than the overall rate.

67. Pause

- Q 0 Not applicable
1 None
2 Slight
3 Moderate
4 Marked
5 Extreme

Pause is the most commonly encountered phrase transition. The length and frequency of pauses has a very strong effect on the impression created by a pattern of behavior. In this scale, both the amount of phrase and pause duration should be considered.

68. Meter

- N 0 Not applicable
1 Free
2 Single
3 Duple
4 Triple
5 Complex

If there is no recurrent beat, the rhythm is free. A single meter has equal stress on every beat. A duple meter consists of beats grouped into multiples of two; a triple meter consists of groups of multiples of three. A complex meter mixes these.

69. Rhythmic variety

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Through devices such as syncopation, rhythmic freedom can be had without varying the basic meter. Without such devices, the rhythm becomes strict, even mechanical. With extreme rhythmic variety, the basic meter can be entirely masked.

70. Metric change

Q 0 Not applicable

1 None

2 Slight

3 Moderate

4 Marked

5 Extreme

Meter may change more or less often, involving more or less extreme changes. Extreme metric change would involve frequent switching between such unrelated meters. The effect of rhythmic variety must be distinguished from the effect of metric change.

Chapter V

Numerical procedures

The analysis of a single performance yields a set of numerical ratings, one for each scale in the system, as discussed in Chapter III. In this chapter, the numerical analysis procedures used in this study are discussed in detail, so that such considerations will not needlessly hamper the discussion of actual performances in later chapters.

Numerical analysis of performance profiles

In order to discover how the performance patterns of the students changed, one must carry out two comparisons for each student:

1. A comparison of the first and second performances by each student.
2. A comparison of the changes found between the first and second performances to the performance patterns in Kabuki of Nakamura Matagoro.

The first comparison identifies the changes that take place. The second relates those changes to Matagoro's Kabuki styles. The question is: did the student change toward the Kabuki, or away from it?

These comparisons are made by comparing the numerical ratings found for each scale and each of the two performances. The procedures for carrying out these comparisons follow.

For any given scale, a change occurs when the value found for the earlier performance does not match the value found for the later performance.

A scale that shows no change will be referred to as a "stable" scale. Once a scale is identified as stable, there is no need to go further with that scale, since we are interested primarily in those aspects of the student's performance pattern that change.

There are several possible relationships between a scale that changes and Matagoro's performance patterns.

Since there are two different styles for Matagoro, a change may occur relative to one of these styles or the other. In such a case, the change will be referred to as a change toward or away from the plain or the dance style.

However, there are a number of consistencies between Matagoro's two styles. In these cases, the value for Matagoro's performance represents both styles at once. In such a case, the change relative to Matagoro will be referred to as a change toward or away from both styles.

It is also possible for a change to occur which does not represent a change toward or away from Matagoro. For example, the student may change from a value that Matagoro never shows to another value that Matagoro never shows. In such cases as these, the change will be referred to as "ambiguous."

From the above discussion, there are eight kinds of change, which may be put in four groups: (1) no change; change toward (2) both styles, (3) the dance style, or (4) the plain style; changes away from (5) both styles, (6) the dance style, or (7) the plain style; and (8) ambiguous change.

If the given scale is a quantitative scale, change on that scale has directionality, i.e., one can consider a change on the scale as moving toward Matagoro or away from him, even if the scale shows no actual match with him. For example, suppose that a student begins with very soft volume and increases his volume to medium while Matagoro shows a medium loud level. This represents a change toward Matagoro, even though the student did not actually match Matagoro's relative volume level. Therefore, on quantitative scales, one must consider both changes to a match with Matagoro's pattern and changes in the direction of Matagoro's pattern as well.

If the given scale is a nominal scale, change on that scale has no directionality as defined above. Therefore, on nominal scales, one can consider only changes that involve a match with Matagoro; one must ignore changes that do not involve such a match. As defined in Chapter III, nominal scales are lists of discrete states. A change from one state to another does not imply a change relative to a third state. For example, a change in the body part used for support (as defined in scale 11) from feet to hips does not imply a change relative to supporting on the knees. One may compare the situation to a alchemical manipulation: changing lead to gold has no relation to changing iron to titanium.

Numerical definition of types of change

The following section defines the situation and the types of change in mathematical terms.

Let A be the value of a given scale S for the student's first performance of a before-and-after pair. Let B be the value of S for the student's second performance of the same pair. Let C be the value of S for Matagoro's plain style, and let D be the value of S for Matagoro's dance style.

There several possible relationships between A , B , C , and D .

For the moment, assume that S is a nominal scale. In this situation, only equalities between A , B , C , and D are of interest.

First of all, if A equals B , then the scale is stable, and one need test it no further. From here on, assume that A does not equal B .

If C equals D , then Matagoro is consistent on S , and any change relative to him will be a change relative to both styles. If A equals C , then there is a change away from both styles; if B equals C , then there is a change toward both styles.

If C is not equal to D then there are various possible relationships between the student's performance patterns and Matagoro's. For example, if A equals C , the student's first performance matches the plain style. This is not very significant in itself, since a match between Matagoro and the student at the beginning of the program could not be due to the effects of program on the student. However, it may acquire significance depending on the relationship of B to D . If B equals D , then there is a change from the

plain style to the dance style; i.e., a change toward dance. If B is not equal to D, then one cannot speak of a change toward dance, but one can speak of a change away from the plain style. In like manner, if A equals D, there may be a change from dance to plain, or a change away from dance.

The possibilities for a nominal scale can be conveniently summarized as follows:

1. If A equals B then S is stable.
2. If C equals D and B equals C then S changes toward both.
3. If B equals D and A is not equal to C then S changes toward dance, or if A equals C and B equals D then S changes toward dance (plain to dance).
4. If B equals C and B is not equal to D then S changes toward plain, or if A equals B and B equals C then S changes toward plain (dance to plain).
5. If A equals C equals D then S changes away from both.
6. If A equals D and B is not equal to C then S changes away from dance.
7. If A equals C and B is not equal to D then S changes away from plain.
8. All other change is ambiguous for a nominal scale.

Classifications 1 through 8 also hold for quantitative scales, but there are inequality relations in quantitative scales that imply a change relative to Matagoro, but not a match with Matagoro. The tests for the quantitative scales follow:

1. If A equals B then S is stable.

2. If C equals D and B equals C

or A is less than B is less than C is less than or equal to D,

or A is less than B is less than D is less than or equal to C,

or C is less than or equal to D is less than B is less than A,

or D is less than or equal to C is less than B is less than A,

then S changes toward both.

3. If B equals D and A is not equal to C

or A is less than C is less than B is less than D

or D is less than B is less than C is less than A

then S changes toward dance (from a non-Kabuki style to dance);

or if A equals C and B equals D,

or C is less than A is less than B is less than C

or D is less than B is less than A is less than C

then S changes toward dance (from plain to dance).

4. If B equals C and B is not equal to D

or A is less than D is less than B is less than C

or C is less than B is less than D is less than A

then S changes toward plain.

If A equals B and B equals C

or D is less than A is less than B is less than C

or C is less than B is less than A is less than D

then S changes toward plain (dance to plain).

5. If A equals C equals D

or C is less than or equal to D is less than A is less than B

or D is less than or equal to C is less than A is less than B

or B is less than A is less than C is less than or equal to D
or B is less than A is less than D is less than or equal to C
then S changes away from both.

6. If A equals D and B is not equal to C
or D is less than A is less than C is less than B
or B is less than C is less than A is less than D
then S changes away from dance.

7. If A equals C and B is not equal to D
or C is less than A is less than D is less than B
or B is less than D is less than A is less than C
then S changes away from plain.

8. All other change is ambiguous for a quantitative scale.

These tests are implemented in lines 120-140 of STUDENTS/DPG (see Appendix).

Three display formats are used to present the results of this analysis in Chapter VII.

"TYPE OF CHANGE FOR EACH SCALE" specifies the type of change that is found for each scale for a given pair of performances. The scales are listed in numerical order and grouped into the four major analysis areas: structure, dynamics, voice, phrasing.

"A, B, C, AND D VALUES" simply presents the values for the first performance (A), the second performance (B), the plain style (C), and the dance style (D) for each scale for a given pair of performances.

"TYPES OF CHANGE RELATIVE TO MATAGORO" presents a summary for all the performances done by a given performer. The heading "Total for all roles" adds up the number of instances of each type of change for all

the performance pairs for a given performer. It also shows the number of changes toward Matagoro, regardless of style, and the number of changes away from Matagoro, again regardless of style.

The probabilities given on "TYPES OF CHANGE RELATIVE TO MATAGORO" for each performer are computed as follows:

Let N be the number of scales that could show a given change. Let P be the probability of any one type of change occurring for any one scale. Let Y be the number of times a particular type of change is observed. The probability that Y is due to change is given by the expression:

$$N! / (Y! * (N - Y)! * P^Y * (1-P)^{(N-Y)})$$

where N! equals N * (N-1) * (N-2) * (N-3) * ... * N-(N-1). This calculation is performed by lines 200-210 of STUDENTS/DPG (see Appendix). The algorithm used is of some interest, since it permits the calculation of large factorials in a small computer without overflow.

Numerical analysis of profiles of Matagoro

Given four sets of data, each consisting of one value for each of seventy scales, on any one scale S there may be up to four different values, one for each of the four sets of data.

For any given scale S, let E be the value for Matagoro's performance as Enju, B be the value for Bimyo, P be the value for the

plain style, and D be the value for the dance style. There are fifteen possible matching relationships between the four values. In the following list, any value not listed as part of an equality is not equal to any of the values that are part of the equality.

1. E equals B equals P equals D (Four-way match)
2. E equals B equals D
3. E equals B equals P
4. E equals P equals D
5. B equals P equals D
6. E equals B and P equals D
7. E equals P and B equals D
8. E equals D and B equals P
9. E equals B
10. E equals P
11. E equals D
12. B equals P
13. B equals D
14. P equals D
15. No match exists between E, B, P, and D

Keeping in mind that in each category the equalities listed are the only equalities that may be present, any one scale will fit into only one of the above categories.

Table 5 gives the relation found for each individual scale by scale number. A table of the actual E, B, P, and D values is also given. These tables are prepared by the computer program called MATAGORO. A listing of this program appears in the Appendix.

Table 6 in Chapter VI tabulates the number of scales for which each of these relationships is found. It also tabulates all matches involving both P and D ("All matches to both"), all matches involving P ("All matches to plain") and all matches involving D ("All matches to dance").

Finally, it tabulates all instances in which complementary relationships exist. These (items 6, 7, 8, 9, and 14) are tabulated as "split situations." In such situations, if one considers E and B as one subset of the set of four values and P and D as the other, equality relationships exist only within subsets (6, 9, and 14) or in a complementary fashion between subsets (7 and 8). Such situations are ambiguous. Since the same scale fits more than one of these possibilities, they are not counted as matches with either style. This data is tabulated in five columns. In the first column one finds the data for all scales considered as a set. In the next four columns one finds the data for each of the four major subgroupings of the scale set.

Chapter VI

Performance patterns of Nakamura Matagoro

Nakamura Matagoro as the model of Kabuki acting

All the student actors whose performances are analyzed here studied Kabuki acting under Nakamura Matagoro. Each student was expected to emulate Matagoro's interpretation of each role. His performance patterns therefore served as the model of Kabuki acting for the student actors. As such, they serve as a natural standard of comparison or benchmark for the analysis of the changes that took place in the Western performances done by the students in this study.

Therefore, for the purposes of this study, Kabuki acting is defined by the performance patterns of Nakamura Matagoro. Fortunately, his position as chief instructor in Kabuki at the National Theatre of Japan and his status as a leading professional actor in the Kabuki theatre over a period of many years establish his credentials as a model example of Kabuki acting. When one considers in addition that his example was explicitly identified as the single model of Kabuki acting for the students in this study, one may conclude that no further search for a model of Kabuki performance is necessary.

Materials on Nakamura Matagoro

Naturally, it is necessary to analyze Matagoro's performance patterns before turning to the performance patterns of the students. Fortunately, considerable material is available for such an analysis. The study of Matagoro presented here is based on the following materials:

1. A videotape of his performance of the role of Enju in Genda Kando at the National Theatre of Japan.
2. A videotape of his performance of the role of Bimyo in Moritsuna Jinya at the National Theatre of Japan.
3. A videotape prepared by this writer at the University of Hawaii at Manoa of demonstrations of most of the major roles and scenes from Kanadehon Chushingura. This tape, entitled "Demonstrations from Chushingura," amounts to over four hours of material, and contains several repetitions of the same role or scene taped on different occasions. Some of this material was collected during special demonstrations staged by Matagoro; the rest of the material was collected during class sessions.

Some of the material in "Demonstrations from Chushingura" is not directly related to any particular play. Matagoro taught a number of exercises used as classroom drills. These drills taught basic patterns of walking, kneeling, bowing, swordsmanship, and handling the fan that are common to almost all Kabuki performance. The basic routines were rehearsed daily throughout most of the program.

In a number of instances, his performance in these demonstration and classroom situations reaches a level of intensity and involvement that quite closely parallels the levels shown in his public performances at the National Theatre. Even without systematic analysis, review of this body of material intuitively reveals a consistent performance style in the hands of a remarkable actor.

Dramas represented in the materials on Matagoro

Although the videotapes of Matagoro involve material from three different plays, there is sufficient similarity between the three dramas to permit comparison. All three were originally written for the puppet theater over a thirty-year period: Genda Kando in 1739, Moritsuna Jinya in 1769, and Kanadehon Chushingura in 1748. Chushingura and Genda Kando share common authorship: Takeda Izumo and Miyoshi Shoraku collaborated with Namiki Senryu on Chushingura and with Asada Kakei on Genda Kando. Since all three plays were written for the puppet stage, they share a number of scenic, literary, musical and performance conventions. Much the same kind of emotional, cognitive, and esthetic effect is produced by each of the three. All three involve similar acting styles; styles considerably more realistic than the aragoto style, and less oriented to comedy and humor than the wagoto style--both styles common to the period in which the plays were written. Of the three, the style shown here is the more readily comparable to the style of acting of non-comedic Western

spoken drama. However, considerable differences between these two do exist, as is shown below.

Plain and dance styles

The most important conclusion that will be drawn in this chapter is that Matagoro showed two distinct styles of performance.

The first of these is referred to in this study as the "plain" style. It is the style he uses in most of the material analyzed here, including most of his performances as Enju and Bimyo, and also most of the material in "Demonstrations from Chushingura."

The second style is referred to here as the "dance" style. It is particularly the style shown in the "Fugitives" section of The Forty-Seven Samurai, which is a michiyuki dance scene adapted from the "Ochiudo" michiyuki in Chushingura. (The other michiyuki scene in Chushingura was not used in The Forty-Seven Samurai). There will be considerable analysis of these two styles in the following pages. For the present, the following descriptions give a preliminary idea of the nature of these performance patterns.

The plain style is a style developed from the puppet theatre and adapted to playing generally serious scenes of prose dialogue. It is one of the least stylized Kabuki performance patterns, and while considerably different from Western performance patterns, bears certain similarities to the style of serious Western spoken drama--certainly more so than the well-known theatricalism of aragoto acting style, for example. There is relatively little information

about this style in the prior literature. The more theatricalized patterns such as aragoto, wagoto, and shosagoto have received far more attention. The most applicable materials are those on acting in the maruhon (puppet-derived) repertory, which developed later than the styles mentioned above. Chushingura is in fact one of the most famous examples of the maruhon style.

The dance style adapts the movement patterns of Japanese dance to the requirements of playing a dramatic scene. It originates in the Kabuki theatre prior to puppet theatre influence. It is strikingly different from the style found in the puppet-theatre repertory. While the greatest differences are found in the area of movement, there are also vocal differences as well, as will be shown below. Much of the information in Brandon, Scott and Leiter has to do with the dance style, especially the materials on shosagoto, tate, and tachimawari. Ernst also has extensive discussion of Kabuki dance and the importance of dance to Kabuki acting; much of this material will be applicable to this analysis.

Synopsis of the role of Enju

Genda Kando (The Disinheriting of Genda) is the first act of the all-day maruhon (puppet-theatre) play, Hiragana Seisuiki. As the Halfords report, "The original play was in five acts of which only two survive. . . . Genda Kando is often played as a complete drama in its own right. . . . The play was written by Takeda Izumo, Miyoshi Shoraku, and Asada Kakei; Takeda Izumo and Miyoshi Shoraku also worked

on Kanadehon Chushingura. The play was first staged in 1739."²²

Enju is the wife of Kajiwara Kagetoki, a warrior under Minamoto Yoritomo. She has two sons, Genda and Heiji. Genda has been away with his father at the front, while Heiji stays at home feigning illness. Genda arrives unexpectedly. He finds himself in an impossible situation: at archery practice, his father accidentally shot down the Minamoto standard. Kajiwara would have atoned through seppuku, but another warrior, Sasaki Takatsuna, intervened, saving Kajiwara's life. Genda, not present at the time, naturally wished to show his gratitude to Takatsuna. However, he had no chance to do so until the battle of the Uji River. The first to attempt the crossing of the river, Genda looked behind him and saw that the only warrior following him was Takatsuna. Genda therefore allowed Takatsuna to land first, thereby ensuring great honor for Takatsuna. However, at the same time, the army considered Genda's action to be one of cowardice. To explain his motives would rob Takatsuna of glory, since it would reveal that only through Genda's action was Takatsuna able to arrive first. In short, in attempting to recompense the savior of his father, Genda has put himself and his family in disgrace. He finds that his only course is to commit seppuku to atone for the dishonor his actions have brought.

Enju greatly wishes her son to live. She appeals to his sense of duty by reminding him that Yoritomo is not only his lord but his godfather as well; Genda replies that he will serve his lord in his

²² Aubrey S. and Giovanna M. Halford, The Kabuki Handbook (Rutland, Vermont: Tuttle, 1956), p. 52.

next life. She then appeals to his sense of filial obligation and his love for her, but Genda remains resolved.

At this point, Enju plays a masterful stroke. She announces that seppuku is too good for Genda; she has resolved that he will not be permitted to die. Instead, she will disinherit him and take his swords from him. She orders Heiji and the servants to dress him in old servant's clothing; Heiji and his jackals deride Genda; Enju pretends to join in, but with tears in her eyes. She then declares that if Genda wishes to be welcomed back into the family, let him prove himself by showing his worth in battle against the Heike.

Chidori, Genda's mistress, has been present all the while. Heiji, who wants her for himself, demands that she give up Genda and become his concubine. When she refuses, he declares to Enju that Genda and Chidori have disgraced her roof. Feigning anger, Enju drives Chidori before her into the next room.

Upon returning, she comments that although she cannot give arms to her disinherited son, there is a suit of armor which was given to Genda by Yoritomo. Since it is his own property, no one can prevent him from taking it with him when he goes. When he goes to get the armor, he finds Chidori waiting for him in hiding behind it; she explains that her mother has ordered her from the house along with Genda. Now they may go off together to the wars.

As Genda and Chidori depart, Enju reappears. Night has fallen, and she carries a lantern. Seeming to be unaware of their presence, she drops two packets of money which Genda collects; she refuses to let them speak their thanks. To hide her tears, she extinguishes the

lantern and exits. As the curtain closes, Genda and Chidori salute her silently.

By this seemingly inhuman course of action, Enju manipulates the code of honor to save her son's life, give him the chance to regain his honor, thwart her younger son's improper ambitions, and unite Genda and Chidori. The basis of her action is her unshakeable belief that Genda will be able to win glory in battle. Since she has no doubt of his martial ability, her remarkable strategm is actually the best way to save her son's life and give him the chance to re-establish his unjustly tarnished honor.

Performance analysis of Matagoro as Enju

As can be seen in Table 1, Matagoro uses his facial muscles gesturally--when he moves one part of his face, the movement is not permitted to affect any other part. This gives clarity and emphasis to each facial gesture to a degree that separates his use of facial gesture from ordinary facial expression and makes it into something specifically theatrical. Furthermore, the amount of facial activity is small; long periods with very little activity alternate with short periods of clearly defined facial expression.

Leiter makes several observations similar to these (p. 182-184). He notes the use of the eyebrows as a separate unit in the role of Moritsuna, the general lack of facial expression in many female roles, and the tendency to make each facial expression a clear, single statement.

TABLE 1
NAKAMURA MATAGORO AS ENJU

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	---					39 Noise	---				
05 Posturality	-					40 Breathiness	---				
06 Head Movement	---					41 Lengthening	-----				
07 Gesture amount	---					42 Accent	---				
08 Limb relation	-----					43 Attack	-----				
09 Turning	-					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-----				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	-----				
16 Floor contact	-----					51 Width	-----				
17 Torso units	-					52 Center	-----				
18 Torso motion	-					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-				
20 Mobility	---					55 Vocal shape	-----				
21 Posturality	-					56 Duration	-----				
22 Flow	-----					57 Emphasis	-				
23 Weight	-----					58 Duration	---				
24 Space	-----					59 Emphasis	-----				
25 Time	---					60 Passage	---				
26 Activation	---					61 Initiation	-----				
27 Shape mode	---					62 Transition	-----				
28 Expansion	-					63 Elaboration	---				
29 Preferred axis	---					64 Compounding	---				
30 Preferred plane	-----					65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	---				
32 Kinesphere size	-					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	---				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retent.	-----					70 Metric change	-				

Inapplicable scales are left blank

More expressive movement occurs in the area of the mouth than in the eye area. The stillness in the eye area, together with the way he fixes each glance on a particular target and holds it there, gives Enju an air of seriousness and command, especially in the later scenes, where Matagoro uses it to show that Enju is under increasing pressure and faces great difficulties. When Genda first arrives, and Enju knows nothing of the troubles about to ensue, there is much more activity in the eye area, conveying a more relaxed, happier mood.

Movement of the head as a whole almost always occurs in the horizontal plane, consisting of rather small turns of the head toward one side or the other. Matagoro handles his head in such a way that one realizes Enju's age: her neck does not have the flexibility of a young person's neck, but causes Enju difficulty and restricts her movement. Often turning her head involves the shoulders, as one often sees in older people.

The amount of arm gesture is also restricted. The limbs usually are in an opposing relation--most often at rest in his lap. He does not use any appreciable amount of limb rotation in arm gestures; simple flexions suffice when he wants to make a gesture. In keeping with the overall amount of gesture, the size of any particular gesture is also small. Again, the restriction conveys age; it also often conveys dignity and authority as well. One feels that Enju does not need large gestures to exert her will. As in the use of facial movement, there is a qualitative difference between the scene where Enju welcomes Genda and the later scenes which become a matter of life and death for Genda.

As Enju, Matagoro spends most of his time kneeling in one place. From his entrance, he crosses to the left side of the upstage platform and kneels in the traditional Japanese fashion. He remains there for most of the scene, rising to announce that Genda will be disinherited. His next move is to exit with Chidori; the scene of giving Genda the armor, and the next scene of giving Genda and Chidori the money, consist of very simple floor patterns: he makes his entrance upstage left, crosses toward center, and then exits again, each move taking a straight path.

Because relatively little movement across the floor takes place in Matagoro's performance of this character, there is relatively little behavior to examine using the scales that describe support and locomotion. It seems fair to say that his style as Enju is one which minimizes locomotory or supporting movement. In context, the absence of such movement creates a sense of repose and dignity that reinforces the impression of Enju as a woman of authority.

However, when such behavior occurs, it seems to follow a consistent pattern. When he moves across the floor, he rises to his feet. He uses full steps on the full foot rather than any kind of sliding or shifting step. Steps on a partial support occur, but the full foot is usually used. His paths across the floor are straight except as necessary to negotiate obstacles. When he takes a new direction, he usually pivots before actually starting on the new path.

These locomotory patterns give a sense of decisiveness to Enju. Once in motion, her motion is direct, the movement of one who has made

up her mind and now proceeds to execute the plan she has conceived, without hesitation or wavering.

He keeps his torso in one unit throughout; when his torso comes off the vertical, it does so by tilting as a whole using the hips as a hinge. He does not keep his torso absolutely rigid; however, although there is a minimal amount of flexibility, there is never any sense of a particular point in the torso where the flexibility occurs. Scott's comment that "there should be a perpendicular line running from neck to heel" (p. 87) is related to this use of the torso. Of course, the line cannot be perpendicular if the actor leans or bends, as quite frequently occurs. The one-unit torso tends to keep the body in a line no matter what movement occurs.

As a rule, Matagoro does not make large or frequent movements with his torso. In the torso as in the face, gesturality is the rule. Much the same effect is generated through the use of gesturality in the torso as in the face: clarity and directness, dignity and authority, an aging body combined with a still sharp and decisive mind. There is a change in the use of gesturality in the torso that parallels the changes in the face and gesture. Early in the play, when Enju is merely happy to see her son again, there is more posturality and more activation generally; later on, when the issues are life and death, Matagoro uses fewer and more pointed gestural movements to convey Enju's sense of crisis and strong will.

Throughout his performance as Enju, Matagoro shows bound flow. His use of weight tends to remain neutral--neither especially strong nor light. His attitude toward space is direct throughout. Although there

are moments of quickness, as a rule his attitude toward time is one of sustainment. He almost always shows passivity, not activation.

Matagoro's first entrance is a good example of sustainment combined with directness. There is a pause in the action on stage. With musical accompaniment and sung narration, the shoji doors upstage open rather suddenly, with Matagoro already in place behind them. He takes his time and looks very sharply at each individual in the scene as he slowly crosses straight to his seat and sits in the traditional Japanese kneeling position. Each movement he makes while crossing and sitting is carefully separated from the others, and each movement has the qualities of passivity, sustainment, directness and neutral weight mentioned above.

His use of passive quality adds to the air of authority somewhat, but more importantly, it helps convey the sense of age. It makes it seem as though it is difficult for him to move, as if the effort of making a movement comes with difficulty or perhaps pain.

The result is that in the time it takes him to take a few steps across the stage and sit, he creates the unmistakable impression of an old woman, not in the best of health, yet possessed of remarkable poise, dignity and authority. It seems no accident that no one moves or speaks until she is comfortably seated.

As mentioned above, he spends the greater part of the scene seated. When he is seated, he tends to show only flow, with perhaps occasional directional gestures. There are long periods of time in which his character, although physically present on the stage, does not participate in any way in the stage action. During such times, he

essentially keeps absolutely still, doing nothing to draw focus to himself. Only at certain moments, in which the rhythm of the scene clearly allows a pause in which the audience may study the reactions of each character, does he make some slight facial or limb gesture to show his reaction to the events which have ensued.

Once he gets up, he shows more directionality; however, there is still a good deal of movement that involves flow only. Throughout the scene, his movement is very contractive. One striking feature of his use of shape is his strong orientation along the lateral axis and into the horizontal plane. He never raises his arms much above shoulder height, and vertical-plane movement seems difficult for him, as it often is for an older person. Extension of his limbs into the saggital plane also seems to be difficult, again a sign of age. Most gestures rise to the mid-torso level from rest and remain at about that height, moving back and forth across his body and showing some movement toward and away from his body, thus moving in a horizontal plane in front of him. In context with other patterns already described, this use of planes emphasizes Enju's physical age. As already noted, the contrast between Enju's weakened physical condition and strong mental alertness is an important element in Matagoro's characterization.

Matagoro's use of shape supports this characterization of Enju. His use of flow arises from the fact that much of the time, he moves rather little, so only selected movements are given directionality. Everything else is left in the state of flow--the state that results in default of directionality or shaping.

As mentioned above, one striking feature of his use of shape is his strong orientation into the lateral axis and the horizontal plane. One moment in particular illustrates this alignment. In her grief and anger, Enju destroys the letter that orders Genda to commit seppuku. Matagoro picks the letter up in both hands so that the paper is vertical and facing him, just below collarbone level, with his fingers over the top of the sheet. Both hands are at the top edge of the letter. From this position, there are several ways to tear the letter in two. Since a sheet of paper is weakest along the axis perpendicular to the surface, it seems reasonable to expect the tearing motion to be a mirror gesture of the hands along the saggital axis, perhaps with a rotation to separate the two halves of the paper. Instead, Matagoro executes a mirror gesture along the lateral axis with no rotation and entirely in the horizontal plane, so that his hands move horizontally left and right and his elbows move out from his body so that his forearms stay level to the floor.

This action provides a moment that powerfully characterizes Enju through movement. It represents an emotional peak for the character, in which she decisively expresses her will. However, the movement clearly shows that though her mind is strong, her body is old and cannot move in a powerful way. She cannot or will not make a large move through space in the saggital axis to rip the paper through the use of her hands and arms; instead she uses the strength of her shoulder to rip the paper laterally, while not moving her arms very far. It implements the principle of restriction even while creating an emphatic movement. Her strength of will, her emotional turmoil, her

determination, and the limitations of her aging body--all are visible in one moment. The impression created summarizes the character of Enju in one resonant statement, created entirely through movement.

Matagoro's visual focus is consistently on the other performers, unless some task takes it to the stage for a short time. He keeps his kinesphere very small, while executing most gestures in the limb range. Active touch is limited to the stage and props. He tends to retain visual focus while moving his body to a new spatial direction, and in several moments shows spot or space holds while most of his body and his visual focus move to a new direction. His use of visual focus always tells us exactly what he is thinking about, since he always fixes his visual focus on the object of his attention.

Furthermore, through his use of spatial retention, he emphasizes the directionality of his visual focus, underlining it for the viewer. In so doing, he theatricalizes his use of focus, giving it a degree of emphasis much beyond the everyday so as to provide the audience with an unmistakable communication of the mental activity of the character.

During much of the action of the play, Enju must conceal her actual feelings, particularly from Heiji. Her strategem for saving Genda depends on her ability to conceal her love for her son while appearing to vent her wrath upon him by disinheriting him. To a great extent, Matagoro conveys this to the audience through vocal means.

The play can be divided into three sections: welcoming Genda; the conflict with Heiji, centering on Genda's recounting of the events that lead to his dishonor; and the process through which Enju saves Genda's life and restores Chidori to him. Matagoro uses vocal means to

show the differences in Enju's thoughts and moods between the first and third of these sections. Enju generally does not participate in the scenes of the second part of the play, which are between Genda and Heiji for the most part.

His use of quality and diction add to the impression of Enju created by the movement patterns discussed above. The slight degree of tightness, nasality, noise, and breathiness create a sense that the voice is somewhat obstructed, as the voice of an older person may be. However, his firm attack and clear consonants convey a sense of the qualities of will and decisiveness that characterize Enju, as does the relatively low rest pitch.

Matagoro shifts back and forth between full-fold and falsetto voice, using full-fold voice rather more than falsetto. Although his voice does not sound cramped, he does not sound as if his throat is fully open. There is a touch of nasality on non-nasal sounds, and a low level of noise and breathiness can be heard throughout. In the first part of the play, his tone is more open and less nasal, with less noise; it sounds clearer and more frontal. It has less tension, and therefore sounds happier and more pleasant. Once the conflict is joined, noise and nasality increase, as does tightness; the sound is harsher and gives a grim air to whatever Enju has to say. Enju's tension shows in her voice; one understands it is the result of her attempt to save Genda, while Heiji and his cohorts interpret it as wrath directed at Genda's dishonor.

Matagoro's voice does not imitate the effect of a woman's voice. Although his pitch range falls relatively high in his potential range,

it does not sound like an attempt to imitate a woman's use range. The dialogue he speaks is written in women's dialect and his use of a combination of full-fold and falsetto voice follows established Kabuki convention for the type of female role he plays. One accepts his voice as the voice of an older woman through context and convention, not through imitation.

He does not clip sustained sounds, and though he does on occasion lengthen them unusually, such occasions do not form the norm of his performance. Although extreme lengthening of the sounds of the last few syllables of a line is a stylistic device often used in Kabuki, Matagoro uses this device rather sparingly in this role. There is relatively little accent on vowels, but attack on consonants is quite strong. Consonantal precision is such that his speech is quite clearly understandable but does not place audible stress on precise enunciation.

His more emotional lines are spoken with increased attack rather than increased accent. Volume and pitch also rise somewhat, but always in a controlled fashion. This use of attack, volume and pitch to create a sense of higher emotion also conveys a feeling that the emotion is kept under control. Again, one is impressed by the strength and determination that characterize Enju.

On one occasion he alters this pattern for effect. After Genda has been put into servant's dress, everyone has a good laugh at his expense. Silence falls, and suddenly Enju realizes that she has not reacted. She looks about her and says, "Minna no mono ga waroo node, haha mo okashi." ("Since everyone else is laughing, I should too.")

Matagoro delivers this line with solid attack, much as he does her other lines. He then forces laughter, but suddenly chokes on it; he forces the motion down and finishes the laugh, then sniffs back tears and says, "Ammari waroo de, namida ga deru." ("I'm laughing too much; tears are coming.") To portray Enju's powerful emotion as she tries to cover up her tears for Genda, Matagoro lets the consonants slip and shifts to the vowels. The line becomes a rolling succession of vowel sound, giving it a sobbing quality quite different from the sound of the rest of Enju's dialogue.

Matagoro holds his patterns of vocal quality, diction, and volume fairly constant. Most of the vocal variety in his performance comes through his use of pitch. There is considerable pitch variation in each utterance and between utterances. When he shifts his pitch through the range of the break between falsetto and full-fold voice, he makes no effort to smooth the transition between vocal modes. On the contrary, the pitch break becomes a stylistic device in itself, in accordance with a common Kabuki vocal convention.

He uses a wide pitch range, as one might expect from his use of both full-fold and falsetto voice. The center of the pitch range he actually uses is rather above the center of his total range, since he avoids the lower range of full-fold or fry voicing. He has a fairly clear rest pitch in the lower part of his use range. There is a slight degree of structuring of his use of pitch, such that there although it does not sound like chanting, it does not sound as free as ordinary spoken dialogue. There is no use of vibrato, but pitch slides occur frequently and often cover a fairly wide range.

Two aspects of Matagoro's handling of pitch help to create a strong feeling of stylization in his vocal delivery. These are his use of a loosely defined pitch structure and the occasional use of marked pitch slide with very long sustained sounds.

The pitch structure he uses does not seem to permit the free use of any pitch at will. However, it does not have a sung quality, or even the kind of chanted quality heard in some parts of the delivery of the gidayu narrator. Rather, it is a spoken style in which certain pitch ranges are used in preference to others. There seem to be three such ranges; one in the lower part of the use range, one around the point where the break between full-fold and falsetto voice occurs, and the third rather higher than that in the falsetto. Pitches which would fall in between these are heard, but not nearly as often as the pitches that do lie within these preferred ranges.

One of the vocal stylizations that is virtually a hallmark of Kabuki performance style is the marked use of vocal slide with marked or extreme sustainment of the sound on which the slide occurs. Out of a total of fifteen syllables in the line "Anmari waroo de, namida ga deru," the last two occupy more than one-third of the total time required to say the line. "Namida ga" is said on a falling pattern to the bottom of the lowest pitch range. Then "deru" is delivered as a quavering sustained upward slide to the top of the low range. Such a pitch and sustainment pattern is quite unlike anything found in ordinary spoken Japanese, or in the normal usage of most other languages.

In any one phrase, he tends to use more than one pitch range; in particular, he will often go back and forth between the range of the break between full-fold and falsetto and either the range above it or the range below it. A good many individual phrase patterns key off the mode break by using it as the point of a sub-phrase transition or to create an elaboration of the pitch or rhythmic pattern.

His volume range is not unusually wide. He usually speaks at a moderate level of projection, going above and below that level about equally. His changes of volume are usually very smooth. In general he adjusts his volume level as needed for the context of each scene. Listening to his performance of Enju, one does not hear volume change as an effect very often.

Of the five basic phrase shapes, Matagoro most often uses the peak--a rise followed by a drop. The duration of most of his vocal phrases is moderate--neither unusually short nor a strain on the breath capacity. He tends to place a stress very early in the phrase; if not at the actual beginning of the phrase, then near it.

His movement phrases are relatively short, and place an emphasis rather late in the phrase, in contrast to his vocal phrasing. Movement passes from one part of his body to another with little or no overlap, beginning in the center of the body or near the base of the limbs. He tends to use cyclic spatial transitions, returning a gesture to its start but not retracing the same path.

Through placing emphasis early in his vocal phrases and late in his movement phrases, he creates a contrast that actually knits his movement and vocal delivery together. As phrase succeeds phrase, one

is drawn alternately to the movement, then to the vocal line by the alternation of phrase emphasis. The result is a kind of counterpoint effect that refreshes one's interest in both lines of delivery.

There is a small amount of elaboration or decoration in each phrase, and also one degree of compounding is very common. His overall rate is slow, as is his phrase rate; each movement and syllable is separated from the others. There is a fair amount of pause. He works in single meter throughout, both in movement and in vocal phrasing, with a fair amount of rhythmic variety, especially using rhythmic devices that decelerate, such as ritard and rubato.

Matagoro's vocal delivery is stylized by this use of single meter and slow rate. He speaks the text in beats, one syllable per beat. The syllable structure of Japanese greatly facilitates this vocal treatment, which creates a rather weighty style of speaking that gives Enju considerable dignity and repose: qualities which were also expressed in Matagoro's movement characterization. His use of elaboration and compounding creates a sense of clear phrasing, but with some texture as well; his phrasing does not create a sense of austerity. Even though his rate is slow and he uses pause relatively frequently, the sense is of a smooth flow of time, not of slow phrases dragged through long pauses.

When Matagoro uses a full pause, it is generally part of a performance pattern that leads to a moment of stillness as its conclusion. The pause both separates one phrase from another and is a part of the preceding phrase as well. Often, it will be accompanied by a general deceleration, a considerable increase in vocal sustainment

and also an increase in sustainment as a movement quality. Both vocal sustainment and movement sustainment create the sense of expansion in time. Therefore, increasing both to the limit of what the context will bear, and then pausing, creates an effect of opening a span of time in which nothing needs to happen. During such a span of time, in which the audience is free to experience the evocative image created by the performer, there is no need for stage business as such. Therefore, it does not slow the rate of the performance or interrupt it; it is rather a change of mode within the performance which in effect carries the performance forward. Even though nothing is concretely happening on stage, something is happening in the performance process; the audience is absorbing what the performer has evoked in them through his preceding performance behavior.

Through the use of the movement and vocal patterns described above, Matagoro creates the impression of a woman of age, not physically robust, but possessed of strong mind and will and able to control her emotions, even at their peak. She is a woman of authority who can and does impose her will on others, but must do so through the manipulation of the code of behavior which governs the conduct of everyone in the play.

In the description of Matagoro's performance given above, one can see that in the course of creating his portrayal of Enju, Matagoro uses the available repertoire of his voice and body, selecting the particular behavior patterns appropriate to the character of Enju and the conventions of Kabuki. In the following analysis, one examines how he creates quite a different character from the same materials.

Synopsis of the role of Bimyo

Bimyo is the mother of Sasaki Moritsuna, a general under Tokugawa Ieyasu at the siege of Osaka Castle. Her other son, Sasaki Takatsuna, is one of the opposing generals under Toyotomi Hideyori. Her grandchild, Takatsuna's son Koshiro, has been captured. Moritsuna is deeply concerned that Takatsuna may be tempted to turn traitor for Koshiro's sake. He reaches the conclusion that to prevent his brother from so dishonoring himself, Koshiro must die. Since Ieyasu has ordered that the boy's life be spared, Koshiro must be persuaded to commit suicide. Moritsuna dares not do this himself, since in so doing he would violate Ieyasu's order. He therefore delegates the task to Bimyo.

The scene in which he persuades Bimyo that Koshiro must die to preserve Takatsuna from dishonor is long and emotional. Moritsuna must use all his influence and magnetism to win her over. At last he is successful; Bimyo agrees to his plan. He leaves her his sword: if Koshiro is too cowardly to kill himself, Bimyo must kill him.

Bimyo's scene with Koshiro is even more harrowing. First she tries to persuade him, but he refuses to give in. She tries to play on his sense of honor and on the shame of his having been captured in his first battle, but without effect. All the while, the horror of what she is doing grows on her. Finally she threatens to kill him herself if he will not do as she asks and die a death befitting a samurai. They fight; Koshiro eludes her clumsy sword strokes, pleading with her to spare his life. Finally, with Koshiro helpless before her,

Bimyo breaks down completely, bursting into tears and embracing him. She cannot bring herself to carry out such a terrible task. Koshiro catches sight of his mother outside the gate and tries to break away; Bimyo drags him back into the house.

Analysis of Matagoro as Bimyo

As shown in Table 2, Matagoro uses a relatively small amount of actual movement of the facial muscles, and a rather large amount of head movement. What facial activity occurs is strictly gestural and is concentrated almost entirely in the eye area. There is some use of the lips. Facial activity is strictly gestural. His most frequent facial activity consists of blinking with his eyelids: a characteristic expression in this role.

He uses a relatively small amount of gesture. The gestures that do occur are usually mirror gestures with both arms. Very little turning of any kind occurs in gestures. Flexure is almost always in the form of flexion rather than folding.

He kneels throughout his long scene with Moritsuna, and kneels with Koshiro until shortly before the fight begins. Once he is on his feet, he always steps; not shifting or sliding. Path shape is usually a gentle curve; he does not usually take the most direct path to his destination, but rather approaches it along a shallow curve. He usually completes a turn before beginning a patch, separating the pivot from the motion across the floor. Floor contact is usually with the full foot.

TABLE 2
NAKAMURA MATAGORO AS BIMYO

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	---					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	---					39 Noise	-----				
05 Posturality	-					40 Breathiness	---				
06 Head Movement	-----					41 Lengthening	-----				
07 Gesture amount	---					42 Accent	-----				
08 Limb relation	-----					43 Attack	-----				
09 Turning	-					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	---					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	---				
14 Path Shape	---					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	---				
17 Torso units	-					52 Center	-----				
18 Torso motion	-					53 Rest level	-----				
19 Flexibility	---					54 Volume change	---				
20 Mobility	-----					55 Vocal shape	-----				
21 Posturality	---					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----					58 Duration	-----				
24 Space	---					59 Emphasis	-----				
25 Time	-----					60 Passage	---				
26 Activation	-					61 Initiation	-----				
27 Shape mode	-					62 Transition	-----				
28 Expansion	---					63 Elaboration	-				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	---					65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	---				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	---				
34 Active touch	-----					69 Rhythmic variety	---				
35 Spatial retent.	-					70 Metric change	-				

Inapplicable scales are left blank

He keeps his torso firmly in one unit, usually moving his whole torso from the hips by tilting. There is some flexibility in his torso, which does not give the impression of rigidity. The torso does move as a whole fairly often. There is a slight sense of posturality in the torso.

He keeps flow and weight neutral, seeming neither especially free nor bound, and neither definitely applying his weight nor withholding it. His use of space is clearly indirect. His use of time tends toward quickness, more so in the fight scenes than in the dialogue scenes. He shows marked passivity; often he seems ready to fall from the sheer weight of his own body. This is especially true after the fight scene, as he portrays Bimyo's emotional collapse.

By far his most common shape mode is flow. Obviously, once the fight begins, he displays other shape modes, yet even in the fight much of his movement does not display the kind of shaping or directionality one might expect. In other words, he manages to handle the swordplay in a very flow-oriented way. He tends toward contracting in his use of the kinesphere, tending to expand only into the saggital area, preferring both the saggital axis and the saggital plane.

He shows performer focus throughout, and performer touch as well. He keeps his kinesphere rather small while tending to move in the limb zone. He does not use spatial retention.

His vocal mode is usually full-fold; he uses relatively little falsetto voice. There is slight but noticeable tightness and nasality as well as breathiness; noise is rather more than slight, though not obtrusive.

All four diction scales were rated as "moderate." There is noticeable sustainment of many sounds, though not to an extreme degree; accent and attack are both used, again not to an extreme, and his consonants are clear without stressing precision.

His pitch range is moderately wide, centered in his voice so that both the highs and the lows of his full-fold range are heard. His rest pitch is also fairly near center. He uses no vibrato, and only a small amount of slide.

He uses a relatively narrow volume range around the median of his volume capabilities; his volume rest level is centered in his range. Volume change is usually smooth, but somewhat more abrupt changes do occur.

He uses an oscillating vocal shape almost all the time, keeping the vocal phrase only moderate in length and usually placing emphasis in the middle of the phrase.

His movement phrasing is somewhat longer than his vocal phrasing, tending toward a fairly long phrase with a late emphasis. The movement passes through his body smoothly, but with little overlap. He begins most movement phrases in the limb area. Most phrases do not return to their beginning point, but follow plane path to a new destination.

Matagoro's use of facial expression and gesture characterize Bimyo as a rather ineffectual, somewhat foolish person. The relative immobility of Matagoro's features, in contrast to the blinking of his eyes and the movement of his head, contribute to the effect. So does his use of gesture: when he gestures, it often consists of rather small mirror gestures lying mostly in the saggital plane. In short,

Matagoro portrays Bimyo as a woman who spends a great deal of her movement time blinking, nodding or shaking her head, and flapping her hands.

Other aspects of his movement add to this impression. He uses the mobility he permits his torso to add torso tilts to his head motions and arm gestures. This increases the size of these movements while furthering the image of ineffectuality. His use of quick and indirect effort dynamics and shape flow give a kind of random, powerless tone to his movement that conveys the impression of a woman who cannot "throw her weight around."

Several aspects of his behavior support the impression of Bimyo's age. The absence of turning in his gestures suggests a certain stiffness in the joints, and the high level of passivity he shows creates an impression very much the opposite of youthful vigor. His vocal quality has slight but audible noise, tightness, and breathiness, all of which add various kinds of inharmonic sound; his voice therefore sounds distinctly different from the voices of the younger characters in the play, such as Moritsuna. Bimyo is not an aged woman, nor does Matagoro play her as such. However, these behavioral touches make her distinctly older than those around her, and perhaps suggest a certain infirmity as well.

Matagoro interprets Bimyo as an indirect, roundabout sort of person in several ways. When he takes a path across the floor, he does not approach his destination head-on; rather he takes a slightly curving path to it, arriving in a sort of sideways fashion. The deviation from a straight path is not large, but it does create a

subtle feeling of indirectness in his movement. The impression is not furtive, but rather irresolute. His quick, indirect movement dynamics tend to create the same impression. His use of oscillating vocal shapes with medial emphasis creates a complementary impression through vocal means.

Giving Bimyo this kind of personality lends credibility to the idea that Moritsuna can persuade her to arrange Koshiro's death. As Moritsuna grows more importunate, Bimyo's will visibly weakens. Matagoro's gestures increase in frequency; his replies rise in pitch and somewhat in speed; he moves his head more and more often and his phrasing speeds up. He also shows that she becomes more and more upset by what she is being asked to do. He increases the amount of rhythmic variety, speeds up his phrase rate, raises the center of his pitch range, and begins to show some free flow along with an increase in quickness.

As Bimyo struggles with her emotions in the scene with Koshiro, Matagoro's portrayal is a striking example of the use of alternating performance patterns. When she is more in control of herself, Matagoro reduces his level of facial activity and gesture, moves his head and torso less, tends not to take paths across the floor, begins to show an effort quality of strength, reduces his indirectness, reduces his kinesphere size, has less noise in his voice, speaks with more precision, lowers the center of his pitch and volume ranges, and slows down his phrasing. Then quite suddenly, when her emotions surge and she cannot bear what she is doing, that pattern virtually explodes: he waves his head and hands, his eyes blink, he moves his body much more;

his movement dynamics change toward free flow, indirectness, and quickness; his kinesphere size increases, his voice gets noisier, breathier, and more constructed; his level of precision decreases, pitch and volume go up, and his phrasing becomes faster. At the end of the fight, when she embraces the boy, he portrays her as almost incoherent with horror, guilt, affection for her grandson, and relief: relief that she need no longer confront her terrible task.

A number of factors combine in Matagoro's vocal characterization of Bimyo. The vocal quality described above gives a somewhat hazy tone to his voice. In addition, his slightly regularized pitch structure, his occasional use of slide, his narrow volume range, and his oscillating phrase shape combine to give his voice an anxious, fretful sound when Moritsuna first tries to enlist Bimyo's aid. As Moritsuna grows more insistent and Bimyo begins to give in, Matagoro gives the oscillating vocal shape more aptitude, raises his pitch, and increases his volume range so that the emotional strain Bimyo experiences shows in his voice. As the tremendous reaction against trying to kill Koshiro breaks her will, Matagoro uses vocal slide much more than at any other time, while using a wider pitch range, increased breathiness, and much shorter vocal phrases. He also uses more rhythmic variety and a less regular pitch structure than at other times. The resulting vocal characterization lets us hear a Bimyo who is overwrought, out of breath, and out of strength as well. There is a strong sense of relief in his voice as she embraces Koshiro and decides not to try to kill him any more. This feeling of relief is conveyed through the contrast between the tense vocal behavior in the

scene with Moritsuna and in the first part of the scene with Koshiro, and the much looser, less structured, more abandoned vocal style of the scene after the fight.

The same use of alternating patterns occurs in Matagoro's use of phrasing. When Bimyo is in control of herself, Matagoro uses a rather steady, rather slow rate, with a fair amount of pause, a steady single meter, little rhythmic variety, and perhaps one degree of compounding. At the high peak of her emotion, Matagoro explodes this pattern much as he does his movement and vocal patterns. Compounding increases, overall rate increases considerably, phrase rate becomes quite fast with pauses for breath between many phrases, and the meter becomes obscured behind a variety of devices that accelerate and syncopate the rhythm in an irregular way. The effect of these phrasing changes accentuates the total effect considerably. Even if one considers only the rhythms of the scene, the emotional process Bimyo undergoes is clearly portrayed. When these rhythms are considered in combination with Matagoro's patterns of voice and movement, the power of his portrayal becomes increasingly evident.

Synopsis of The Forty-Seven Samurai

Kanadehon Chushingura is a very long and complex drama, intended to last all day and into the evening. The adaptation of Chushingura performed as The Forty-Seven Samurai is heavily cut so as to permit the performance of the most important scenes from the main plot of Chushingura within the span of a normal evening's performance. Even

so, it is still a long and complex drama involving a number of characters. The following synopsis is intended only to give the reader a brief acquaintance with the principal actions of the major characters, so that the following analysis of material from "Demonstrations from Chushingura" will make some kind of sense.

There are two main actions in The Forty-Seven Samurai. The first, which occupies approximately the first half of the play, concerns the downfall and suicide of Enya Hangan, a samurai, at the hands of Ko no Morono, a court noble. The second half of the play presents the revenge exacted from Ko no Morono by Oboshi Yuranosuke, Hangan's devotedly loyal chief retainer.

In the first scene of the play, Enya Hangan Takasada and Momonoi Wakasanosuke Yasuchika, provincial samurai lords, are placed in charge of a court ceremony. Since their knowledge of court etiquette is inadequate to the task, they are instructed to carry out their duties under the Shogun's chief councillor, Ko no Morono, an expert in such matters. Of course, this means that their success is completely dependent on Morono's good will.

Morono presumes upon his position to make advances to Kaoyo, Hangan's wife. Even though he threatens to ruin Hangan, Kaoyo refuses him. Through Wakasanosuke's intervention, Kaoyo is able to make her escape. Morono is furious, both with Kaoyo for rejecting him and with Wakasanosuke for interfering. He berates Wakasanosuke for presumption; the young man can barely hold his temper. The curtain closes on a mie in which the opposition of the two characters is expressed.

The following scene takes place before the gate of the Shogunal palace. Kakogawa Honzo, retainer of Wakasanosuke, brings a lavish bribe for Morono. At first, Bannai is very rude to him; but a gift of gold quickly makes him very solicitous. Honzo and Bannai enter the palace.

After Honzo and Bannai depart, Hayano Kampei, retainer of Hangan, enters. A maid of Kaoyo's, Okaru, comes bearing a letterbox to be delivered to Morono. Okaru and Kampei are in love. Instead of taking the letter to Hangan himself, Kampei gives it to his man and goes off with Okaru as the curtain closes. As a result, Kampei is not with Hangan when the crises comes in the next scene; he is completely disgraced.

On the day Hangan and Wakasanosuke are to meet Morono, Wakasanosuke arrives first. He knows nothing of the bribe Honzo has paid. He is hot with rage over Morono's arrogance toward him, but finds to his surprise that Morono and Bannai, Morono's chief retainer, are fawning and apologetic. His anger finding no outlet, he insults Morono and stalks out of the room.

Upon Hangan's arrival Morono berates him for being late. Hangan gives him a letter from Kaoyo, which turns out to be a poem rejecting Morono's advances. Hangan knows nothing of Morono's infatuation with his wife. Morono sarcastically supposes that Hangan was late because he cannot bear to be separated from her. He then tells a long story about a foolish tadpole in which the tadpole turns out to be Hangan. He then goes on to remark that the tadpole seems to be turning into a

toad. Never before, he says, has he seen a toad walking around the palace and wearing clothes!

Hangan is ready to draw at this, but Morono reminds him that to draw a sword in the palace is a capital offense. With great difficulty, Hangan suppresses his anger. Then, when Hangan has barely got control of himself again, Morono tells him that the instructions for the ceremony will not be given to him, but to Wakasanosuke: "There's no educating a provincial barbarian." He turns to go, kicking his long trailing nagabakama into Hangan's face. Hangan stops him by setting his knee on Morono's nagabakama, perhaps to demand an apology. Once more, Morono compares him to a toad, telling him to hop away. Hangan, goaded beyond endurance, draws his sword and wounds Morono in the forehead. Honzo, who has been in concealment, grabs Hangan and prevents him from following as Morono makes his escape with Bannai's assistance. The curtain falls as Hangan executes a mie expressing his rage and frustration.

The michiyuki scene follows. This scene will be described in detail later. Briefly, Kampei and Okaru are fleeing to her family's home; Bannai attacks them with a band of retainers. Kampei drives them all off and humiliates Bannai.

The next scene takes place at Hangan's castle. He has been ordered to commit suicide for violating the peace of the palace and wounding the Shogun's chief councillor. The representative of the Shogun, Ishido Umanojo, and the samurai who will take over Hangan's estates, Yakushiiji Jirozaemon, have come to formally deliver the order. Hangan's chief retainer, Oboshi Yuranosuke, has not yet returned from

travel away from the castle. Hangan greatly desires to see Yuranosuke before he dies. The preparations continue, but slowly; finally there is nothing more to do. Hangan inquires of Rikiya, Yuranosuke's son, whether Yuranosuke has returned; sadly, Rikiya informs him that no sign of Yuranosuke has yet been seen. Hangan expresses his regret, formally asks Ishido to witness his death, and drives home the blade.

At that exact moment, Yuranosuke appears on the hanamichi, frantic with haste. But Hangan is still alive; in a brief, highly intense scene of very few words, the two men come to an understanding: Yuranosuke will seek revenge. After Hangan dies, Yuranosuke takes the seppuku dagger from Hangan's clenched fist.

Ishido declares that Hangan's estates are confiscated and that Hangan's retainers are no longer samurai and must disband. He expresses his sympathy and departs. Yakushiji crows over his good fortune and rudely demands to be shown into the castle, now his; Hangan's retainers lead him inside. Kaoyo enters in robes of mourning; she has shaven her hair and become a nun. Yuranosuke offers her the formal yet deeply felt sympathy of the retainers. She in turn gives him her cut tresses; Yuranosuke is struck dumb with grief. Kaoyo's tears almost overcome her as the curtain closes.

In the next scene, Hangan's retainers are about to attack the mansion when Yuranosuke stops them. Telling them that the time is not yet ripe to revenge the death of their lord, he threatens to commit suicide on the spot unless they leave quietly. Awed by the force of his personality, the retainers do as he commands.

Yuranosuke is left alone on the stage. He watches the retainers go. Slowly he kneels at center stage, and takes out Hangan's death blade. With great emotion, he wipes the blood from the blade onto his palm and licks the blood as an oath of loyalty. He then pantomimes cutting the throat of his enemy; suddenly he looks around himself to see if anyone saw him. He is still alone. He wraps the blade again and conceals it, rises slowly, adjusts his clothing, and begins to walk slowly away from the castle toward the hanamichi. Three times he turns to look back at his former home; each time he turns again and keeps on walking. At the shichisan he falls to his knees facing the stage and bows; then, collecting himself, he turns his back on the castle for the last time. Slowly he walks down the hanamichi and exits.

The next scene takes place in the Ichiriki teahouse. Okaru has sold herself into prostitution there to give Kampei money to use in his attempt to redeem himself. Yuranosuke is also staying there. He is pretending to have fallen into debauchery as a strategy to lull Morono into complacency. His son Rikiya brings a secret letter from Lady Kaoyo; it apparently is a signal that Morono is vulnerable. He tells Rikiya to go and warn the others to be ready; Rikiya exits. A group of teahouse girls comes out; they play blind-man's bluff with Yuranosuke as "it." They lead Yuranosuke back into the teahouse. One of Morono's men, Kodayu, formerly a retainer of Hangan's, has been spying. He appears and hides himself under the teahouse veranda.

Yuranosuke comes back out of the teahouse. He opens the letter and reads it; as he does so, Okaru opens the shoji of the neighboring room. Thinking that Yuranosuke is reading a love letter, she arranges

herself to read the letter in her mirror. As the letter unrolls in Yuranosuke's hands, it drops down in front of the veranda so that Kodayu can read it as well.

One of Okaru's hair ornaments drops to the ground; the sound startles everyone. Kodayu rips off the end of the letter and scuttles back under the veranda. Yuranosuke quickly rolls the letter up, holding it behind his back; suddenly he finds the torn end. All the while, Kaoyo pretends to be merely taking the air "as if nothing happened there."

Yuranosuke suddenly pretends to be drunk. He makes an offer to Kaoyo: if she will live with him for three days, he will buy out her contract with the teahouse. She is startled but very happy at this sudden change in her life; as he goes into the teahouse to arrange to buy her contract she prattles happily about returning to her husband and gets ready to write home about the good news.

At this point, her brother Heimon appears. She tells him the good news and whispers the contents of the letter in his ear. Heimon realizes that Yuranosuke means to kill her because she knows too much; buying out her contract is merely a device. Suddenly, he tries to kill her, but she gets away from him and refuses to come back to him until he puts down his swords where she can get them out of his reach. After he does so and she rejoins him, he tells her that Kampei has committed suicide. Yuranosuke, not realizing that Okaru was Kampei's wife, merely intended to take her away and kill her in secret. Rather than that, Heimon resolved that she should die at the hands of one of her family; by killing her, Heimon can prove his worth to Yuranosuke and

be allowed to join in the attack on Morono. Okaru is crushed by the news of Kampei's death and has no wish to live; she consents to die at her brother's hand. Yuranosuke stops them; he has overheard everything. He grants permission to Heimon to join him. He also admits Kampei to the league posthumously; in Kampei's name, Yuranosuke helps Okaru to stab Kudayu under the veranda. Rikiya pulls Kudayu out and Yuranosuke beats him while berating him for turning against Hangan. After Yuranosuke has calmed himself again, the teahouse girls announce that a palanquin, sent by Rikiya, has arrived. Yuranosuke instructs Heimon to "take our drunken friend to the Kamo River. Let him drown his sorrows in the waters there!" Heimon enthusiastically agrees. The group poses as the curtain runs closed.

The final scene depicts Morono's capture and death at the hands of Yuranosuke. The curtain opens on a winter scene in the garden of Morono's estate. Maids from the house run across the stage in fear. Two of Morono's men fight with two of Yuranosuke's and are driven back toward the house. Shimizu Ichigaku, a renowned swordsman and Morono's personal bodyguard, fights with two of Yuranosuke's men and is killed. Morono is found and brought before Yuranosuke. He is offered the chance to commit suicide with the same blade that killed Hangan. He pretends to accept the offer, but suddenly lunges at Yuranosuke; the retainers cut off his head. Yuranosuke thanks his men for their loyalty, devotion, and self-sacrifice in memory of their dead lord. They shout in victory together, then turn slowly to one another as the curtain closes for the last time.

Analysis of the plain style material

Table 3 is an analysis of the basic performance pattern of the plain style material including the roles of Hangan, Morono, Wakasanoske, Bannai (other than the dance scene), Honzo, Kaoyo, Okaru, Yuranosuke, Rikiya, and Heimon. All of the principal scenes for each of these characters is included.

Throughout the plain style material Matagoro shows a consistent style. Each character is individualized by playing variations on the basic style common to all. As one will see in the analysis of Table 4, that style changes dramatically for the dance scene. However, the style used in the rest of the play is first on the agenda.

Although facial tension occurs in both the eye and mouth areas, the eye area is relatively less used. When tension does occur in the eye area, the eyebrows are more likely to be involved than any other part of the eye area. In the mouth area, the lips are used more than any other facial feature. Overall, the amount of facial activity is only slight, though there is a marked increase in facial activity at certain points in the play. Facial posturality is very seldom shown. Head movement is most often in the horizontal plane.

The amount of gesture is strictly limited. When gestures occur, the limb relation tends to be opposing. Matagoro uses very little limb rotation of any kind. Flexion is the most common form of flexure, though folding also occurs.

Most of the characters spend most of their time kneeling. Full steps are used when moving across the floor; when shifting weight in

TABLE 3
NAKAMURA MATAGORO: PLAIN STYLE

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	---					39 Noise	-----				
05 Posturality	-					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	---					42 Accent	-----				
08 Limb relation	-----					43 Attack	---				
09 Turning	-					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	---					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	---				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	-----				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	-					52 Center	-----				
18 Torso motion	-					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	---										
21 Posturality	-										
						55 Vocal shape	-----				
						56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	---					58 Duration	---				
25 Time	---					59 Emphasis	---				
26 Activation	---					60 Passage	-----				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	---										
29 Preferred axis	-----					63 Elaboration	---				
30 Preferred plane	-					64 Compounding	---				
						65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	---				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retent.	-----					70 Metric change	---				

Inapplicable scales are left blank

place, sliding shifts and step shifts are used. Aerial steps do not occur. Path shape is always straight, sometimes very deliberately so. By far the most common form of turning is pivoting in place before taking a path. Floor contact is with the full foot.

Matagoro always maintains a one-unit torso. He moves his torso, when he does, by tilting it from the hips. There is only a slight degree of flexibility and mobility, and no sense of postural torso movement.

He uses bound flow consistently except in very few moments of intense emotion. His use of weight tends to remain neutral. When he shows a definite use of weight, strength almost always appears rather than lightness. At very few moments, he shows bursts of very intense strength. His use of space is indirect, especially in shaping behavior and in behavior involving turning. He almost always shows sustainment rather than quickness, even in movement that is done rapidly. Passivity tends to be the rule, though certain characters, such as Heimon, Rikiya, and Okaru, show activation at times.

He very often uses shaping movement, both large and small. He tends to be contractive with most characters, though certain characters are the opposite. He shows definite and consistent orientations to the saggital axis and the lateral plane.

He uses performer focus most of the time, though some scenes are played using a fair amount of audience focus. He tends to keep his kinesphere rather small. Most of his movement occurs in the limb zone. Active touch is limited to the stage and its properties. Active touch of performers is rare. Certain characters use self touch when they

have occasion to adjust their clothing and the like. There is a moderate amount of spatial retention, usually involving holding a point of visual focus while moving the body into a new direction. There are a number of moments in which his body holds its form in space while he executes gestures.

He alternates between full-fold and falsetto voice. The balance between full-fold and falsetto voice varies with different characters, but almost all characters use some of each, depending on the circumstances. His voice is slightly tight, slightly nasal, somewhat noisy, and slightly breathy. These four qualities are also evident in his off-stage voice.

He shows a moderate degree of lengthening of sustained sound, especially in the end of a line; several lines lengthen the final syllables considerably. There is a rather noticeable degree of accent, but only a slight degree of attack. Consonants are clearly formed without noticeable stress of precision.

His pitch range is quite wide, covering both the full-fold and falsetto ranges. The center of the pitch range is medium high, reflecting the relative absence of the low frequencies of the fry range. His rest pitch is on the low side of his use range, since he tends to come back down into full-fold voice after using falsetto for effect. He uses a slightly regularized pitch structure. He does not use vibrato, but uses slide to a marked degree for a number of characters and scenes.

His volume range is moderately wide and centers on the loud side of the range. His volume rest level is on the soft side of his use

range, about at the middle of his potential range. His volume changes tend to be relatively smooth, but very abrupt changes are used at certain points in the play.

He tends to use an oscillating vocal shape. Most phrases are moderate in length. Phrase emphasis tends to come early.

Movement phrase duration is rather short. Emphasis in movement phrases tends to fall early. Movement passage is smooth, and usually with some overlap. Most movement begins in the limb area and follows plane paths to some new point rather than returning to their starting point.

There is only a slight degree of elaboration in Matagoro's phrasing, and usually only one degree of compounding. His overall rate is slow, with a somewhat faster phrase rate and fairly frequent, fairly long pauses. The effect is rather deliberate or dignified. Meter is usually single, especially vocal meter, with a moderate degree of rhythmic variety and occasional changes to duple meter or free rhythm.

The amount of facial expression varies considerably by character. The very reserved, dignified Hangan and Lady Kaoyo use almost no facial expression except when Hangan is goaded beyond reason by Morono; the fierceness of his rage is strongly expressed in his face during his final mie. On the other hand, Okaru, a very emotional young girl, regularly shows her feelings on her face, especially upon hearing of the death of Kampei. However, although posturality increases in expression of strong emotion, the movement remains basically gestural.

More expressive men such as Wakasanosuke still use relatively little actual facial movement; most facial expression by such characters is done through movement of the head as a whole. When Wakasanosuke stalks out of the room after Morono apologizes to him, Matagoro turns his head and looks down at Morono without tilting his head down, literally looking down his nose. He then says, "Baka na samurai da!" ("Samurai fool!"), snapping his head down and back as he does so. His face changes very little except to increase the tension in his lips as he resolutely walks out the door.

The amount of gesture is limited because the norm of gesture is stillness. Each gesture comes from stillness and returns to stillness, even if another gesture immediately follows. Therefore, each gesture that occurs is magnified by the general absence of gesture. Gestures are not a running accompaniment to the action, but occur only as special moments. In the first scene of the play, several minutes go by with no stage action whatsoever except a few widely spaced well-emphasized gestures: each of the major characters in turn raises his head from forward low to forward middle and spreads his arms laterally toward side middle, then brings them to rest again. Again, when Morono forces his embrace on Lady Kaoyo, each step and arm movement is separated, however briefly, from the other gestures that precede and follow. Lady Kaoyo does not gesture at all except to turn her head away from Morono. Morono's gestures stand out the more vividly in contrast to the absence of movement from Lady Kaoyo.

By varying limb relation, one can open or close the body. Matagoro uses opposing limb relation consistently, which tends to close the

body. Other aspects of his style also close the body: the absence of movement within his torso, his tendency to be contractive, his small kinesphere size, and the absence of performer touch. By closing his body through these means, he seems to be separated from everyone else on stage. When several performers all adopt this pattern, each performer appears to occupy his own private space on stage.

The absence of turning in his gestures simplifies their shape. Since he uses little elaboration and tends to keep each movement phrase to only moderate length, each gesture has a readily apparent spatial form. Since most gestures initiate in the limb area, most gestures initiate in the moving limb itself; the absence of posturality further tends to isolate each gestural movement. Each gesture is therefore a clearly formed, readily perceived shape.

A similar pattern emerges in his use of support and locomotion. Each step is a separately performed action, with no shifting or sliding or blur one step into another. Shifting and slide occur only as part of very particular choreographic patterns. The path of most movement across the floor tends to be a straight line; a new path will be separated from the old path by a pivot in place that is part of neither path. Floor contact is usually with the full foot; the less positive contact with a part of the foot is less used.

Because his torso is strictly kept in one unit and moves relatively little, it acts as a center of stillness in his own body. Any movement, support or gesture, stands in contrast to that stillness.

The texture of his movement is formed by a combination of effort and shape factors. His use of indirectness, shaping, and the limb zone

create a dance-like sense of complexity in his use of space, while at the same time, his use of bound flow, passivity, and a small kinesphere create a sense of control and restraint. Each movement is clear and separate, as discussed above, yet the movements in sequence form complex patterns and shapes in space. Even such a simple sequence as Morono opening the letterbox takes on a kind of dance-like, choreographed quality through the combination of clarity of movement and spatial complexity.

His use of axes and planes is unusual, since his preferred direction, the saggital axis, does not lit in his preferred plane, the lateral plane. He separates movement using directionality from movement using shaping. When his body volume expands directionally, it does so along the saggital axis: to reach, to point, to thrust a sword, to extend a helmet forward while carrying it, to gesture for someone to approach, and so forth. However, his body volume frequently expands in shaping movement not oriented in a single direction. The basic stance for the samurai character, the basic samurai kneel and bow, the opening of the sleeves in the first scene, Yuranosuke's rolling up the torn letter, Heimon's stances in his scene with Okaru and his manner of holding the wounded Kodayu, Hangan's movements as he prepares for suicide--all these and many other movement sequences involve enlarging the body volume in the lateral plane, without particular stress on expanding the body volume in a particular direction. The contrast between the spatial orientations of his directional and his shaping movement create a further sense of

complexity without changing the clarity of the gestures that compose these kinds of movement.

Characters touch rather seldom, and only at moments of dramatic importance. Heimon holds his sister Okaru when he breaks the news of Kampei's death. In the opening scene, Morono forces an embrace on Kaoyo. Later, Morono also raps Hangan in the chest with his fan as a deliberate insult. In the teahouse scene Yuranosuke beats Kidayu and Heimon carries him away; Yuranosuke and Okaru touch in the group pose at the curtain. Yuranosuke touches Hangan only after his death in order to compose the body. Okaru and Kampei, who are lovers after all, clasp hands from time to time. Other than these few acts of touching, there is no physical contact between performers.

Matagoro usually maintains visual contact with the other performers. He often makes visual contact with the audience at the beginning of a scene, then switches to the other performers as the scene gets under way. Ernst's observation that the Kabuki actor maintains the space around himself seems amply borne out: Matagoro does not invade another performer's space unless there is dramaturgical reason to do so, but maintains a strong sense of contact with the other performers at a distance through visual means.

Matagoro uses different vocal ranges for different characters. The width of each range is about the same, but they are centered differently. He uses the lowest range for Morono and the highest for Okaru and Kaoyo. However, all characters use both full-fold and falsetto voice; the principal difference is that a low-voiced character such as Morono goes up into the falsetto range much less

frequently than a high-voice character such as Kaoyo, who does not often come down out of the falsetto range. The other vocal quality variables remain approximately the same for all characters, though Hangan has a much noisier voice for his death scene.

The use of slide is a marked feature of Matagoro's vocal style for all characters. Slides usually occur at the end of sentences in speeches involving high emotion. For example, as Hangan is goaded by Morono, he asks, "Iyasa, ki ga chigatta ka, Musashi no kami?" ("Are you out of your mind, Governor of Musashi?"). The last three words are spoken on a long descending slide from falsetto into high full-fold voice with a great deal of vocal noise and constriction the whole way down; there is a deceleration throughout so that the last two syllables take about as long as the preceding four. The whole utterance of the last three words takes about fifteen seconds. Hangan is inwardly furious, and outwardly barely in control; his hand is clamped on his sword ready to draw. The vocalization expresses the rage and frustration that is about to goad Hangan beyond the law.

He seems to structure his use of pitch to some extent. If one imagines a range of pitch near the top of the falsetto, another around the break from falsetto to full-fold, and a third well below the break from falsetto to full-fold, any given pitch Matagoro uses is much more likely to fall near the center of those ranges than on the boundary between them. A high-voiced character such as Kaoyo, for example, seems to move back and forth between the upper two; a lower voice such as Hangan or Morono moves back and forth between the lower two. Other characters, such as Wakasanosuke and Heimon, seem to fall into just

one range most of the time, though Heimon uses the lower falsetto range as he breaks the news of Kampei's death to Okaru.

Matagoro uses very similar movement phrasing for all characters. In particular, the use of successive passage and limb range initiation hold true for everyone in the play. Initiation in the moving part creates the impression often called "isolation," in which each part of the body seems to have an expressiveness of its own, such that the head may seem to do one thing, the torso another, and the arms a third. While Matagoro does not carry it that far, the effect of his movement phrasing in creating a choreographed feel to the movement is evident throughout his work on the play.

Although rate is fairly consistent throughout the play, Matagoro does use a much faster rate on a few occasions. Yuranosuke's entrance during the suicide scene is a very abrupt shift in rate from the very slow, almost agonizing pace of the previous part of the scene to a frantic, rushing tempo as Yuranosuke hurries to meet his master one last time. Most of Matagoro's use of rhythmic variety and metric change occurs in scenes such as this. For example, as Hangan's retainers rush in to attack Yakushiji in the castle, everything is chaotic for a few moments. Free rhythm is used for the first exchange between Yuranosuke and the retainers. As soon as Yuranosuke begins to assert himself, however, the single meter and steady tempo of the usual rhythmic pattern begin to reappear.

Synopsis of the michiyuki scene

The Kabuki adaptation of Chushingura, which serves as the source for The Forty-Seven Samurai, contains a scene not in the original puppet play: the michiyuki dance scene known as "Ochiudo" ("Fugitives"). The action of the scene as performed in The Forty-Seven Samurai is relatively simple. Okaru and Kampei are fleeing to the home of her parents. He is in disgrace because he was not at his post with his master at the time of the confrontation between Hangan and Morono. As the scene opens, he is despondent and considering suicide; Okaru urges him to preserve his life and look for a chance to redeem himself. He makes an attempt to kill himself, but Okaru stops him.

At this point Bannai and a troupe of his men arrive and attack Kampei. Bannai wants Okaru, and Kampei is not inclined to let him have her. Kampei easily defeats Bannai and his men single-handedly; he spares Bannai's life only at Okaru's reminder that killing Bannai would merely add to his list of crimes.

Although the action of the first part of the scene is serious in a melancholy way, the action of the second part is entirely comic. Bannai and his followers are costumed in the cheerful, colorful hanayoten (cherry-blossom soldier) dress; their weapons are cherry blossom branches. Bannai begins with a boastful, strutting speech insulting Kampei and Hangan, then discovers to his chagrin that Kampei can dispose of him with a mere flick of the wrist. He sends his men in to the attack; Kampei toys with them briefly, then sends them all running off down the hanamichi in fear. Bannai then tries to sneak up

on Kampei and Okaru; Kampei takes his sword from him and threatens to cut off his nose and his ears, but Okaru stops him. Bannai has to beg for the return of his sword before he can leave. At the end of the scene, as Kampei and Okaru go off on the hanamichi, Bannai appears on the main stage one last time. He challenges Kampei, but Kampei's reply literally blows him off his feet. As Kampei and Okaru depart and the curtain begins to close, Bannai meets the curtain and takes over from the stage attendant; in a delightful stroke of overt showmanship, he runs the curtain closed himself.

The scene is staged as a dance, or to be more precise, a series of dances separated by brief passages of dialogue. The first part, between Okaru and Kampei, is very slow and lyrical; the content of the scene is conveyed through mime. A dialogue passage follows which recapitulates the mime. A shorter dance passage follows, in which their preparations to continue their journey are portrayed in mime. Just as they start for the hanamichi, Bannai is heard offstage; he and his troops come running down the hanamichi as Kampei and Okaru move back to center and left. At the shichisan (the point 7/10ths of the way from the offstage end of the hanamichi) he stops and does a very vigorous, martial dance. He and his troops then run onto the stage and Bannai performs a second dance while he delivers a rhythmic speech insulting Kampei and Hangan and declaring his intentions to take Okaru. The fight which follows is a danced tachimawari (choreographed dance-fight) sequence in which Kampei easily defeats his opponents barehanded. The conclusion of the scene is an alternation of short dance and dialogue passages.

Analysis of the dance style

As shown in Table 4, facial tension is distributed over the whole face. In the eye area, the eyebrows are most used; in the mouth area, the lips. The overall amount of facial activity is slight, but at certain points, Bannai uses very large, comic facial movements. Bannai's facial expressions are fully postural. Head movements occur most frequently in the horizontal plane, though Kampei's mie uses saggital plane head movement.

There is a large amount of gesture used. Much more gesture is used in dance passages than in dialogue. The most frequent limb relationship is mirror, though skew and parallel relations occur often as well. Compound turning is the rule, as is compound flexion. Often, complex patterns of turning and flexion are combined in the same gesture sequence, as in the arm gestures at the beginning of Bannai's dance at the shichisan.

The characters are on their feet most of the time, although Kampei and Okaru kneel for a while during their first dialogue passage. Weight transfer is most often through full steps, though at certain points slide-shift becomes important as a way of coming into or out of a pose. During the tachimawari, aerial steps occur as two hanayoten flip on their hands and land flat on the floor. Straight paths are the rule except when Okaru and Kampei prepare to depart; at that point they execute small circular paths before moving off down the hanamichi. Characters often turn before beginning a new path, as in the plain style, but the turns in this scene often involve larger

TABLE 4
NAKAMURA MATAGORO: DANCE STYLE

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-----				
04 Facial activity	---					39 Noise	-----				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---					41 Lengthening	---				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-----					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps	-----					48 Pitch structure	---				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	-----				
16 Floor contact	-----					51 Width	-----				
17 Torso units	-					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-----										
21 Posturality	---					55 Vocal shape	-----				
						56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	---					58 Duration	---				
24 Space	---					59 Emphasis	---				
25 Time	---					60 Passage	-----				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----					63 Elaboration	---				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	-----					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-----				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retent.	-----					70 Metric change	---				

Inapplicable scales are left blank

arcs. Floor contact is with the full foot except when Bannai goes up on his toes to try to see past Kampei to Okaru.

Matagoro uses a one-unit torso throughout, but moves it a great deal. He does not allow himself much flexibility in his torso, but permits some compound motion, usually combining tilting and bending. As a result there is a slight sense of posturality in his torso movement.

He uses a consistent combination of bound flow, lightness, indirectness, and sustainment, but balances these factors with a very high degree of activation.

He uses a great deal of shaping behavior and tends to be expansive. Directional movement seems to occur most often along the saggital axis, and shaping tends to use the horizontal plane most frequently, followed by the lateral plane. Visual focus is most commonly on other performers, though some audience focus occurs, especially as Bannai delivers his speech insulting Kampei. Matagoro places most of his movement in the limb zone, using a moderate-sized kinesphere. There are a number of instances of performer touch in the scene. Spatial retention occurs, again mostly through holding a visual contact while moving the body into a new direction.

Vocal mode is full-fold and falsetto; full-fold voice predominates for Bannai and Kampei, falsetto for Okaru. Tightness is only slight, but is definitely audible; nasality and noise are moderate, breathiness is slight. Sustainment is only slight. Accent and attack are both moderate, and consonants are clear without stress on precision. The pitch range for this scene is rather wide, centered in

the middle of the range but with a rest pitch in the low side. As before, there is some regulation of pitch structure. Vibrato does not occur, but again there is a marked use of slide. Volume range, center, and rest level are all on the loud side. Definitely abrupt volume transitions are fairly common.

Most vocal shapes form peaks, usually of moderate length and having an emphasis early in the phrase. Most movement phrases are rather short with emphasis placed early. Passage is successive. Initiation occurs in the limb and distal ranges more often than in the torso range. Plane transitions are most common, though skew transitions also occur frequently. There is little elaboration, and only one degree of compounding. The overall rate is moderate, and the phrase rate is moderately fast for most of the scene. There is not a great deal of pause during most of the scene. Meter is duple through most of the scene, with a great deal of rhythmic variety and some metric change.

The character who uses facial expression the most is Bannai. In Matagoro's presentation, Bannai's facial expression is in the finest tradition of rubber-face comedy. When he comes in, he wears an expression of great determination; suddenly he thinks better of attacking Kampei himself, and his face shows his fear perfectly. Later on he tries to sneak by Kampei with a wonderful sly expression which turns to great shock and fear as Kampei grabs him. His life spared, his relief shows on his face; after fearfully recovering his sword, he screws up his courage--and his face--to attack Kampei, but at a mere

look from his adversary he suddenly discovers the value of discretion, and his face mirrors the change.

Much of Bannai's facial expression uses the eyebrows and the lips. As he confronts Kampei for the first time, his brows contract and his lips tighten, the corners drawn back and down. His eyebrows climb his forehead and his lips draw into an O when he suddenly finds himself worsted. As he makes his escape, his eyebrows are raised and his eyes wide with his lips loose and at rest--a sort of "Oh, don't mind me" look.

A great deal of gesture occurs in the dance passages. Bannai's first dance at the shichisan consists of a complex, interlocking pattern for both arms ending in a skew thrust to left side high and right forward low, followed by two stamping steps with high leg lifts and a repeat to the other side of the arm pattern. Bannai's speech insulting Kampei is delivered with a great deal of danced mime gestures of both arms and legs that illustrate the meaning of each sentence. He finishes it by grabbing his sword hilts with large circling gestures and then pivoting on his widely placed feet to face Kampei, then slide-shifting his feet together and straightening up. Kampei has less gesture than Bannai, but he still executes a number of gesture patterns during his tachimawari with the hanayoten, and finishes them off with a mie involving large gestures of both arms and legs. Okaru has a section of danced mime gesture in the opening of the scene, and occasional hand and arm gesture during the tachimawari.

The support and locomotion patterns used in this scene contribute to the scene's visual liveliness. The characters are almost always up

and moving about the stage with strong, definite full steps after the rather lyrical opening passages. Even in the opening, Kampei is up on one knee and Okaru rises to a kneel in high level for several gesture sequences. There is a clear distinction made between straight and circular paths, such that the use of circular paths as Okaru and Kampei prepare to depart creates a pleasing esthetic contrast to the straight paths used in the rest of the play. Turns also add visual interest, since many turns carry the performer through rather large arcs. In the rest of the play, turns of ninety degrees or more are rather rare; in this scene, most turns are of that magnitude. Although the scale set contains no measure of path length, it is worth noting that full or half-stage crosses are more frequent in this scene compared with the rest of the play.

The flips in this scene and Bannai's falls are among the few occasions when differences of level are used for effect. The opening scene uses different levels of platforming and steps, creating differences in level among the characters involved, and the steps and verandas of the teahouse scene effectively create interest through differences of level. Other than these few instances, most of the play occurs on the flat floor; visual interest is created through devices other than level. Even in scenes staged on two or more levels of platforming, such as the Daijo, Ichiriki, and Kyoto bridge scenes, most of the movement occurs on the actual stage floor in front of the platforming. A sequence may begin at a higher level, but always the action descends onto the flat floor and the main part of the scene is played there. The only possible exception to this pattern is the Daijo

scene; yet even here the first portion of the scene, played on the platforming, involves no movement across the floor. The only time anyone moves across the platforming is when first Tadayoshi, then the assembled daimyo, descend the stairs to the flat floor in order to exit. All other movement occurs on the flat floor except for two mies by Morono, the first when his name is announced by the narrator, the last at the curtain that ends the scene.

There is much more torso movement in this scene than in any other. The swordplay, the tachimawari, Bannai's falls, Kampei's mie, and the slower dance at the beginning all give occasion for torso movement. Most such torso movement does not involve rotation within the torso, but uses bending, tilting, and rotation of the body as a whole. The degree of flexibility shown is never large, but still is greater than the flexibility shown in the rest of the play. The real difference is in mobility; Matagoro permits much more movement of the torso as a whole in this scene than in any other, except perhaps the tachimawari sequences in the final scene of the play.

The effort combination Matagoro uses is quite striking. The combination of boundness, lightness, indirectness, and sustainment is not one that any movement analyst would describe as a combination suitable for fighting. In many contexts, such a combination would tend to be associated with a slow tempo and a dream-like quality. In this case, however, the rate is quick, particularly the phrase rate, and Matagoro shows a very high degree of activation. The sustainment is a matter of avoiding any tendency to abbreviate or truncate the movement; instead, each movement is allowed the full time necessary

for the execution and perception of that movement as a separate entity. In the context of a fight scene, this implies a certain expansion in time--hence the quality of sustainment. Real fighting is a matter of directionality--the stab, the punch, the slash.

Tachimawari as done by Matagoro is a matter of shaping and forming patterns in space. Hence his use of indirect quality. Lightness and bound flow further remove the tachimawari movement from realistic fighting movement, since actual fighting movement must employ strength and free flow to deliver the maximum energy to the target.

The result of this effort constellation is a thorough stylization of the fighting scene into a rather gentle dance, with no feeling of violence at all. All the effort qualities associated with violence--free flow, strength, directness, quickness--have been changed to their opposites--bound flow, lightness, indirectness, sustainment. The appeal of the scene is based on the aesthesis of its qualities as dance movement, not on its qualities of violent action.

Matagoro uses a great deal of shaping behavior. The dance passages are much involved with making virtual forms in space, and even the tachimawari movement is often concerned with spatial form. In swordplay, for example, the body, arms and sword carve out a three-dimensional form; often the opponent moves only within the boundaries of the form being created for the duration of that phrase. On a smaller scale, many of Okaru's hand gestures in her dance passage at the start of the play involve very beautiful forms in space created through complex flexure and turning in the wrist, fingers, and elbow.

Matagoro uses a markedly larger body volume in this scene than in the other scenes in the play. Here he permits himself to be expansive. His movement still tends to occupy the limb zone, but since the whole kinesphere is larger, the zone of most of his movement is larger as well. Using props such as the sword or the cherry-blossom branch further enlarges his body volume.

There is much more touch in this scene than in the rest of the play. Kampei and Okaru, Kampei and Bannai, Kampei and the hanayoten all relate through touch at one point or another. Since the more usual pattern of visual relationship across a distance is still very much in evidence, the contract between the two patterns creates an added source of variety. Touch also serves to characterize relationships. Okaru touches Kampei very tenderly. Kampei grabs Bannai roughly by the front of his kimono; Bannai very gingerly lifts Kampei's sleeve while attempting to sneak by him. Bannai seems to be overcome with foolish passion when he manages to catch hold of Okaru's kimono sleeve.

The principal vocal difference between this scene and the rest of the play is in volume. Volume range increases; some moments are truly full-power, as in Bannai's first "Yare koi-yai!" (You there, get over here!). Volume shift is more abrupt; the line mentioned above pops out over soft music after dialogue of no more than moderate volume.

There is considerably less dialogue per unit time in this scene, as much of the scene is taken up with dance. Therefore, voice is less important most of the time.

However, one vocal passage is highly unusual: Bannai's first speech in which he insults Kampei. It is in the style known as nori, a

name which refers to the fact that the performer rides (noru) the rhythm of the shamisen. It is delivered in strict duple rhythm, moderately fast, with alternation between straight and syncopated beat. The speech is spoken with a slightly regularized pitch structure; there is no sense that the speech is sung. Vocal quality remains about the same. There is increased attack and accent, and also an increase in precision, though not marked. Falsetto voice is not used. Slide occurs only in the final phrase. The phrase shape is very irregular. No other speech in The Forty-Seven Samurai is even remotely similar in style.

The style of the scene up to the nori is not nearly as great a departure from the norms of the rest of the play as is the nori and the rest of the scene that follows (i.e., the tachimawari (danced fight) sequences). The very marked stylistic shift shown by the nori may well function to let the audience know that a new norm is being established for the time being. No important cognitive information is conveyed by the speech, as it simply recaps the events leading up to Hangan's suicide--information already provided in much greater detail. The bravura nature of the piece makes it a very good attention-getter and attention-holder; after apprehending the style of the nori, the spectator should not be taken aback by any part of the scene to come.

The nature of Matagoro's style in this scene is clearly very different from his manner of performance in the rest of the play. These differences are in keeping with the basic differences in dramaturgy: comedy versus serious drama, dance versus spoken drama. There is also a shift away from the principal characters in the story.

For the time being one is involved with Okaru, Kampei, and Bannai; Morono, Hangan, and Yuranosuke are out of sight and out of mind until the following scene. Finally, it is worth bearing in mind that the Ochiudo scene was a creation of the Kabuki theater, not of the puppet stage; the differences between the two may tell us much about the nature of Kabuki outside the puppet-derived repertory. That, however, is well beyond the scope of this study.

Comparative analysis of Matagoro's performances

Figures 5-8 present a comparative analysis of the relationships between Matagoro's performance as Enju, his performance as Bimyo, and composites of the plain style and dance style material from "Demonstrations from Chushingura." In this section, this data will be used to show the nature of the relationship between these four performances. In particular, this data supports the conclusion that Matagoro shows two distinct, though related, patterns of performance. To investigate this matter, one must establish the nature of any invariant aspects of Matagoro's performances, whether the plain style material shows a distinct difference from the dance style material, and whether the plain style material shows a stronger relationship to Matagoro's performances as Enju and Bimyo than does the dance material. If both of the latter relationships are true, then the dance material must be seen as a style distinct from, though related to, the rest.

Fundamental characteristics of Matagoro's performance

In Table 5, the type of match existing for each scale is shown. As defined in Chapter V, for any scale S, E is the value of S in Matagoro's performance as Enju, B is the value of S in his performance as Bimyo, D is the value of S in the dance style material, and P is the value of S in the plain style material. For any scale, there may be no match, or a match between two, three, or four values.

The scales showing a four-way match are particularly important, since on these scales Matagoro was consistent throughout all four roles. There are 13 such scales as follows; each scale name is followed by the value for that scale.

Movement structure:

3	mouth tension:	lips
4	facial activity:	slight
12	weight transfer:	step
15	turning:	pivot in place
16	floor contact:	full foot
17	torso units:	one
19	flexibility:	slight

Movement dynamics:

31	visual focus:	performers
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Voice:

37	tightness:	slight
40	breathiness:	slight
44	precision:	moderate

TABLE 5

NAKAMURA MATAGORO: TYPE OF MATCH BY SCALE NUMBER

E = Enju. B = Bmyo. D = dance style. P = plain style

Movement structure:

01 E=P	02 E=B/P=D	03 E=B=P=D	04 E=B=P=D	05 E=B=P
06 E=P=D	07 E=B=P	08 E=B=P	09 E=B=P	10 E=B=P
11 E=D/B=P	12 E=B=P=D	13 E=B=P	14 E=P=D	15 E=B=P=D
16 E=B=P=D	17 E=B=P=D	18 E=B=P	19 E=B=P=D	20 E=P
21 E=P/B=D				

Movement dynamics:

22 E=P=D	23 E=B=P	24 B=P=D	25 E=P=D	26 E=P
27 P=D	28 B=P	29 B=P	30 E=D	31 E=B=P=D
32 B=P	33 E=B=P	34 E=P/B=D	35 E=P=D	

Voice:

36 E=P=D	37 E=B=P=D	38 E=B=P	39 P=D	40 E=B=P=D
41 E=B=P	42 B=P=D	43 B=D	44 E=B=P=D	45 E=P=D
46 E=P/B=D	47 E=B/P=D	48 B=P=D	49 E=B=P=D	50 E=P
51 E=P	52 E=B/P=D	53 E=B=P	54 NM	

Phrasing:

55 E=D/B=P	56 E=B=P	57 P=D	58 E=P=D	59 E=B/P=D
60 E=B/P=D	61 E=B=P	62 B=P=D	63 E=P=D	64 E=B=P=D
65 E=B=P	66 E=B	67 E=P=D	68 E=B=P	69 E=P
70 E=B/P=D				

49 vibrato: none

Phrasing:

64 compounding: slight (one degree)

Having taken Matagoro as the model of Kabuki acting style, and having found that these thirteen aspects of his performance are those in which he is completely consistent, one must conclude that these are the fundamentals of his acting style.

This group of traits has the same relation to Matagoro's acting that a foundation does to a house. One cannot live in a house that is nothing but a foundation; a house that is but a foundation is incomplete. On the other hand, a house without a foundation is not a house; it quickly collapses into a pile of disorganized lumber and brick. In like manner, these thirteen traits only indicate the relatively few invariant aspects of Matagoro's performance; they are incomplete as a description of his acting style. Yet since they are invariant, they form the core of consistency on which his acting style is built. Without such invariant traits, his acting would lack the internal consistency that is required before one can speak of "style" at all.

The idea that these qualities do have a fundamental bearing on the nature of his acting is confirmed by their presence in the basic drills he taught at the beginning of the Kabuki-Hawaii program. The very first of these, a simple exercise designed to teach the basic manner of kneeling, walking, and bowing, incorporates all of the movement qualities on the list of thirteen traits.

This exercise begins kneeling in Japanese fashion with the feet tucked under the body. There is essentially no change in facial expression during the exercise, but the lips are held in a somewhat tense, rather dour expression. The actor rises to his feet, keeping his torso in one unit and not permitting more than a shade of torso flexure. Taking full steps on the full foot, the actor walks forward, kneels, and bows low, maintaining the torso pattern specified above throughout. The bow is not a single unitary phrase, but is broken up slightly, showing one degree of compounding. Rising again to his feet, the actor pivots in place, returns with full steps on the full foot to his starting position, and once more kneels. As one can see from this summary, all of the movement characteristics on the list above are displayed in this, the very first exercise taught by Matagoro in the Kabuki-Hawaii program.

The vocal qualities on the list do appear in all the material that shows Matagoro's manner of vocal production. However, for the purposes of the argument here, it would be desirable to establish their presence in fundamental skill drills such as the movement drill discussed above. Unfortunately, the early skill drills generally did not involve vocalization of any kind. However, one exercise taught very early in the course did involve vocal production. In this exercise, the students walked in a circle, using a choreographed step. In rhythm with their walk, they chanted a phrase, "Shitaniiiiiii... shitani!" Although few of the actors imitated him at this point, Matagoro's own utterance of the phrase shows the four vocal qualities

on the list: slight tightness and breathiness, moderate precision, no vibrato.

The conclusion that these thirteen items are fundamental aspects of Matagoro's performance is supported by his complete consistency with respect to them and the fact that these characteristics appear in exercises which clearly were intended to develop fundamental movement and vocal skills in the student actors at the very outset of the Kabuki-Hawaii program. Surely mere idiosyncracies of his style would not meet these tests.

The existence of two styles

All of Matagoro's performances share the basic qualities discussed above. However, these account for only 13 out of 70 possible scales: about 19% of the total. The distribution of the remaining 81% is now the main concern.

Relationships between the plain and dance styles

We have identified the material from the michiyuki scene of The Forty-Seven Samurai recorded on "Demonstrations from Chushingura" as the locus of the dance style, and the remainder of the material on "Demonstrations" as the locus of the plain style. One may therefore investigate the number of matching relationships extant between these bodies of material and the rest of the material on Matagoro.

Immediately above, one finds that 13 scales out of 70 are consistent throughout all four bodies of material on Matagoro. There are four other categories in which one finds scales that involve matches between plain and dance. These are the cases in which $E = P = D$, $B = P = D$, $E = B$ and $P = D$, and the case in which $P = D$ only. In all, there are 36 scales which show a match between plain and dance regardless of whatever else occurs.

However, the assumption that the 13 consistent scales are fundamental invariants of Matagoro's performance implies that one should not expect differences between styles to appear on these scales. It is the remaining 57 scales that must be considered, of which 23 show a match between plain and dance. This amounts to just over 40%.

In short, the analysis shows that the plain style differs from the dance style on about 60% of the scales outside the invariant group. It would seem fair to say that this demonstrates a considerable difference between the plain and dance style materials.

Relationships between the four performances

In Table 6, there is a striking relationship: there are no scales at all that show matches between Enju, Bimyo, and the dance material. In contrast, there are sixteen scales for which Enju, Bimyo, and the plain style material have values in common. This is clearly an indication that a stronger relationship exists between Enju, Bimyo, and the plain style material than exists between Enju, Bimyo, and the

TABLE 6

NAKAMURA MATAGORO: ANALYSIS OF SCALE RELATIONSHIPS

MATCHING COMBINATIONS	SCALE GROUPS				
	All	Struct.	Dynam.	Voice	Phr.
Four-way match.....	13	7	1	4	1
Enju=Bimyo=dance.....	0	0	0	0	0
Enju=Bimyo=plain.....	16	7	2	3	4
Enju=plain=dance.....	10	2	3	2	3
Bimyo=plain=dance.....	4	0	1	2	1
Enju=Bimyo/plain=dance.....	6	1	0	2	3
Enju=plain/Bimyo=dance.....	3	1	1	1	0
Enju=dance/Bimyo=plain.....	2	1	0	0	1
Enju=Bimyo.....	1	0	0	0	1
Enju=plain.....	6	2	1	2	1
Enju=dance.....	1	0	1	0	0
Bimyo=plain.....	3	0	3	0	0
Bimyo=dance.....	1	0	0	1	0
Plain=dance.....	3	0	1	1	1
No match.....	1	0	0	1	0
All matches to both.....	27	9	5	8	5
All matches to plain.....	25	9	6	5	5
All matches to dance.....	2	0	1	1	0
All split situations.....	15	3	2	4	6

dance style material. In other words, Enju and Bimyo should be regarded as representing performances in plain style. Enju or Bimyo alone match up with the plain style material 25 times, versus twice for the dance style material. Again, there is a far stronger relationship to plain style material than to the dance style material.

A similar relationship appears upon consideration of those scales on which there is only a single match. There are six scales where the only equality is between Enju and the plain style material, while there is only one scale on which the only equality is between Enju and the dance material. The same pattern shows on examination of the same figures for Bimyo: three single matches with the plain style, one with the dance style. There is a strong relationship between the plain style material and Matagoro's performances as Enju and Bimyo. The relationship of the dance style to these performances is much weaker.

Both of the relationships specified at the beginning of this section have been met. There is a core group of invariant traits which relate the plain and dance styles; there is also a definite difference between the plain and the dance styles, such that Matagoro's performances as Enju and Bimyo, and his performance in the plain style material from "Demonstrations from Chushingura," form a body of stylistically related material clearly different from the dance style. These results support the hypothesis that Matagoro shows two distinct, though related, styles of performance.

Finally, one must determine some estimate of the probability that these results are due merely to chance. Table 7 gives the probabilities that the figures given in Table 6 are due to chance.

TABLE 7

NAKAMURA MATAGORO: PROBABILITIES OF SCALE RELATIONSHIPS

MATCHING COMBINATIONS	SCALE GROUPS				
	All	Struct.	Dynam.	Voice	Phr.
Four-way match.....	.00	.00	.38	.03	.38
Enju=Bimyo=dance.....	.00	.00	.00	.00	.00
Enju=Bimyo=plain.....	.00	.00	.00	.00	.00
Enju=plain=dance.....	.00	.00	.00	.00	.00
Bimyo=plain=dance.....	.00	.00	.05	.00	.05
Enju=Bimyo/plain=dance.....	.00	.05	.00	.00	.00
Enju=plain/Bimyo=dance.....	.00	.07	.07	.08	.00
Enju=dance/Bimyo=plain.....	.00	.08	.00	.00	.08
Enju=Bimyo.....	.09	.00	.00	.00	.08
Enju=plain.....	.00	.00	.08	.00	.09
Enju=dance.....	.11	.00	.08	.00	.00
Bimyo=plain.....	.00	.00	.00	.00	.00
Bimyo=dance.....	.13	.00	.00	.09	.00
Plain=dance.....	.00	.00	.10	.10	.10
No match.....	.15	.00	.00	.11	.00
All matches to both.....	.00	.00	.00	.00	.00
All matches to plain.....	.00	.00	.00	.00	.00
All matches to dance.....	.01	.00	.13	.14	.00
All split situations.....	.00	.00	.00	.00	.00

These values could range between 0 and 1, with 1 representing the highest probability of the result being due to chance, and 0 the lowest such probability. The values in Table 7 are very low except for the figure for a four-way match in movement dynamics and phrasing. These are the two areas in which only 1 four-way match was found. They indicated that there is some possibility that the four-way matches in these areas may be due to chance. However, even in these two cases, the probability is low.

Table 8 gives the actual scale values for each of the four bodies of material for Matagoro. This figure is provided so that the actual numbers can conveniently be compared to the results presented above.

Continuities in Matagoro's performance patterns

Beyond the patterns to be observed in individual scale relationships, there are certain continuities that can be observed in Matagoro's pattern of structural movement that tie together many of the observations made thus far.

The first such continuity is a principle of restriction. He simply does not move very much in any way at all, and greatly reduces the number of possible movement patterns that he does use. The general absence of posturality, the restriction of movement across the floor, the very restricted use of the face and head, the avoidance of rotation in limb gestures, and the elimination of almost all torso movement are ways in which he restricts his movement repertoire.

TABLE 8

NAKAMURA MATAGORO: SCALE VALUES BY ROLE AND SCALE NUMBER

E = Enju. B = Bimyo. D = dance style. P = plain style

E B D P	E B D P	E B D P	E B D P	E B D P
Movement structure:				
01 3 2 5 3	02 3 3 2 2	03 2 2 2 2	04 2 2 2 2	05 1 1 5 1
06 2 5 2 2	07 2 2 4 2	08 4 4 3 4	09 1 1 5 1	10 3 3 5 3
11 1 2 1 2	12 5 5 5 5	13 0 0 5 0	14 1 2 1 1	15 1 1 1 1
16 5 5 5 5	17 1 1 1 1	18 1 1 5 1	19 2 2 2 2	20 2 3 4 2
21 1 2 2 1				
Movement dynamics:				
22 4 3 4 4	23 3 3 2 3	24 4 2 2 2	25 2 4 2 2	26 2 1 5 2
27 2 1 5 5	28 1 2 4 2	29 2 3 4 3	30 3 2 3 1	31 4 4 4 4
32 1 2 3 2	33 3 3 4 3	34 3 4 4 3	35 3 1 3 3	
Voice:				
36 4 3 4 4	37 2 2 2 2	38 2 2 3 2	39 2 0 3 3	40 2 2 2 2
41 3 3 2 3	42 2 3 3 3	43 4 3 3 2	44 3 3 3 3	45 4 3 4 4
46 4 3 3 4	47 3 3 2 2	48 3 2 2 2	49 1 1 1 1	50 4 2 5 4
51 3 2 4 3	52 3 3 4 4	53 3 3 4 3	54 1 2 4 3	
Phrasing:				
55 4 3 4 3	56 3 3 2 3	57 1 3 2 2	58 2 4 2 2	59 4 4 2 2
60 2 2 3 3	61 3 3 4 3	62 3 4 4 4	63 2 1 2 2	64 2 2 2 2
65 2 2 3 2	66 2 2 4 3	67 3 4 3 3	68 2 2 3 2	69 3 2 4 3
70 1 1 2 2				

The second principle that can be observed in Matagoro's structural movement patterns is a principle of economy. Even within the movement restrictions outlined above, he does not move his eyebrows only. He not only keeps his hands in his lap much of the time, but when he does gesture, he uses only whatever simple flexion is required, without adding any rotation, circling, or other complexity. Only those few movement across the floor that are absolutely required for the action of the play are performed. When he moves his head to look to one side, his torso does not twist a little at the shoulders to follow the head; instead, it remains at rest.

Finally, Matagoro's structural movement patterns clearly involve a principle of separation. Each movement is clearly delineated from the others. When he turns to take a path across the floor, the turn is clearly separated from the action of moving across the floor. The use of gestural rather than postural movement permits the use of sequential rather than overlapping gestures, a pattern evident not only in the limbs, but in the face as well.

The use of bound flow ties in with the principle of restriction that seems apparent in his movement structure. The essence of bound flow is the sense that there are defined limits on any given movement such that the movement is not allowed to pass beyond given bounds. This sense of stoppage in the qualitative feeling of the movement reinforces the restrictive aspects of Matagoro's movement structure.

Matagoro's neutrality with respect to weight seems to be in keeping with the principles of restriction and economy. He avoids both definitely applying his weight to his environment and definitely

holding back his weight and its impact. Along with the restricted character of his movement structure, this creates a sense of self-containment.

His use of directness modulates that sense of self-containment mentioned above into a strong feeling of authority. Because his manner of dealing with the space around him is direct rather than indirect, there is no sense that his self-containment avoids contacting his environment. On the contrary, his use of a direct spatial attitude, together with the economy, restriction, and separation of his movement, creates a sense of concentration. His use of sustainment further heightens that sense of concentration and authority, for he lengthens his movement in time while those around him tend to shorten theirs.

In any one phrase, he tends to use more than one pitch range; in particular, he will often go back and forth between the range of the break between full-fold and falsetto and either the range above it or the range below it. A good many individual phrase patterns key off the mode break by using it as the point of a sub-phrase transition or as a point at which to create an elaboration of the pitch or rhythmic pattern.

Matagoro holds his patterns of vocal quality, diction, and volume fairly constant. Indeed, as observed above, four of the thirteen invariant aspects of his performance have to do with voice. Most of the vocal variety in his performance comes through his use of pitch. There is considerable pitch variation in each utterance and between utterances. When he shifts his pitch through the range of the break

between falsetto and full-fold voice, he makes no effort to smooth the transition between vocal modes. On the contrary, the pitch break becomes a stylistic device in itself, in accordance with a common Kabuki vocal convention.

Two aspects of Matagoro's vocal style help to create a strong feeling of stylization in his vocal delivery. These are his use of a loosely defined pitch structure and the occasional use of marked pitch slide and very long sustained sounds.

The pitch structure he uses does not seem to permit the free use of any pitch at will. However, it does not have a sung quality, or even the kind of chanted quality heard in some parts of the delivery of the gidayu narrator. Rather, it is a spoken style in which certain pitch ranges are used in preference to others. There seem to be three such ranges: one in the lower part of the use range, one around the point where the break between full-fold and falsetto voice occurs, and the third rather higher than that in the falsetto. Pitches which would fall in between these are heard, but not nearly as often as the pitches that lie within these preferred ranges.

Through placing emphasis early in his vocal phrases and late in his movement phrases, Matagoro creates a contrast that serves to knit his movement pattern and vocal delivery together. As phrase succeeds phrase, one is drawn alternately to the movement, then to the vocal line by the alternation of phrase emphasis. The result is a kind of counterpoint effect that refreshes one's interest in both channels of communication.

When Matagoro uses a full pause, it is generally part of a performance pattern that leads to a moment of stillness as its conclusion. The pause both separates one phrase from another and is a part of the preceding phrase as well. Often, there will be a general deceleration, a marked increase in vocal sustainment and in sustainment as a movement quality. Both vocal sustainment and movement sustainment create the sense of expansion in time. Increasing that expansion to what the context will bear--then pausing--creates an effect of opening a span of time in which nothing needs to happen. In such a span of time, the audience is free to experience the evocative image created by the performer. As such, it does not slow the rate of the performance or interrupt it; it is rather a change of mode within the performance which in effect carries the performance forward. Even though nothing is concretely happening on stage, something is happening in the performance process; the audience is absorbing what the performer has evoked in them through the preceding performance behavior.

Chapter VII
Student analyses

This chapter presents analyses of the performances done by the student actors for this study. Each student performed for the study both before Kabuki-Hawaii was well underway and again after the program was nearly over. Four students performed two roles each; two students performed one role each. In the case of one student, Carol Honda, videotape of two full-length performances was available; one performance was done before Kabuki-Hawaii, the other afterward.

Each role performed by each actor is summarized, then an analysis of their performances is given; finally a comparison of the changes in their performances to Matagoro's performance style is given.

All direct quotations from the plays are from the videotape of the actor's performance, not from any particular edition of the play.

Norris Shimabuku

Norris Shimabuku performed two cuttings from the character of Launce in Two Gentlemen of Verona. The first of these is the speech which begins Acts II, scene iii.

Synopsis of his cutting from Act II

Launce appears leading a dog. He has just taken his leave of his family, and is "going with Sir Proteus to the Imperial's court." He complains that his whole family--himself included--was weeping rivers to see him go, yet his dog did not share the general sorrow: "He is a stone, a very pebble stone, and has no more pity in him than a dog." He decides to show what his leave taking was like; to do so he sets up various articles of his apparel as the members of his family. His staff becomes his sister, his hat becomes Nan the family maid, and so forth. However, he finds it all a bit confusing. His left shoe is his father at first. Then it becomes his mother; then his father again. Then he sees that it must be his mother, for it has a hole in it--like his mother, "it hath the worser sole." Then he cannot quite decide whether he is the dog, or the dog is himself, or he is himself and the dog at the same time. He never makes up his mind about it; the epistemology of it all is a bit too much for him. His right shoe, his father, cannot speak for weeping; he kisses it, but it weeps on. He comes to kiss his left shoe, his mother; and indeed it is her: "Why, there 'tis! Here's my mother's breath, up and down." And all the while, he points out, his dog "sheds no tear, nor speaks a word" of comfort or of sorrow. But Launce weeps afresh.

His performance of the cutting from Act II

His "before" and "after" performances are very similar, so the following remarks apply generally to both.

Tension is seen in all parts of his face with the eyebrows and the lips the most active. There is a moderate amount of facial activity, with only a slight degree of posturality. When he makes a movement with his face, he tends to make rather large, gestural movements of individual facial features, a pattern often seen in comedic performance, and one which immediately establishes a comic tone to Norris's interpretation of Launce. In between such movements, his face tends to return to a state of repose. His head movement consists mostly of lateral shifts and rotations, often with a horizontal plane component. To look at the dog or at one of his props, he cocks his head over more than he turns it to the side. This gives him the effect of looking quite attentively at whatever engages his interest, so that he constantly seems to have difficulty in making sense of his surroundings--again, a comic exaggeration, conveying a sense of foolishness in the character.

His performance gains considerable visual interest through his active and evocative use of pantomimic gesture. Most of his gestures are single gestures, since he keeps one hand busy pantomiming the dog's leash; however, as he warms to the subject of his family's lacrimosity, he lets the leash drop and uses both hands, particularly to handle props. He turns his hands a good deal by twisting--the natural form of rotation for the lower arm. Flexure usually takes the

TABLE 9
NORRIS SHIMABUKU AS LAUNCE: ACT II, "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	---					40 Breathiness	---				
06 Head Movement	-----					41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	-----					55 Vocal shape	-----				
21 Posturality	-----					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	---					58 Duration	---				
24 Space	-----					59 Emphasis	---				
25 Time	-----					60 Passage	---				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----					63 Elaboration	-				
29 Preferred axis	-----					64 Compounding	-----				
30 Preferred plane	-					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

form of flexion. He is on his feet throughout, moving with full steps. Even if the path taken is very short, little more than a shift of weight, he still uses full steps, keeping them very short also. This frequent stepping in place helps convey the foolishness of the character; it has a clownish look to it, since it represents an inappropriate release of energy.

Many such paths are too short to be called either straight or curved; his few paths of greater length are straight. He turns in place rather than on a path; for example, he brings himself and his pantomimed dog to a full stop before pausing, regarding the dog with some puzzlement, and then turning to the audience for his first line, having decided, evidently, that a discourse on the dog is called for. Floor contact is on the full foot throughout. He uses a two-unit torso that breaks at the waist. He uses a good deal of compound torso movement, and a moderate degree of torso flexibility and mobility. A moderate degree of posturality also occurs in his use of the torso.

He shows bound flow and light weight quite consistently, and activeness as well. He almost always shows directness, and usually quickness. This effort pattern gives his movement a lively, spirited quality; it helps convey the impression that Launce is an awake, aware person, constantly trying to deal with his world in an active fashion. In context with other stylisms that convey the foolishness of the character, his effort pattern establishes the particular kind of fool he is: not the blundering clod, but the fellow who manages to be foolish despite apparent wit.

He tends to emphasize directionality over shaping or flow: a tendency in keeping with his use of directness and quickness. In Norris's interpretation, Launce is a person who constantly directs himself to the world around him, a world that interests and puzzles him; Norris's use of directionality helps convey that impression.

He is fairly expansive, moving into several directions in turn without a strong preference for any one, but always using a generous amount of space. This underscores the activity and extroversion that characterize Launce. He does not employ shaping movement frequently, but when it occurs it tends to fall into the lateral plane. Since he often faces the audience, use of the lateral plane makes him seem to use more space, in keeping with his expansiveness. There is a sense of complexity in his use of space since he uses a variety of directions, but his movement tends to be directional in a complex way without using shaping. One might describe his movement as constantly spiking or thrusting out from the center in many directions. He uses audience focus throughout, except when he has occasion to look at a prop or at his imaginary dog. The text is written as direct address; his use of audience focus immediately establishes this convention. His kinesphere size is rather large, in keeping with his expansiveness, and he tends to use the limb and distal zones a good deal, which keeps his gesture easily visible: very important for the pantomime effects, and also important for the sense of foolish alertness that strongly characterizes Launce. He handles his props quite a bit, but makes no other use of touch; he does not mime petting the dog or embracing his family, for example.

He uses both full-fold and fry voice, with only slight tightness, nasality, noise and breathiness. There is a definite use of accent and some use of lengthening to make out the rather strong prose rhythms of the passage. He also makes definite use of attack to stress certain consonants as a way of bringing attention to particular words. Through these devices, the shape of the line is clearly delineated, which greatly helps to convey the sense of the words. His consonants are clearly enunciated, perhaps placing a slight stress on precision, though not markedly so. He uses a fairly wide pitch range centered in his voice, but seldom uses falsetto. His rest pitch falls in the center of his use range. He does not structure his use of pitch. He does not use vibrato, and uses little slide. He uses a rather wide range of volume, centered in his potential range, and having a medium rest level. Volume change occurs without great abruptness, but there tends to be a definite shift in volume rather than a smooth gliding change. His use of volume acts in concert with his use of diction to shape the sentence or phrase for clarity of meaning.

He uses oscillating phrase shapes of relatively short duration. Emphasis is placed in the early part of the phrase. His movement phrases are also of relatively short duration and likewise often place emphasis early in the phrase. This use of early emphasis in relatively short phrases creates an active, lively rhythm that attracts our interest to the characteristic behavior pattern Launce shows; a very active, alert personality that manages, despite all his sincere efforts, to misunderstand almost everything.

Movement passage shows little overlap. Much of his movement is initiated in the distal of limb range and moves toward the body center, an interesting reversal of the pattern most people show in everyday life. This initiation pattern helps to convey the clownish aspect of the character. Skew transitions are the rule, as he frequently changes the direction and plane of his movement; an aspect of his phrasing that reinforces the effect of his use of space. He uses little elaboration, but frequently sets up quite complex compounding of phrases, especially in vocal phrasing. This use of compounding reinforces the sense of activeness and alertness conveyed by other aspects of his performance pattern. His overall rate is moderate, though phrases tend to move quickly; he uses pause a great deal to separate phrases and to create rhythmic patterns. He uses free meter throughout, and a fair amount of rhythmic variety.

Comparison of the two performances of his cutting from Act II

Norris's performance pattern is quite stable. The few changes can be summarized as follows.

The distribution of facial tension remains the same in both performances, both in terms of active areas, and in terms of active parts within each area. Head movement also is the same in both performances. However, there is an increase in facial activity, and a rather marked increase in facial posturality. His facial expression therefore seems more earnest; he seems to care more in the second

TABLE 10
 NORRIS SHIMABUKU AS LAUNCE: ACT II, "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	-				
06 Head Movement	-----					41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-----					55 Vocal shape	---				
21 Posturality	-----					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----					58 Duration	---				
24 Space	-----					59 Emphasis	---				
25 Time	---					60 Passage	---				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----					63 Elaboration	---				
29 Preferred axis	-----					64 Compounding	-----				
30 Preferred plane	-					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

performance; the sadness at leaving his family, for example, seems more like real sadness and less like a comedian's device. There is somewhat less gesture the second time around, but the other aspects of his use of gesture remain the same. His use of support and locomotion does not change. The only change in his torso movement is a decrease in flexibility. His effort constellation changed in two respects; his weight quality changed from light to strong, and his time quality changed from quick to sustained. As a result, some of the quality of alertness is lost; there is a sense of greater concentration on the world around him, still without full comprehension, of course. His use of shape and his handling of space remained the same.

His vocal quality changed considerably. He used both fry and full-fold voice in the earlier performance, but only full-fold in the latter. Although noise remained the same, there were decreases in nasality and breathiness; his voice is definitely clearer in the second performance. Diction remained the same, as did his use of pitch. His handling of volume showed little change other than a rise in the placement of the volume range so that the center of the range lay at a louder level than before. Two changes occurred in his vocal phrasing: he changed his phrase shape from oscillating to ramp, and increased the phrase length. Only one change occurred in his movement phrasing; he used less distal initiation in the latter performance. His phrase structure remained quite similar, with an increase in elaboration, and a decrease in the amount of pause.

In Norris's interpretation, Launce gives a contradictory impression. On the one hand, he seems very sharp and quick; yet he

turns out to be very much a fool. Much of the humor in his performance derives from the tension between these two aspects of Launce.

His manner of using the head and face is quite different from everyday usage. It is one of several aspects of his performance that give it a theatrical air. It also gives a comedic tone to his performance since it somewhat exaggerates ordinary facial expression much as does a clown.

His effort qualities give a sharp, precise tone to his movement, but without heaviness. His use of bound flow and light weight together with directness, quickness, and activeness give his movement a sense of sureness, swiftness, and accuracy without any sense of applying force or impact on arrival. His use of directionality as a substitute for shaping also gives a sense of directness and exactitude to his movement. His tendency to initiate movement in the distal or limb/distal range keeps the center of his body still and makes each gesture more visible, thereby further enhancing the clarity of his movement. These qualities help create the impression of Launce as a seemingly sharp, yet confused fellow, and tend to draw our attention to the action of his mind as he expresses himself in gesture.

This impression is also supported by his use of voice. His voice has a crisp, clear quality, despite using the lower range a good deal, due to his use of diction and to the relative clarity of his tone. This is especially true of the latter performance, in which his voice is actually lower, yet his vocal production is clearer. In his second performance, the lengthening of his phrases and his increased use of

elaboration create a greater sense of the confused complexity of Launce's thinking.

In Norris's interpretation, the foolishness of the character is in what he says, not in how he says it. The humor of Launce emerges as a contradiction between the silly statements he makes and the very bright, intelligent air he uses while making them. This applies to non-verbal as well as verbal expression: Norris has Launce setting up his props as his family with all the air of someone demonstrating an important procedure, yet the whole rigmarole is an inherently ridiculous way to show the scene Launce depicts. While his movement shows clarity and clearheadedness, the cognitive content conveyed by the movement is delightfully inane.

Changes with respect to Matagoro in his cutting from Act II

Norris changed toward Matagoro in some ways. Facial posturality showed an increase; the change gave a more natural, less stylized look to his use of facial expression. While Matagoro uses facial expression relatively little, when he does show the character's feeling through the face, the effect is that of natural expression of strong feeling, not of a stylized facial expression. In this respect Matagoro's use of expression in the plain style differs from what one finds in other styles of Kabuki, such as aragoto. Norris's use of facial expression shows certain changes toward Matagoro's plain style; it remains quite different from other styles of Kabuki facial expression.

TABLE 11
 NORRIS SHIMABUKU; LAUNCE (ACT II)
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 no change	03 no change	04 away both
05 toward dance	06 no change	07 away dance	08 no change
09 no change	10 no change	11 no change	12 no change
13 no change	14 no change	15 no change	16 no change
17 no change	18 away dance	19 toward both	20 no change
21 no change			

Movement dynamics:

22 no change	23 away dance	24 no change	25 toward both
26 no change	27 no change	28 no change	29 no change
30 no change	31 no change	32 no change	33 toward plain
34 no change	35 away both		

Voice:

36 ambiguous	37 no change	38 away plain	39 no change
40 away both	41 no change	42 no change	43 no change
44 no change	45 away both	46 away dance	47 toward both
48 no change	49 no change	50 no change	51 no change
52 toward both	53 no change	54 no change	

Phrasing:

55 away plain	56 toward plain	57 no change	58 no change
59 no change	60 no change	61 toward plain	62 no change
63 toward both	64 no change	65 no change	66 no change
67 no change	68 no change	69 no change	70 no change

Torso flexibility decreased; as a result, the nature of Norris's torso movement changed, with relatively more expression appearing in the limbs due to the decreased use of gestures using separate parts of the torso. His gestures therefore seem more independent of his torso, which makes them seem more abrupt. His gesture flows less from the torso and more from the arms. His use of time changed from sustainment to quickness, making his gestures seem sharper and more precise. He used a lower rest pitch for a more solid tone.

He allowed himself longer vocal phrasing, an advantage in working with the rather complex Shakespearian sentence structure. His movement initiation became more central because he decreased the amount of purely distal gesture, which also changed the manner of his gesture, giving them more weight. Along with the change toward quickness, his gestures now had more punch and solidity than before. He slightly increased the amount of elaboration in his phrasing, so that the formerly angular line of his movement softened slightly.

He changed away from Matagoro in other aspects. The amount of facial activity increased; smaller and more postural facial gestures gave him a more natural, less stylized use of facial expression. The amount of gesture also decreased. Along with changes in initiation and time, the effect on limb gestures was similar to that on facial gesture: a less theatrical look. A similar result occurs through decrease in torso motion. Smaller, simpler, and more central gestures gave a less theatricalized air to his performance. The change to strength from lightness is a change in gesture from a quick, snappy

feeling to greater weight and solidity. Decreasing spatial retention also gave him a less theatrical air.

Although he showed increased nasality and breathiness, it did not affect the sound of his voice to any marked degree. Along with lower rest pitch, he used narrower pitch range and lower pitch center; all part of a general deepening of his voice. The change seems to have given him more power, reflected in a louder volume range center. The change to flat vocal phrase shapes tended to lessen the variety of his vocal work. He showed less fry and more full-fold voice, because the general lowering of pitch made the use of fry mode unnecessary. This last change is ambiguous with respect to Matagoro, since Matagoro uses a mixture of full-fold and falsetto, while Norris never uses the falsetto voice.

The following table shows the A, B, C, and D values for Norris's performance as Launce in Act II.

Synopsis of his cutting from Act IV

Norris's second cutting from Launce is from Act IV, scene iv. Once again he has his dog, and a tale to tell about the misbehavior of the animal. It seems poor Launce's dog is rather a bad-mannered beast; he was to give it to Silvia as a gift from Proteus, and no sooner had Crab made the lady's acquaintance than he stole food from her table and left odiferous traces of his presence beneath it. But Launce saves him as he has done before. "If I had not had more wit than he, to take a fault upon me that he did, I think verily he had been hanged for

TABLE 12

NORRIS SHIMABUKU; LAUNCE (ACT II): A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 5 5 3 5	02 2 2 2 2	03 2 2 2 2	04 3 4 2 2	05 2 4 1 5
06 3 3 2 2	07 4 3 2 4	08 1 1 4 3	09 3 3 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 1 1 1 1	15 1 1 1 1
16 5 5 5 5	17 2 2 1 1	18 5 4 1 5	19 3 2 2 2	20 3 3 2 4
21 3 3 1 2				
Movement dynamics:				
22 4 4 4 4	23 2 4 3 2	24 4 4 2 2	25 4 2 2 2	26 4 4 2 5
27 3 3 5 5	28 4 4 2 4	29 5 5 3 4	30 1 1 1 3	31 5 5 4 4
32 4 4 2 3	33 4 3 3 4	34 3 3 3 4	35 3 2 3 3	
Voice:				
36 2 3 4 4	37 2 2 2 2	38 2 1 2 3	39 2 2 3 3	40 2 1 2 2
41 3 3 3 2	42 3 3 3 3	43 3 3 2 3	44 3 3 3 3	45 4 3 4 4
46 3 2 4 3	47 3 2 2 2	48 1 1 2 2	49 1 1 1 1	50 2 2 4 5
51 4 4 3 4	52 3 4 4 4	53 3 3 3 4	54 3 3 3 4	
Phrasing:				
55 3 2 3 4	56 2 3 3 2	57 2 2 2 2	58 2 2 2 2	59 2 2 2 2
60 2 2 3 3	61 4 3 3 4	62 4 4 4 4	63 1 2 2 2	64 4 4 2 2
65 3 3 2 3	66 4 4 3 4	67 3 3 3 3	68 1 1 2 3	69 3 3 3 4
70 1 1 2 2				

it." And so he does in the present case: he goes to the man who whips the dogs, and informs him that he, Launce, "did the thing you wot of." Much to Launce's surprise, the worthy fellow "makes me no more ado, but whips me out of the chamber." As Launce points out, few masters would endure such things for their servants; yet Launce has saved Crab many times, sitting in stocks and standing in pillories for Crab's stolen puddings and killed geese. But Crab shows little propensity to improve. Launce has urged him to behave as does his master, but with little result: "When didst thou see me heave up my leg and make water against a gentlewoman's farthingale?"

His performance of the cutting from Act IV

Norris's performances of this scene are startlingly similar, as a comparison of Tables 13 and 14 shows. Considering that these performances are over eight months apart, his consistency in this scene is remarkable. Since these two performances are very similar, the following summary will serve for both. Points of difference will be mentioned as they arise.

Norris tends to show more facial expression in the mouth area in his earlier performance, while in his later performance he distributes facial expression over the whole face. There are other differences in facial expression: his face is much more active and more postural in the second performance, and he uses more complex head movement the second time around. These changes are similar to the changes that occurred in his first cutting from Launce, and they have a similar

TABLE 13
 NORRIS SHIMABUKU AS LAUNCE; ACT IV; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	---					39 Noise	---				
05 Posturality	---					40 Breathiness	---				
06 Head Movement	-----										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	-----										
						55 Vocal shape	---				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	-----					58 Duration	---				
25 Time	-----					59 Emphasis	---				
26 Activation	-----					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	---					63 Elaboration	-				
30 Preferred plane	-					64 Compounding	-----				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

TABLE 14
 NORRIS SHIMABUKU AS LAUNCE; ACT IV; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	-----					41 Lengthening	---				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-----					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	---					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	-----					55 Vocal shape	---				
21 Posturality	-----					56 Duration	---				
22 Flow	---					57 Emphasis	---				
23 Weight	---					58 Duration	---				
24 Space	-----					59 Emphasis	---				
25 Time	---					60 Passage	---				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----					63 Elaboration	-				
29 Preferred axis	---					64 Compounding	-----				
30 Preferred plane	-					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

effect; the second interpretation is less lively and clownish, more human and natural.

He handles gesture much as he did for his first cutting, using twisting more often than any other form of turning in the first performance, and compound turning patterns in the second. His gesture therefore seems more complex in his second performance.

He stood throughout for the first performance, spending almost all of it standing in one place and occasionally shifting his weight by step-shifting. The second performance was markedly different in this respect, in that he sat on a tall stool to relate the story of Crab's misdeeds and therefore did not use the weight shifts of his first performance. Sitting down also changes the general ambience of the scene; it creates a different kind of storytelling atmosphere. In his first performance, it is as though Launce stopped for a moment to tell about his dog while on his way somewhere else. In the second performance, he seems to have much more time; he actually settles down to talk about how he and his dog get along. The second interpretation has a more serious air, and lessens the sense Launce gives of being slightly in a rush.

In the second performance, weight shifts occur only while walking, and always consist of full steps. As one might expect, there are few paths to analyze for shape, but there is a difference nonetheless: in both performances, he makes his entrance at the side of the stage and comes to center. This path is the only major path taken during the whole performance. In the first performance, he made a straight path directly to center; in the second, he allowed the imaginary dog to

pull him off a straight path. In so doing, he creates a theatrical moment that carries him to center, while in his first performance the initial moment of the scene is less interesting.

Floor contact is on the full foot throughout the first performance, and it is also on the full foot in the second performance whenever he supports on his feet. In short, when he stands, he stands in a firm and balanced manner. There is nothing dizzy about Launce; in his own mind, he has quite a command of himself and the world, and his stance shows it. We in the audience know better, and therefore see something comic in his firmly based, yet rather confused personality.

He uses the torso in essentially the same way as he does for his first cutting, with some variation in the amount of flexibility, mobility, and posturality he permits himself. The pattern of his use of the torso is essentially the same in all four performances. The only difference in his use of the torso between his earlier and later performances of the scene from Act IV is the rather small difference he seems to show in posturality.

The only other area in which differences exist between his Act IV performances is his effort pattern. This area is also the area in which the most significant differences are to be found.

In his first performance, flow is bound, though not strongly so. His handling of weight shows strength, and that of space shows definite directness. He tends to show quickness, and definite activeness. In his second performance, one sees a very different effort pattern. He shows free flow instead of bound flow, lightness instead of strength, and sustainment instead of quickness. His use of

space and activation remain the same. The pattern of the first performance is a pattern oriented toward action, toward the expression of a desire to affect the environment, to have an impact on things: both in a literal, physical sense and in a more general way. The second pattern does not have this sense of impact; the connotation it conveys, in the context of the rest of his performance pattern, is one of greater thoughtfulness and mental or emotional involvement. Launce seems less oriented toward doing something about the world and more oriented to thinking about it: a shift, as it were, from the vita activa, trending a bit toward the vita contemplativa.

The remaining scales are all identical for both performances.

His visual focus is on the audience except when he looks at Crab (who is imaginary) or gestures with his head and rolls his eyes at the same time to express his disgust with Crab's latest antics. He tends to use the outer zones (limb and distal) of a moderate-sized kinesphere, which carries his gesture away from his body and makes it visible. Active touch is limited to properties, both real and imaginary; he does not mime touching the dog; rather, he handles the dog's leash with his right hand. He also touches the stool as he sits and occasionally as he adjusts his position.

He uses fry and full-fold voice, with a slight degree of tightness, nasality, noise, and breathiness. He does not lengthen sustained sounds very often, and uses only moderate attack, accent, and precision. His pitch range is rather wide, especially when he gets annoyed at the dog, and the center of that range is rather high, though he does not use true falsetto voice. His rest pitch is at a

medium level. He uses a free pitch structure throughout; he uses no vibrato, but does use slide on occasion. He uses a moderate volume range, centered rather on the high end, especially when he is annoyed at the dog. He uses a medium rest level. Volume change is moderate, but not smooth; there is a definite sense of a shift in volume level when he changes loudness.

Vocal phrasing emphasizes ramp shapes, though others are used. The duration of his vocal phrases tends to be on the short side, and he tends to place his emphasis early in the phrase. Movement phrasing also tends to be short and to place emphasis early. Movement passage is linked, but shows little overlap; initiation is most often in the limb area, though distal initiation also occurs rather frequently. Central initiation is much rarer. He uses plane transitions a great deal; a sequence of phrases may return to its starting point, but a single phrase rarely does so.

As the above remark on transition might indicate, although he shows no elaboration to speak of, he does show several degrees of compounding. His overall rate is fairly fast, and his phrase rate rather brisk. He uses pauses frequently, though not usually of long duration, primarily to control rhythm, emphasis, and timing. He uses free meter throughout, with moderate rhythmic variety and no change of meter.

Changes with respect to Matagoro

Table 15 shows there are changes in facial expression which tend toward Matagoro generally. Area tension changes from the mouth area to the full face, posturality increases, and head movement becomes compound. These changes reflect a change in the mood of the piece from happy-go-lucky to quizzical; the more complex use of the face reflecting the more complex feelings of the character. His use of turning in gesture also reflects this change, as he makes more use of complex rotations rather than plain twisting. He sits rather than stands, and shifts his weight from time to time between his feet, which are positioned to share the weight of his body with the stool, but unequally. There is a change away from Matagoro in the form of an increase in torso posturality, perhaps due to the limitation on locomotory movement created through his choice of a seated position. He uses free rather than bound flow, strength rather than lightness, and quickness rather than sustainment; these changes give his gestures more weight and punch.

The rest of his performance pattern shows no change. Table 16 gives the A, B, C, and D data for Norris's performance as Launce in the scene from Act IV.

TABLE 15
 NORRIS SHIMABUKU; LAUNCE (ACT IV)
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 toward dance	02 no change	03 no change	04 away both
05 toward dance	06 ambiguous	07 no change	08 no change
09 toward dance	10 no change	11 away dance	12 toward both
13 no change	14 away both	15 no change	16 no change
17 no change	18 no change	19 no change	20 no change
21 away dance			

Movement dynamics:

22 away both	23 toward dance	24 no change	25 toward both
26 no change	27 no change	28 no change	29 no change
30 no change	31 no change	32 no change	33 no change
34 no change	35 no change		

Voice:

36 no change	37 no change	38 no change	39 no change
40 no change	41 no change	42 no change	43 no change
44 no change	45 no change	46 no change	47 no change
48 no change	49 no change	50 no change	51 no change
52 no change	53 no change	54 no change	

Phrasing:

55 no change	56 no change	57 no change	58 no change
59 no change	60 no change	61 no change	62 no change
63 no change	64 no change	65 no change	66 no change
67 no change	68 no change	69 no change	70 no change

TABLE 16

NORRIS SHIMABUKU; LAUNCE (ACT IV): A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 5 3 5	02 2 2 2 2	03 2 2 2 2	04 2 4 2 2	05 2 3 1 5
06 3 5 2 2	07 3 3 2 4	08 1 1 4 3	09 3 5 1 5	10 3 3 3 5
11 1 3 2 1	12 3 5 5 5	13 0 0 0 5	14 1 2 1 1	15 1 1 1 1
16 5 5 5 5	17 2 2 1 1	18 5 5 1 5	19 3 3 2 2	20 3 3 2 4
21 2 3 1 2				
Movement dynamics:				
22 4 2 4 4	23 4 2 3 2	24 4 4 2 2	25 4 2 2 2	26 4 4 2 5
27 3 3 5 5	28 4 4 2 4	29 2 2 3 4	30 1 1 1 3	31 5 5 4 4
32 3 3 2 3	33 4 4 3 4	34 3 3 3 4	35 3 3 3 3	
Voice:				
36 2 2 4 4	37 2 2 2 2	38 2 2 2 3	39 2 2 3 3	40 2 2 2 2
41 2 2 3 2	42 3 3 3 3	43 3 3 2 3	44 3 3 3 3	45 4 4 4 4
46 4 4 4 3	47 3 3 2 2	48 1 1 2 2	49 1 1 1 1	50 2 2 4 5
51 3 3 3 4	52 4 4 4 4	53 3 3 3 4	54 3 3 3 4	
Phrasing:				
55 2 2 3 4	56 2 2 3 2	57 2 2 2 2	58 2 2 2 2	59 2 2 2 2
60 2 2 3 3	61 3 3 3 4	62 4 4 4 4	63 1 1 2 2	64 4 4 2 2
65 3 3 2 3	66 4 4 3 4	67 3 3 3 3	68 1 1 2 3	69 3 3 3 4
70 1 1 2 2				

Summary

In Table 17 one may see that the situation is indeed one of stability. In total, fifteen scales change toward the Kabuki and fifteen change away, so that the amount of change in Norris's performance pattern toward and away from Matagoro is balanced. There are a few aspects of Matagoro's performance that have been assimilated, but these assimilations have not made any considerable difference in Norris's performance pattern as a whole.

Each performance viewed individually repeats the overall pattern. Most scales are stable, and there is a balance between the amount of change toward Matagoro and the amount of change away from him. His second performance seems to show no change at all relative to the plain style, but this is probably merely due to the small amount of change generally rather than to any actual trend to hold onto the plain style. The change with respect to both styles shows a precise balance between changes toward Matagoro and changes away from him.

Although there are a very small number of specific aspects in which he shows change relative to Matagoro, overall he neither changed in the direction of Matagoro's style nor away from it. The assimilations of Kabuki style do not affect his overall performance pattern. Instead, he remains very true to his own manner of performance as seen in his earlier performances. It seems that Norris possesses a strong style of his own, which changed during his exposure to Kabuki, but only to a small degree.

TABLE 17

NORRIS SHIMABUKU: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	108	7	5	3	15	7	6	2	12	2
P	.000	.110	.192	.137	.000	.110	.160	.073	.000	.000

First role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	50	5	1	3	9	4	4	2	10	1
P	.000	.116	.119	.243	.006	.194	.194	.214	.012	.000

Second role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	58	2	4	0	6	3	2	0	5	1
P	.000	.196	.071	.135	.000	.178	.296	.135	.000	.000

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

Hal Brown

Hal Brown performed two cuttings, one from the character of Astrov in Chekhov's Uncle Vanya, the other from the character of Macbeth in the Shakespearian play of the same title.

Synopsis of his cutting from Astrov

The cutting from Astrov is taken from the first act of the play. Astrov has been talking about his work in forestry and conservation when Vanya challenges his views. Astrov responds with a speech castigating the ecological practices of his time. He describes how the forests of Russia are being destroyed because the peasants are desperate for fuel; no one bothering to think that such a resource, once destroyed, cannot be recreated. Unthinkingly, he says, man is ruining not only a great natural beauty, but a necessary source of raw material as well. He grows impassioned, then suddenly realizes that he has lost his audience through his fervor. He sounds like a crank, even to himself. He apologizes and takes his leave.

First performance as Astrov

Facial tension concentrates in the eye region, being especially evident in the motion of the eyeball. There is a relatively small amount of actual facial activity, though he uses a fair amount of head movement; facial activity tends to be moderately postural. His eyelids

TABLE 18
 HAL BROWN AS ASTROV; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	-					38 Nasality	---				
04 Facial activity	---					39 Noise	---				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	---				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	---										
						55 Vocal shape	-----				
21 Posturality	---					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----										
24 Space	---					58 Duration	---				
25 Time	-----					59 Emphasis	---				
26 Activation	---					60 Passage	-----				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	-				
30 Preferred plane	-----					64 Compounding	-----				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	-----				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

and eyebrows are quite still most of the time; there is some expressive movement of the lips, but this too is held to a minimum. His head movement largely consists of horizontal turns. He creates facial expressions mainly through movement of his whole head, combined with the directionality of his visual focus as shown through movement of the eyeball. He uses a moderate amount of gesture, usually single gestures of the right hand. He repeats one gestural pattern so often that the description of his gesture presented here is essentially a description of this one pattern: his right hand is extended with the forearm level to the floor and the palm turned up, the elbow is flexed about ninety degrees and is held rather close to the body. As he tilts and rotates his torso, his hand moves with the torso and adds complementary movement of its own. He is on his feet throughout, usually taking full steps. He moves in straight paths with turns made as part of the path, not separated from it. Floor contact is on the full foot. He breaks his torso into two units, usually at the waist, and uses a variety of torso movement, often in combination. Even so, torso flexibility and mobility are only slight; he keeps himself stiff, his two unit torso acting like two pieces with a hinge between.

Despite Astrov's fervor and clear reasoning, Hal gives Astrov the impression of being a crank. This is partly through his use of effort; he uses bound flow, neutrality in weight, indirectness, and quickness, with passive activation. These are factors which in combination seem weak and irresolute; they undermine Astrov's forthright words and brisk manner of speech. Astrov's body is stiff, as mentioned above; a further expression of this stiffness appears in his use of space. He

uses directionality consistently, stabbing into the saggital area with his gesturing right hand. There is no shaping to his movement to reduce the angularity of his gesture. Since his use of space is rather expansive, his stiff and rather sharp-cornered movement shows all the more. This use of shape furthers the impression created by his use of effort. His visual focus remains on the other performers throughout; there is no sense of direct address to the audience, even though the speech is both polemical and applicable to our own day. He uses a large kinesphere and most often uses the limb zone, so that he moves at a fair distance from his body center. In this scene, active touch is limited to his own body; he does not even handle any props, though in the rest of the play he uses stage and performer touch fairly often. He makes no use of spatial retention.

Hal uses only full-fold voice throughout, with slight tightness, noise, nasality and breathiness. He does not make any particular use of vocal quality that especially characterizes Astrov, though the slight sense of constriction in his voice does not hinder the impression Astrov gives of being slightly eccentric. He lengthens sustained sounds only slightly, and makes relatively little use of accent. Attack is moderate, as is precision. His pitch range is only moderately wide, as might be surmised from the fact that he does not use falsetto or fry voice. He centers his pitch range on the low side of his voice, and uses a rest pitch in the lower part of the range. He does not structure his use of pitch at all, nor does he use vibrato. Slide occurs only occasionally. He uses volume for effect, and therefore has a rather wide volume range. It is centered in the middle

of his potential range, and his rest pitch is rather on the louder side. Volume change tends to be abrupt. For example, his first line runs, "You can burn peat in your stoves, and build your barns of stone. Oh, I admit you can thin a forest if you have to. But why lay it flat?" "You can burn peat" builds to a strong volume emphasis. "And build your barns of stone" is at a reduced level, approximately the same volume throughout the phrase. The next sentence is also at a consistent level, but the level is distinctly higher than the preceding phrase. "But why lay it flat?" is then dropped in level, but builds to secondary emphasis on "why" and a primary emphasis on "flat." The impression is of forceful, intelligent argumentation by someone with both intellectual and emotional commitment to his position.

Hal tends to use long oscillating phrases with medial emphasis. His vocal phrasing sustains the impression of intelligence and argumentativeness created in his use of volume effects. On the other hand, his movement phrasing tends to undermine that impression; he moves in short phrases with early emphasis, showing a great deal of overlap in his movement, initiation in the limb range and a tendency to plane transitions. Due to the effort constellation described earlier, his movement has a sudden, galvanized quality quite at odds with Astrov's steady, clearheaded thinking. Hal uses no elaboration, but often as much as three degrees of compounding; this gives his phrasing complexity as a reflection of Astrov's complex thinking. His overall rate is moderate, but his phrase rate is fairly fast; there is a moderate use of pause to separate phrases and phrase groups, for

emphasis and for timing. He uses free meter throughout with a fair amount of rhythmic variety, both to separate phrase groups and to create variety within his phrasing.

Comparison of his first and second performances as Astrov

Distribution of facial tension moves from the eye area to the full face. Eye tension moves from the eyeball to the eyebrow, the lips become a focus of tension in the mouth area, and activity increases. The result is a marked change in his manner of facial expression; in his earlier performance he created facial expression largely through his glance and the movement of his head, in his later performance he uses the facial features much more. His face therefore seems less stiff, less neurotic-looking, more human and alive. In his earlier performance, turning was consistently a matter of twist as he constantly used one particular gesture pattern. In his later performance, although that same gesture pattern occurs frequently, it is alternated with a variety of other gestures such that his use of turning is better described as compound. This greater gestural variety again makes Astrov seem less neurotic, better in command of himself than before. The torso scales show change, all in the direction of a less stiff and more active use of the torso. The number of torso units increases, and we may see that the flexibility of the torso increases markedly, and mobility also increases. Again, the change is in the direction of a more human, more relaxed, less neurotic Astrov.

TABLE 19
 HAL BROWN AS ASTROV; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	-----				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	---				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	-----					52 Center	-----				
18 Torso motion	-----					53 Rest level	---				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	-----										
						55 Vocal shape	-----				
21 Posturality	---					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	---					58 Duration	-----				
25 Time	-----					59 Emphasis	---				
26 Activation	-----					60 Passage	---				
						61 Initiation	---				
27 Shape mode	---					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	-				
30 Preferred plane	-----					64 Compounding	---				
						65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	---					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	---				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

In the effort area, he adds the use of strong weight quality in his latter performance and also changes his activation from passive to active. He thereby becomes more forceful and more weighty; more the kind of man one listens to and takes seriously. In view of the above changes, some use of shaping might logically be expected; however, the actual change is in the other direction, toward greater use of flow. As his later performance presents a more relaxed Astrov, more movement flow appears which was suppressed by the stiffness typical of his earlier performance. The other shape factors remain the same, indicating that no fundamental change in Hal's use of shaping took place. Hal makes Astrov initiate movement closer to the center of his body in the later performance. Although the kinesphere size remains the same, his kinesphere zone moves toward the body center. He does not use any active touch, and he adds occasional use of spatial retention.

Hal changes his vocal quality to add considerable use of fry and markedly greater noise; in effect he roughens his voice, thereby giving greater weight and command to Astrov. He increases his use of sustainment, accent, and attack all at the same time, so that his words seem much more formed and complete. Pitch width decreases while the center of the range rises markedly, so that a generally higher voice results. While not of great consequence to the character of Astrov, this use of pitch gives Hal more flexibility and seems more comfortable. His volume rest level decreases markedly while the rest of his volume pattern remains the same, thereby intensifying the impact of his volume effects.

His vocal phrasing changes drastically. He changes from oscillating to valley phrase shapes, decreases the duration of his phrases, and moves the emphasis to a medial position, usually using attack to create emphasis. His movement phrasing also changes markedly. Movement phrase duration greatly increases and passage becomes much less overlapping. Initiation moves into the center of the body, another aspect of the pattern noted in our discussion of the changes in his use of space. Hal uses less compounding and slows down in his later performance; he also decreases his rhythmic variety somewhat. Again, the effect is to add weight to the character and to lead one to take him more seriously.

Changes relative to Matagoro in Astrov

Hal's performance pattern shifted toward Matagoro in several areas of movement structure. He shows a full-face distribution of facial tension, as does Matagoro in the dance style. Eye tension shifts from the eyeball to the eyebrows; Matagoro consistently shows eyebrow tension. Hal comes to show tension in the lip area, as does Matagoro. His use of compound turning in his second performance parallels Matagoro's usage in the dance style.

There are also changes away from Matagoro in movement structure. The increase in facial activity is a change away from Matagoro's style, which tends to minimize facial activity in most contexts. Hal increases the number of torso units he uses, and increases torso flexibility and mobility as well, a general shift away from Matagoro.

TABLE 20
 HAL BROWN: ASTROV
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 toward dance	02 toward both	03 toward both	04 away both
05 no change	06 no change	07 no change	08 no change
09 toward dance	10 no change	11 no change	12 no change
13 no change	14 no change	15 no change	16 no change
17 away both	18 no change	19 away both	20 away plain
21 no change			

Movement dynamics:

22 no change	23 away plain	24 no change	25 no change
26 away plain	27 ambiguous	28 no change	29 no change
30 no change	31 no change	32 no change	33 away plain
34 ambiguous	35 toward both		

Voice:

36 ambiguous	37 no change	38 no change	39 ambiguous
40 no change	41 toward plain	42 toward both	43 away dance
44 no change	45 away both	46 no change	47 away both
48 no change	49 no change	50 no change	51 no change
52 no change	53 away dance	54 no change	

Phrasing:

55 away plain	56 toward plain	57 toward both	58 away both
59 no change	60 ambiguous	61 away plain	62 no change
63 no change	64 toward both	65 toward plain	66 toward plain
67 no change	68 no change	69 away plain	70 no change

His effort constellation changed away from Matagoro, showing increased strength and activeness. His use of more central kinespheric zones takes him away from Matagoro's plain style usage, while the increase in spatial retention is a change toward Matagoro's pattern. His use of active touch, which changes from self-touch to none, differs from Matagoro's characteristic stage or performer touch for both of Hal's performances.

Hal's increased use of vocal fry is a shift to a mode of voice that Matagoro does not use with any frequency. The increase in lengthening and accent Hal shows takes his vocal pattern toward Matagoro in these areas. On the other hand, his attack, pitch width, and rest pitch all shift away from Matagoro.

Several areas of phrasing shift toward Matagoro. Vocal duration and emphasis shift toward Matagoro as do compounding and rate. Hal shifts away from Matagoro with respect to vocal phrase shape, movement phrase duration, and rhythmic variety.

Table 21 gives the actual A, B, C, and D values for Hal's performances as Astrov.

TABLE 21

HAL BROWN: ASTROV: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 4 5 3 5	02 4 2 2 2	03 1 2 2 2	04 2 3 2 2	05 3 3 1 5
06 2 2 2 2	07 3 3 2 4	08 1 1 4 3	09 3 5 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 1 1 1 1	15 2 2 1 1
16 5 5 5 5	17 2 3 1 1	18 5 5 1 5	19 2 4 2 2	20 2 3 2 4
21 2 2 1 2				
Movement dynamics:				
22 4 4 4 4	23 3 4 3 2	24 2 2 2 2	25 4 4 2 2	26 2 4 2 5
27 3 2 5 5	28 4 4 2 4	29 3 3 3 4	30 3 3 1 3	31 4 4 4 4
32 4 4 2 3	33 3 2 3 4	34 2 1 3 4	35 1 2 3 3	
Voice:				
36 3 2 4 4	37 2 2 2 2	38 2 2 2 3	39 2 4 3 3	40 2 2 2 2
41 2 3 3 2	42 2 3 3 3	43 3 4 2 3	44 3 3 3 3	45 3 2 4 4
46 2 2 4 3	47 2 3 2 2	48 1 1 2 2	49 1 1 1 1	50 2 2 4 5
51 4 4 3 4	52 3 3 3 4	53 4 2 3 4	54 3 3 3 4	
Phrasing:				
55 3 5 3 4	56 4 3 3 2	57 3 2 2 2	58 2 4 2 2	59 2 2 2 2
60 5 2 3 3	61 3 2 3 4	62 4 4 4 4	63 1 1 2 2	64 3 2 2 2
65 3 2 2 3	66 4 3 3 4	67 3 3 3 3	68 1 1 2 3	69 3 2 3 4
70 1 1 2 2				

Synopsis of his cutting from Macbeth

The cutting Hal chose from the role of Macbeth is the soliloquy which begins Act I, scene vii: "If it were done when 'tis done, then 'twere well it were done quickly." Alone, Macbeth meditates on his plan to assassinate Duncan. His imagination troubles him with visions of how the forces of Nature themselves will noise abroad the foulness of the deed he contemplates. He knows that if the consequences of the murder would go no further than the blow of the knife, he would have no hesitation. But there is both earthly and heavenly judgement to fear; he worries that his action will return to plague him. He rehearses to himself the reasons why he should spare Duncan: Duncan is his kin, his guest, and his king, all at once, and a good king as well; his death may bring down not only earthly justice, but heavenly as well. The cutting ends as Lady Macbeth enters and interrupts his train of thought, and he anxiously asks, "How now? What news? Hath he asked for me?"

First performance as Macbeth

Hal places most of his facial tension in the area of the mouth. In the eye region, facial expression usually takes the form of glancing with the eyeball; in the mouth area, movement of the lips is the principal form of facial expression. Overall, there is only a relatively slight degree of facial activity; most facial expressions depend upon movement of the head as a whole, much as they did with

TABLE 22
 HAL BROWN AS MACBETH; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	-----					37 Tightness	-----				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	---					39 Noise	---				
05 Posturality	---					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	---				
08 Limb relation	-----					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	---					49 Vibrato	-				
15 Turning	-----					50 Slide	-				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	---				
18 Torso motion	---					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	---				
20 Mobility	-----										
						55 Vocal shape	---				
21 Posturality	-----					56 Duration	-----				
22 Flow	---					57 Emphasis	-----				
23 Weight	-----										
24 Space	---					58 Duration	-----				
25 Time	-					59 Emphasis	---				
26 Activation	-					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	---					63 Elaboration	-				
30 Preferred plane	-----					64 Compounding	-----				
						65 Overall rate	-				
31 Visual focus	-					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	---					68 Meter	---				
34 Active touch	-					69 Rhythmic variety	-----				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

Astrov. There is a fair amount of gesture. Most often, his gestures are with both hands in a mirror relationship, circling his arms from the shoulder while keeping his hand rotated slightly so as to turn the palm up somewhat. He keeps his arms comfortably flexed. He is on his feet throughout, using full steps and putting his whole foot on the floor. He tends to use curved paths as he slowly, yet restlessly paces across the stage. As his thoughts change direction so does his body, with turns as large as 180 degrees. These turns are most often separated from the paths that precede and follow. His torso is divided into two units, and most often moves through rotation, either while turning his whole body, or while gesturing, carrying his arms from side to side as he turns from the waist. His torso is flexible and mobile, and moderately postural as well. In general, the quality of his torso movement is relaxed and easy.

He uses the effort qualities of free flow, strength, indirectness, sustainment, and passive activation. The tone these qualities give his movement, in context with the other aspects of his characterization, give him a troubled, meditative, worried air, yet show Macbeth to be a man who is capable of the kind of decisive action he contemplates. He is like someone holding a heavy hammer, swinging it slowly and easily, testing its weight, yet deeply concerned about using it. His movement usually shows directionality rather than shaping. He is quite expansive into the lateral and horizontal areas; much of his gesture involves rotation in the horizontal plane, and he frequently gestures directionally across his body along the lateral axis. He shows space focus almost throughout. Although the scene could be played as direct

address, he does not do so; instead he plays it, so to speak, to the air around him. When Lady Macbeth would enter, he focuses on her imaginary presence. As mentioned previously, he uses a large kinesphere, tending to move in the central and limb zones. He uses no active touch and no spatial retention.

He uses fry and full-fold voice, moderately tight as if with worry, but showing only slight nasality, noise, and breathiness. He draws out words considerably, while using only slight accent; however, he stresses his consonants markedly. On the other hand, he gives his consonants only moderate precision. He uses a wide pitch range with a low center, medial rest pitch, and no pitch structure, vibrato, or slide. His vocal style is heavy, a bit thick, and weighty; his Macbeth almost growls his words, pouring his heavy thoughts out into the air. His volume range is only moderately wide, centered on the soft side with a medial rest level. Volume change tends to be smooth. His use of volume conveys the feeling that he is talking to himself or to the air around him. There is a sudden lift in volume at the end when Lady Macbeth interrupts him and he speaks not to himself, but across the stage to her.

He tends to use long phrases with late emphasis, having an overall ramp shape. On the other hand, his movement phrases are only moderately long, and tend to place emphasis early. He shows linked movement passage; he tends to initiate movement in the limb range and to use plane transitions. He uses no elaboration, but as much as two degrees of compounding. His overall rate is very slow, but his phrase rate is moderate; the difference is not created through pause but

through rhythmic variety. He uses a single meter working off the rhythms of the blank verse.

Comparison of his performances as Macbeth

In the eye area, the locus of tension changes from the ball to the brow; facial activity and posturality both increase. Limb relation changes from mirror to single as Hal adopts gestures similar to the right hand gesture pattern we may see in Astrov. He no longer shows circling with his whole arm. Rather, he carries his lower arm along while rotating the upper arm, so that his hand is carried through space. During these gestures, his hand is held palm up or out. He makes his paths straight instead of curved in his second performance. Instead of the big turns in place, he uses smaller turns taken on a path. His torso movement changes from rotation to compound, as the variety of torso movements that he shows increases markedly. At the same time, the mobility, flexibility, and posturality of his torso movement all decrease; the increase in variety is countered by a decrease in size.

His use of effort differs markedly between these two performances. Only his weight quality remains constant from one to the other. He changes from free to bound flow, from indirectness to directness, and from passive activation to activeness. He still shows sustainment, but much less than before. He uses less directionality and more flow. While reorienting himself from the lateral to the sagittal axis, he remains oriented to the horizontal plane, especially in terms of torso

TABLE 23
 HAL BROWN AS MACBETH; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	-----				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---					41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	---				
08 Limb relation	-					43 Attack	-----				
09 Turning	---					44 Precision	-----				
10 Flexure	-----					45 Width	---				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----					51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	---					55 Vocal shape	---				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----					58 Duration	---				
24 Space	-----					59 Emphasis	-----				
25 Time	---					60 Passage	---				
26 Activation	-----					61 Initiation	-				
27 Shape mode	---					62 Transition	-----				
28 Expansion	-----					63 Elaboration	-				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	-----					65 Overall rate	---				
31 Visual focus	-					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	---					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	---				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

rotation. He decreases the size of his kinesphere somewhat. He uses stage touch and some spatial retention.

His vocal quality changes markedly. Vocal mode moves away from fry toward full-fold; tightness and nasality decrease while noise increases; breathiness remains constant. His use of lengthening and attack decrease while accent and precision remain the same. Pitch range width decreases markedly in the second performance, and his rest pitch lowers. He still uses no vibrato, but uses some slide. His volume increases while maintaining the same relative relation of center and level; volume change becomes more abrupt.

He continues to use the same vocal shape, but makes it much shorter and uses medial emphasis instead of late emphasis. While his movement phrase duration also shortens, he moves the emphasis in his movement phrasing to the middle of the phrase from his former early placement. The result of these opposing changes in phrasing is that his movement and vocal phrases are now of similar length with similar placement of emphasis. He brings his initiation in the center of his body from the limb range. He uses less compounding and speeds up his overall rate while keeping his phrase rate the same and using less rhythmic variety but the same amount of pause. He changes his basic meter from single to free.

Changes relative to Matagoro in Macbeth

As Macbeth, Hal shows change toward Matagoro in several areas of movement structure. He shows the same change in the locus of eye

TABLE 24
 HAL BROWN; MACBETH
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 toward both	03 no change	04 away both
05 toward dance	06 no change	07 no change	08 away dance
09 ambiguous	10 no change	11 no change	12 no change
13 no change	14 toward both	15 ambiguous	16 no change
17 no change	18 toward dance	19 no change	20 toward plain
21 toward dance			

Movement dynamics:

22 toward both	23 no change	24 away both	25 toward both
26 ambiguous	27 ambiguous	28 no change	29 toward plain
30 no change	31 no change	32 toward dance	33 no change
34 ambiguous	35 toward both		

Voice:

36 ambiguous	37 toward both	38 away plain	39 toward both
40 no change	41 toward plain	42 no change	43 toward dance
44 no change	45 away both	46 no change	47 toward both
48 no change	49 no change	50 toward both	51 no change
52 toward both	53 toward dance	54 toward plain	

Phrasing:

55 no change	56 toward dance	57 toward both	58 toward both
59 away both	60 no change	61 away plain	62 no change
63 no change	64 toward both	65 toward plain	66 no change
67 no change	68 away plain	69 away plain	70 no change

tension as we saw in his performance as Astrov. The increase he shows in facial posturality takes his performance in the direction of Matagoro's use of facial posturality in the dance style. He shows a change from curved to straight floor path, also a change toward Matagoro's practice. He shows decreases in mobility and posturality, both of which take him toward Matagoro's practice.

Hal's increase in facial activity is a change away from Matagoro's usage, as we also saw in Hal's work as Astrov. Hal's change from mirror limb relationships to single limb gestures is a change away from Matagoro.

His shift in turning from circling to rotating has no relation to Matagoro's pattern, which shows either no turning or compound turning, depending on the style.

In movement dynamics, Hal shows change toward Matagoro in flow, time, axes, kinesphere size, and spatial retention. Hal shifts from free to bound flow, thereby matching one of Matagoro's consistent usages. As Macbeth, Hal originally showed even more sustainment than Matagoro, but his second performance is close to Matagoro in this respect. Hal's shift from the lateral axis to the saggital axis brings him into agreement with Matagoro's plain style. Hal's decrease in kinesphere size brings him into agreement with Matagoro's practice in the dance style. Matagoro consistently shows a moderate degree of spatial retention; Hal originally shows none, but uses a slight degree in his second performance, thereby tending toward Matagoro's practice.

Hal shifts from passive to active activation, a change with an ambiguous relation to Matagoro's pattern, since in so doing he moves away from Matagoro's plain style and toward the dance style at the same time, without actually matching either one. Likewise, his shift from directionality toward increased shape flow has no relation to Matagoro's pattern, which consistently emphasizes shaping. The same situation occurs with respect to Hal's shift from an absence of active touch to use of self touch; Matagoro typically shows either performer or stage touch.

Only one aspect of Hal's movement dynamics changes away from Matagoro. Hal shows indirectness in his first performance, changing to directness in his second, while Matagoro is consistently indirect.

In voice, Hal changes toward Matagoro in tightness, noise, lengthening, attack, rest pitch, slide, volume center, and volume change. His decreased tightness matches Matagoro's practice. Likewise, the slight increase in noise brings Hal into agreement with Matagoro. Hal's decrease in lengthening brings him into agreement with the plain style, and his decrease in attack brings him into a match with the dance style. His slightly lower rest pitch matches Matagoro's practice. He begins to show touches of slide, which though much less prominent than Matagoro's practice, still represent a trend in the direction of Matagoro. Hal's volume increases in two ways, a louder center and more abrupt change, both of which show similarity to Matagoro's practice.

Hal changes away from Matagoro in two vocal aspects. His nasality starts out less than Matagoro's and decreases. He decreases his pitch

width, even though he began with a pitch width quite similar to Matagoro's.

Finally, Hal shows a decrease in the use of fry voice. However, he does not adopt the mixture of full-fold and falsetto voice that is characteristic of Matagoro. Rather, he uses full-fold production throughout his second performance, with little fry and no falsetto.

Hal changes toward Matagoro with respect to vocal phrase duration and emphasis; movement phrase duration, compounding, and overall rate. His vocal phrase duration becomes shorter, and his emphasis is placed earlier in the phrase. Movement phrases become shorter also. Compounding decreases, and overall rate speeds up a bit, though his phrase rate changes little.

Hal also changes away from Matagoro with respect to several aspects of his phrasing. His movement phrase emphasis moves later in the phrase, though he was quite similar to Matagoro in this respect at first. His initiation became more central; again, at first he was quite similar to Matagoro, particularly to the plain style. He used a freer metrical structure in his second performance, and with less rhythmic variety; both changes away from Matagoro.

The following table gives the A, B, C, and D values for Hal's performances as Macbeth.

TABLE 25

HAL BROWN; MACBETH: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 4 2 2 2	03 2 2 2 2	04 2 3 2 2	05 2 3 1 5
06 2 2 2 2	07 3 3 2 4	08 3 1 4 3	09 4 2 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 2 1 1 1	15 3 2 1 1
16 5 5 5 5	17 2 2 1 1	18 2 5 1 5	19 3 3 2 2	20 3 2 2 4
21 3 2 1 2				
Movement dynamics:				
22 2 4 4 4	23 4 4 3 2	24 2 4 2 2	25 1 2 2 2	26 1 4 2 5
27 3 2 5 5	28 4 4 2 4	29 2 3 3 4	30 3 3 1 3	31 1 1 4 4
32 4 3 2 3	33 2 2 3 4	34 1 2 3 4	35 1 2 3 3	
Voice:				
36 2 3 4 4	37 3 2 2 2	38 2 1 2 3	39 2 3 3 3	40 2 2 2 2
41 4 3 3 2	42 2 2 3 3	43 4 3 2 3	44 3 3 3 3	45 4 2 4 4
46 2 2 4 3	47 3 2 2 2	48 1 1 2 2	49 1 1 1 1	50 1 2 4 5
51 3 3 3 4	52 2 3 4 4	53 3 4 3 4	54 2 3 3 4	
Phrasing:				
55 2 2 3 4	56 4 2 3 2	57 4 3 2 2	58 3 2 2 2	59 2 3 2 2
60 2 2 3 3	61 3 1 3 4	62 4 4 4 4	63 1 1 2 2	64 3 2 2 2
65 1 2 2 3	66 3 3 3 4	67 4 4 3 3	68 2 1 2 3	69 3 2 3 4
70 1 1 2 2				

Summary

Hal's first and second performances are considerably different from each other in both roles. Taking both roles together, he shows the most change of any student, although Tony Soper shows slightly more change in one of his two roles. Nevertheless, there is a stable core. On Table 26, we may see that in his first role, *Astrov*, he shows no change on 38 of 70 scales (54.3%); in his second, *Macbeth*, he shows no change in 30 of 70 scales (42.9%).

The nature of the changes that Hal shows is complex. His performance pattern changes toward Matagoro in a number of respects: overall, 26.4%. However, his performance pattern changes away from Matagoro in a number of ways as well; 17.1% overall. Nor is his performance pattern consistent from one role to another with respect to the predominance of change toward Matagoro or away from him. As *Astrov*, his performance pattern changes away from Matagoro in more ways than it changes toward him; 21.4% versus 17.1%. This contrasts with his work as *Macbeth*, in which his performance pattern changes toward Matagoro 35.7%, away 12.9%. There is also a good deal of ambiguous change, at about the same level in both performances amounting to 7.9% overall.

If one looks only at those aspects in which Hal changes toward Matagoro, one finds that Hal tends to change toward Matagoro most in those aspects of performance in which Matagoro is consistent in both the plain and dance styles. This is not true of those aspects in which Hal changes away from Matagoro; here the tendency is for the change

TABLE 26

HAL BROWN: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	68	19	9	9	37	10	3	11	13	11
P	.000	.002	.131	.131	.071	.137	.004	.127	.007	.000

First role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	38	6	2	4	12	6	2	7	15	5
P	.000	.138	.102	.204	.036	.138	.102	.083	.090	.000

Second role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	30	13	7	5	25	4	1	4	9	6
P	.000	.002	.140	.181	.014	.151	.014	.151	.006	.000

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

away from the plain style to equal or exceed the change away from aspects where Matagoro is consistent.

Whether we look at structure, dynamics, voice or phrasing, we find Hal moving toward Matagoro on some aspects and away from him on others. Furthermore, when we contrast his work on Astrov to his work on Macbeth, we can see that there are relatively few changes that occur the same way on both roles. It is suggestive that the role which shows the larger change toward Matagoro is drawn from the classic repertory rather than the modern. Kabuki has been proposed as a model approach to the classic repertory in general and to Shakespeare in particular; the results of our analysis of Hal's work would seem to indicate that Kabuki had more influence on Hal in the classic role than in the modern one.

Hal's work shows complex changes. As we shall see, some of the students in this study were clearly and directly influenced by their experience in the Kabuki-Hawaii program, but Hal is not one of these. His work shows a complex relation to the Kabuki styles. He seems to have assimilated some aspects of Kabuki style and rejected others; at the same time, the rather large amount of ambiguous change suggests that his style underwent an internal evolution at the same time. In short, he came out a different actor than he went in, but the difference does not consist of simple assimilation or rejection of Kabuki performance patterns. Rather, it consists of a complex evolution of his own performing style under the influence of his experience with Kabuki.

Roseann Concannon

Roseann Concannon performed excerpts from Hero in Much Ado About Nothing, and from Agave in Euripedes' The Bacchae.

Synopsis of her cutting from Hero

Her excerpt from Hero is drawn from the beginning of Act III. Hero enters with Margaret and Ursula. Hero plots to play Cupid between Beatrice and Benedick; she intends to so arrange matters that both Beatrice and Benedick will think that the other is hopelessly in love. She promptly sets this plot in motion. She tells Margaret to find Beatrice; Margaret is to tell Beatrice that Hero and Ursula are out walking, and that Beatrice must slip into the orchard where she may overhear Hero and Ursula talking about her. Margaret willingly undertakes the task. Hero then arranges with Ursula to walk up and down in the "pleached bower, where a honeysuckle ripened by the sun/ Forbids the sun to enter." There, Beatrice will find them and hear them talk about Benedick: what a wonderful man he is, and how he is "sick in love with Beatrice." Beatrice comes, and they begin their little charade.

First performance as Hero

Roseann concentrates facial expression into the mouth area. Her eyes are therefore relatively inactive; when eye expression occurs,

TABLE 27
ROSEANN CONCANNON AS HERO; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	-				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	---				
05 Posturality	---					40 Breathiness	---				
06 Head Movement	-----					41 Lengthening	-----				
07 Gesture amount	---					42 Accent	---				
08 Limb relation	-					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	-				
16 Floor contact	---					51 Width	---				
17 Torso units	---					52 Center	---				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-				
20 Mobility	-----					55 Vocal shape	---				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	---					58 Duration	---				
24 Space	---					59 Emphasis	---				
25 Time	-----					60 Passage	---				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	---					62 Transition	---				
28 Expansion	---					63 Elaboration	---				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	-					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	---				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	---				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

it most often involves her eyelids: blinking and widening or narrowing her eyes. For example, she narrows her eyes when changing to a more commanding manner as she tells Margaret to leave: "This be thy office, bear thee well in it, and leave us alone." Facial expression in the mouth area usually involves using the lips to give extra visual shape to her words, helping to create an arch, mischievous air. Her face is moderately active, but does not show much posturality. In this case, the absence of posturality creates a sense of affectation which works against the credibility of Roseann's characterization. Head movement is largely in the lateral plane, cocking her head over to look at Margaret and Ursula rather than turning her head in the horizontal plane. She gestures occasionally, using single gestures of one hand or the other, usually circling her arm from the shoulder while holding it flexed at the elbow and often at the wrist as well. Often, she puts a twist in her lower arm to turn the palm out. This gesture pattern helps create a sense of femininity for Hero. She is on her feet throughout, standing and walking; she takes full steps. She uses straight paths and usually turns into a new direction while still moving across the floor, a pattern that conveys a sense that the character is in a hurry to get on to the next step in her plan. While standing, she often makes a partial contact with one foot, most often on the ball of her foot with her foot trailing, but sometimes on her heel with her foot extended in front, the off-balance position conveying Hero's sense of fun. She uses a two-unit torso and rather varied torso movement, usually combining tilts and bends. As she speaks and gestures distally with her hands, she often shows separate

torso gestures directed toward the other character, helping to convey a sense of confidentiality appropriate to her little plot. Although she does not use a great deal of torso flexion, she does move the torso as a whole moderately often. Most torso movement is fairly gestural.

Her use of effort is characterized by boundness, lightness, and indirectness, qualities which give Hero a sense of delicacy. She is usually neutral in time and activation. Her use of shaping is characterized by flow, some directionality, and contraction; in the context of her other effort choices, this use of contraction and flow gives a sense of softness. She uses many small distal gestures oriented toward the saggital axis and the lateral plane. These gestures are not allowed to use much space, which tends to give her a sense of refinement, in that she rather seldom pushes out into the space in front of her when she gestures. She uses a moderate-sized kinesphere, and usually places her movement fairly far from the center of her body, in the limb and distal zones. However, her use of space is contractive, not expansive, so the effect is one of feminine affectation, quite appropriate to the character of Hero. She restricts active touch to herself, using such gestures as laying her hand on her heart to indicate the first person. Visual focus is on the other performers (imaginary in this case). She does not use spatial retention.

She uses full-fold voice throughout. She shows very little if any tightness or nasality, though there is slight noise and breathiness. Sustained sounds are lengthened somewhat, with only slight use of

accent and attack; precision is moderate. She does not show any structuring of pitch, nor does she use vibrato or slide. Her volume range is quite narrow and centered definitely on the soft side with a medial rest level and very smooth change. She uses a moderately wide pitch range, centered very low in her voice; rest pitch is medial. Her vocal quality and diction convey a soft quality conveying that Hero means her plotting only in fun, a quality reinforced by her softness in volume. Her vocal quality also conveys her effort to persuade her companions to go along with her little scheme. Unfortunately, her very low pitch tends to counteract this quality by giving a somewhat masculine touch to her voice rather at odds with the rest of her characterization.

Usually, her vocal phrasing is composed of rather short ramp phrases with early emphasis. Likewise, her movement phrasing is short with early emphasis. Passage is linked; initiation is in the limb and distal zone, again lending a certain feminine affectation to her movement. Also in keeping with this interpretation of Hero, she uses a slight degree of both elaboration and compounding, which gives a certain sense of detail and texture to her gesture. Her overall rate is moderate, and her phrase rate rather quick, with considerable use of pause. Meter is free throughout, with some rhythmic variety, but without metric change. She creates the effect of one who is improvising as she goes, rather than someone who is following a well-developed scheme.

Comparison of first and second performances as Hero

She shows a fair amount of change between her first and second performances as Hero. Support and vocal phrasing are the only areas that did not change in some respect.

There is a considerable change in facial expression. In her second performance, the distribution of facial expression is now principally concentrated in the eye region, although the locus of tension in each region remains the same. There is overall less facial activity and less posturality than before, and the cocking of the head has largely been replaced by horizontal rotations. These changes make her use of facial expression much more credible. Her use of gesture changes; single gestures are replaced by opposing gestures with both hands, and the twisting of the lower arm is replaced with turning motions of the upper arm that carry her hands through arcs. These gestures are larger and more forceful; they seem somewhat at odds with the rest of her characterization. She tends to separate changing direction from taking a path in her second performance, and uses full-foot floor contact except in one or two leg gestures. Torso mobility and posturality both decrease. Her use of bound flow changes to neutral while her activation changes from neutral to active. She changes from contractive to neutral in her use of expansion. She reorients herself from the lateral plane to the horizontal plane. She uses less distal movement than before, and less active touch as well; her initiation also pulls back toward the center. On the other hand, she shows a considerable increase in her use of spatial retention, particularly

TABLE 28
ROSEANN CONCANNON AS HERO; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	-				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	---					39 Noise	-				
05 Posturality	-					40 Breathiness	---				
06 Head Movement	---					41 Lengthening	---				
07 Gesture amount	---					42 Accent	-----				
08 Limb relation	-----					43 Attack	---				
09 Turning	---					44 Precision	-----				
10 Flexure	-----					45 Width	---				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	-				
16 Floor contact	-----					51 Width	-				
17 Torso units	---					52 Center	---				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-				
20 Mobility	---					55 Vocal shape	---				
21 Posturality	-					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	---					58 Duration	-----				
24 Space	---					59 Emphasis	-				
25 Time	-----					60 Passage	-----				
26 Activation	-----					61 Initiation	-----				
27 Shape mode	---					62 Transition	-----				
28 Expansion	-----					63 Elaboration	---				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	-----					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	---				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

in terms of visual focus on her (imaginary) fellow performers. These changes make her seem more deliberate, less the engaging intriguer and more a serious plotter. This gives Hero perhaps more weight than the scene calls for.

Her vocal quality is essentially the same, though there is less noise the second time around. She lengthens sustained sounds somewhat less in her second performance, and uses accent somewhat more. Her pitch width decreases and the center of her pitch range rises dramatically, and her rest pitch rises to match. Her use of volume remains the same except that her already narrow volume range shrinks to a virtually constant level.

Her movement phrase duration lengthens dramatically, and her emphasis shifts to the beginning of the phrase. Her movement passage becomes markedly more overlapping. As mentioned earlier, her initiation is more central in her second performance. Her former reversal transitions have given way to plane transitions. Finally, there is a slight decrease in her use of pause. She conveys the impression of one who has a well-thought-out plan, worked out in detail, rather than one improvising an intrigue in a spirit of fun.

Changes relative to Matagoro in her portrayal of Hero

There are several changes toward Matagoro, particularly toward the plain style, in the structural aspects of Roseann's portrayal of Hero. Her change in facial tension from mouth-only to mouth-dominant brings

TABLE 29
ROSEANN CONCANNON; HERO
TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 toward plain	02 no change	03 no change	04 toward both
05 toward plain	06 toward both	07 no change	08 toward plain
09 ambiguous	10 no change	11 no change	12 no change
13 no change	14 no change	15 toward both	16 toward both
17 no change	18 no change	19 no change	20 toward plain
21 toward plain			

Movement dynamics:

22 away both	23 no change	24 no change	25 no change
26 ambiguous	27 no change	28 away plain	29 no change
30 toward dance	31 no change	32 no change	33 toward plain
34 ambiguous	35 toward both		

Voice:

36 no change	37 no change	38 no change	39 away both
40 no change	41 toward dance	42 toward both	43 no change
44 no change	45 away both	46 toward plain	47 no change
48 no change	49 no change	50 no change	51 away both
52 no change	53 no change	54 no change	

Phrasing:

55 no change	56 no change	57 no change	58 away both
59 away both	60 ambiguous	61 toward plain	62 toward both
63 no change	64 no change	65 no change	66 no change
67 toward both	68 no change	69 no change	70 no change

her into agreement with the plain style. Her decrease in facial activity brings her into agreement with both styles, while her decrease in facial posturality results in a match with the plain style. She changes the planar orientation of her head movement from sagittal to horizontal, thus matching both styles. She changes limb relationship from single to opposing, which leaves her following the plain style in this aspect. She changes from pivoting in motion to pivoting in place, which brings her into agreement with both styles. She no longer uses the ball of her foot, but always the full foot, thus matching Matagoro's pattern. She decreases torso mobility and posturality, thus matching Matagoro's plain style pattern.

There are no changes away from Matagoro in Roseann's structural movement pattern. One change is ambiguous; she moves from twisting to rotating while Matagoro shows either no turning or compound turning. With this single exception, she changes her pattern of structural movement toward Matagoro in every aspect in which she showed change at all.

Her movement dynamics present a more complex picture. She changed toward Matagoro in planar orientation, kinesphere zone, and spatial retention. Planar orientation shows a change from lateral to horizontal, thus changing to match the dance style, while kinesphere zone becomes somewhat more central and spatial retention increases, matching the plain style and both styles, respectively. Her changes in activation and active touch are ambiguous. She changes from active to neutral without matching either style; in touch, she changes from self touch to none. Matagoro shows performer or stage touch.

Lengthening, accent, and pitch center change toward Matagoro. Her change in lengthening from moderate to slight is a change toward dance style, while increased accent is a change toward both. She shows a large shift in pitch center, from low to medium high, thus changing to match the plain style. There are three changes away from Matagoro in her vocal work: noise, pitch width, and volume width. The level of noise in her voice decreased, and both pitch and volume width decreased, thus changing away from Matagoro.

Her initiation becomes somewhat more central, changing toward the plain style, while her mode of transition changes from reversal to plain, changing toward Matagoro. She changes away from Matagoro in two respects: her phrase duration becomes longer, and her placement of emphasis becomes earlier. She shows one ambiguous change: movement passage changes from linked to simultaneous, while Matagoro shows succession.

The following table presents the A, B, C, and D values for Roseann's performance as Hero.

TABLE 30

ROSEANN CONCANNON; HERO: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 1 3 3 5	02 3 3 2 2	03 2 2 2 2	04 3 2 2 2	05 2 1 1 5
06 3 2 2 2	07 2 2 2 4	08 1 4 4 3	09 3 2 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 1 1 1 1	15 2 1 1 1
16 2 5 5 5	17 2 2 1 1	18 5 5 1 5	19 2 2 2 2	20 3 2 2 4
21 2 1 1 2				
Movement dynamics:				
22 4 3 3 4	23 2 2 3 2	24 2 2 2 2	25 3 3 2 2	26 3 4 2 5
27 2 2 5 5	28 2 3 2 4	29 3 3 3 4	30 1 3 1 3	31 4 4 4 4
32 3 3 2 3	33 4 3 3 4	34 2 1 3 4	35 1 3 3 3	
Voice:				
36 3 3 4 4	37 1 1 2 2	38 1 1 2 3	39 2 1 3 3	40 2 2 2 2
41 3 2 3 2	42 2 3 3 3	43 2 2 2 3	44 3 3 3 3	45 3 2 4 4
46 1 4 4 3	47 3 3 2 2	48 1 1 2 2	49 1 1 1 1	50 1 1 4 5
51 2 1 3 4	52 2 2 4 4	53 3 3 3 4	54 1 1 3 4	
Phrasing:				
55 2 2 3 4	56 2 2 3 2	57 2 2 2 2	58 2 4 2 2	59 2 1 2 2
60 2 5 3 3	61 4 3 3 4	62 2 4 4 4	63 2 2 2 2	64 2 2 2 2
65 3 3 2 3	66 4 4 3 4	67 2 3 3 3	68 1 1 2 3	69 2 2 3 4
70 1 1 2 2				

Synopsis of her cutting from Agave

From the role of Agave, Roseann chose the speech that immediately follows Agave's entrance with the bloody head of Pentheus upon her thyrsus. She is deep in the grip of the Bacchic trance; she has no idea whose head she carries. She imagines that she carries some great trophy, a prize of the hunt with which to honor of the celebrants of Bacchus. She derides the men who hunt with spears and snares, for she has killed this trophy with her own bare hands. She calls upon the people of Thebes to witness her success; she calls for Pentheus and her father to come and see what she has brought. She asks that the trophy be nailed up on the palace wall for all to see. The speech ends on a note of proud boasting before the people of the city.

First performance as Agave

Facial expression occurs mainly in the mouth region, using the lips both for exaggerated formation of words and for fierce grins and grimaces. Her face is moderately active and shows some posturality most of the time. She uses horizontal rotations of the head almost exclusively. Within the eye area, the main focus of expression is the eyelids, used primarily to widen or narrow the eyes. Her use of facial expression is intended to convey the madness of Agave; however, the relative absence of expression in her eyes tends to work against her. She uses a moderate amount of gesture, usually parallel gestures using flexion and turning to create complex shapes in space with her hands.

TABLE 31
ROSEANN CONCANNON AS AGAVE; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	-----				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	---				
08 Limb relation	---					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-				
18 Torso motion	-----					53 Rest level	---				
19 Flexibility	---					54 Volume change	---				
20 Mobility	---										
						55 Vocal shape	-				
21 Posturality	---					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	---					58 Duration	---				
25 Time	---					59 Emphasis	---				
26 Activation	---					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	-				
30 Preferred plane	-----					64 Compounding	-----				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	-----				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

Again, the intention is to convey the madness of Agave; here she is rather more successful, since the twisting and flexing gestures work the space in front of her in a very overwrought, aggressive way. She is on her feet throughout, using full steps to take a number of relatively short straight paths back and forth on the stage, always using the full foot. She uses two units in her torso, most commonly bending forward from the waist while crouching. Most of the crouching position is due to flexion in her knees; her back does not actually move or bend very much; hence she is able to create considerable variation in level despite the low amount of flexibility, mobility and posturality recorded here. Her torso also does not participate in her arm gesture, nor to any great extent in her supporting movement due to her low level of posturality.

She uses boundness and strength as her principal effort qualities. Strength is used to convey the wildness of Agave; being insane, she loses her inhibitions and throws her body around, gesturing very strongly. Her bound flow tends to work against this impression, since it creates a feeling of control and stoppage that is the opposite of the quality created through the use of strength. The other weight factor, activation, also works against the general impression of the character, since Roseann lets her activation become passive. This tends to dull the sense of excitement or energy vital to the presentation of the manic Agave. Along with the distal shaping movement goes a sense of indirectness in space which is supported by her use of audience focus. Roseann places the people of Thebes in the house, and constantly scans the audience as well as the other

characters on stage (who are imaginary in these performances); her attention to space is not only directed into the house, but offstage and onstage as well, as her Agave, fervently in expectation of having her trophy hung upon the palace wall, looks for Pentheus and Cadmus to arrive and applaud her deed. Most of her actions show the time quality of sustainment, a quality which seems to extend time; this tends to work against Agave's imperious desire to see everything happen immediately in response to her autocratic commands. It almost goes without saying that she treats the space around her in a markedly expansive way; she uses the limb zone more than any other, though she is also active in the distal and central zones. She uses no active touch, and only a slight amount of spatial retention. The most prominent instance of spatial retention occurs as she holds a gesture toward the spot where she wants the head hung while looking around and demanding that someone bring a ladder.

She uses both fry and full-fold voice, but no falsetto. There is slight tightness and noise; some breathiness enters into her voice to show Agave's physical state: Agave is not young, has been running, and is emotionally unstrung. There seems to be no nasality. There is only slight use of lengthening and accent; Agave's intensity is primarily shown through marked use of attack. Precision is only moderate. Pitch width is also only moderate, but the center of the pitch range and the rest pitch are rather high; Agave's excitement keeps the pitch level raised. There is no structuring of pitch, no vibrato, and only occasional slide. Her use of volume is remarkably restrained, considering the character type; her range is only moderately wide,

centered very low, and with a low rest level as well. Volume change is rather smooth. Roseann keeps her voice down for the most part, only occasionally letting go with more volume for the peak lines. This is another aspect of her characterization which seems to short-circuit the effect of her other choices.

Her vocal phrasing tends to use monotone shapes, of moderate duration and early emphasis. Her movement phrasing also has early emphasis. Movement phrase length is fairly short. Passage is linked, with limb zone initiation and plane transitions. There is no elaboration, but there are several degrees of compounding, especially in voice and gesture. Overall rate is medium; phrase rate is on the fast side, with moderate use of pause. Meter is free throughout, with extreme use of rhythmic variety: marked deceleration, acceleration, change of rate, and so forth. This kind of rapid and extreme rhythmic variation emphasizes Agave's unhinged mind.

Comparison of first and second performances as Agave

Facial and torso posturality both decrease. Agave seems less insane as a result. In the area of movement dynamics, space, time, and activation all change; space and time change from indirect and sustained to direct and quick. Her performance therefore seems angrier, more forceful; Agave looks as if she would like to hit someone, wherein Roseann's earlier performance Agave seemed only to have a desperate desire to proclaim her success to the world. While Roseann's first performance showed passive activation, her second

TABLE 32
ROSEANN CONCANNON AS AGAVE; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	-				
05 Posturality	---					40 Breathiness	-----				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	---					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	---				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	---										
						55 Vocal shape	-----				
21 Posturality	-					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----										
24 Space	-----					58 Duration	-----				
25 Time	-----					59 Emphasis	-----				
26 Activation	-----					60 Passage	-----				
						61 Initiation	-----				
27 Shape mode	-					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	-					63 Elaboration	-				
30 Preferred plane	-					64 Compounding	---				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	-----				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

shows neutrality with respect to activation; not a major change. Her use of shape changes dramatically in all respects: shape mode changes from shaping to flow, she is less expansive than before, and she reorients herself from the saggital axis and horizontal plane to the vertical axis and the lateral plane. Agave therefore seems to be more in control of herself, except for violent upward-sweeping movements. Roseann's kinesphere size decreases along with her use of expansion, and she no longer uses spatial retention. Overall, Agave seems less insane than angry in Roseann's second performance.

Vocal mode changes from fry and full voice to just full voice; the amount of noise decreases. She uses more sustainment and accent. Pitch width decreases and rest pitch lowers while volume center and volume rest level rise considerably, volume change becoming much more abrupt. Her voice is therefore lower and louder, but the vocal characterization remains much the same.

Her vocal phrase shape changes from flat to oscillating and her emphasis shifts from early to medial. Her movement phrasing changes considerably in all respects: duration increases, emphasis shifts from early to medial, passage shifts from linked to successive; initiation moves farther from her center into her limb and distal ranges and she shifts from plane to cyclic transitions. The effect is to make Agave seem less full of wild emotion than before, more in control of herself. Her phrase structure remains the same except that her use of rhythmic variety decreases somewhat.

Changes relative to Matagoro in her performance as Agave

Only two aspects of her movement structure pattern change in her performances as Agave, and both change toward Matagoro. Facial posturality decreases to the level of the plain style, and torso posturality also decreases to match the plain style.

Two aspects of her movement dynamics change toward Matagoro: planar orientation and kinesphere size. Her change from horizontal to lateral orientation brings her into agreement with the plain style, and her decrease in kinesphere size does the same. On the other hand, a number of movement dynamics aspects change away from Matagoro: space, time, activation, shape mode, expansion, and axes. She changes from indirectness to directness, while Matagoro shows indirectness. She changes from sustainment to quickness, while Matagoro consistently shows sustainment. Her change from passive to neutral activation results in matching neither the passive activation of the plain style nor the activeness of the dance style. While Matagoro shows shaping consistently, Roseann abandons shaping for flow. In expansion, she becomes neutral, thus differing from both the contractive plain style and the expansive dance style. Her change from the saggital to the vertical axis takes her away from the plain style without coming into any relationship with the dance style.

TABLE 33
 ROSEANN CONCANNON; AGAVE
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 no change	03 no change	04 no change
05 toward plain	06 no change	07 no change	08 no change
09 no change	10 no change	11 no change	12 no change
13 no change	14 no change	15 no change	16 no change
17 no change	18 no change	19 no change	20 no change
21 toward plain			

Movement dynamics:

22 no change	23 no change	24 away both	25 away both
26 away plain	27 away both	28 away dance	29 away plain
30 toward plain	31 no change	32 toward plain	33 no change
34 no change	35 away both		

Voice:

36 ambiguous	37 no change	38 no change	39 away both
40 no change	41 toward plain	42 toward both	43 no change
44 no change	45 away both	46 no change	47 toward both
48 no change	49 no change	50 no change	51 no change
52 toward both	53 toward plain	54 toward dance	

Phrasing:

55 toward plain	56 no change	57 away both	58 away both
59 away both	60 toward both	61 toward dance	62 away both
63 no change	64 toward both	65 no change	66 no change
67 no change	68 no change	69 toward plain	70 no change

There are six changes toward Matagoro in Roseann's vocal patterns. Lengthening and accent both increase, her rest pitch drops, her volume range center goes up, her rest level gets louder, and her volume change becomes more abrupt. There are two changes away from Matagoro: her voice becomes less noisy and her pitch width decreases. One change is ambiguous: she uses less fry than previously, but without adopting the mixture of falsetto and full-fold voicing typical of Matagoro. Instead she uses full-fold voice throughout, which creates a sound quality quite different from Matagoro's.

Vocal phrase shape, passage, initiation, compounding, and rhythmic variety change toward Matagoro. Vocal phrase shape changes from flat to oscillating, passage from linked to successive. Initiation became less central, matching the dance style. The extreme rhythmic variety of her first performance changes to a moderate level typical of the plain style. Vocal phrase emphasis, movement phrase duration and emphasis, and transition change away from Matagoro. Vocal emphasis changes to medial from early. Movement phrase duration becomes longer and emphasis, like vocal phrasing, becomes medial. Transition changes from plane to cyclic.

The following table presents the A, B, C, and D values for Roseann's performance as Agave.

TABLE 34

ROSEANN CONCANNON; AGAVE: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 3 3 2 2	03 2 2 2 2	04 3 3 2 2	05 3 2 1 5
06 2 2 2 2	07 3 3 2 4	08 2 2 4 3	09 3 3 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 1 1 1 1	15 2 2 1 1
16 5 5 5 5	17 2 2 1 1	18 4 4 1 5	19 2 2 2 2	20 2 2 2 4
21 2 1 1 2				
Movement dynamics:				
22 4 4 4 4	23 4 4 3 2	24 2 4 2 2	25 2 4 2 2	26 2 3 2 5
27 5 1 5 5	28 4 3 2 4	29 3 1 3 4	30 3 1 1 3	31 5 5 4 4
32 3 2 2 3	33 3 3 3 4	34 1 1 3 4	35 2 1 3 3	
Voice:				
36 2 3 4 4	37 2 2 2 2	38 1 1 2 3	39 2 1 3 3	40 3 3 2 2
41 2 3 3 2	42 2 3 3 3	43 4 4 2 3	44 3 3 3 3	45 3 2 4 4
46 4 4 4 3	47 4 2 2 2	48 1 1 2 2	49 1 1 1 1	50 2 2 4 5
51 3 3 3 4	52 1 4 4 4	53 2 3 3 4	54 2 4 3 4	
Phrasing:				
55 1 3 3 4	56 3 3 3 2	57 2 3 2 2	58 2 3 2 2	59 2 3 2 2
60 2 3 3 3	61 3 4 3 4	62 4 3 4 4	63 1 1 2 2	64 4 2 2 2
65 3 3 2 3	66 4 4 3 4	67 3 3 3 3	68 1 1 2 3	69 5 3 3 4
70 1 1 2 2				

Summary

Roseann's performance pattern shows 58.6% no change on both roles. Overall, more of her performance pattern remained stable than changed.

In her second role (Agave), only one change is observed that does not relate to Matagoro's performance pattern. In her performance of Hero, there are four such changes; a considerably higher level, more typical of the student actors as a group. It would seem that a certain amount of internal evolution not necessarily directly influenced by her exposure to Kabuki took place in her performance as Agave.

She shows almost no tendency to change toward the dance style; almost every instance of change toward Matagoro on both roles is a change toward the plain style or both styles. In other words, in any aspect where the plain and dance styles differ, Roseann is far more likely to change toward the plain style than toward the dance style, if she changes at all.

When she changes away from Matagoro, she shows a very strong tendency to change where the plain and the dance styles agree. When the plain and the dance style do not match, she does not generally change away from Matagoro, if she changes at all. There are 20 cases where she changes away from Matagoro; of these, 16 involve a change away from both styles: i.e. an aspect of performance in which the plain and dance style agree.

Her first and second roles show the same general pattern. The majority of all scales are stable. More change toward Matagoro

TABLE 35

ROSEANN CONCANNON: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	82	13	4	16	33	16	1	3	20	5
P	.000	.044	.030	.006	.073	.006	.001	.012	.001	.000

First role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	41	8	2	8	18	6	0	1	7	4
P	.000	.029	.126	.029	.108	.119	.010	.052	.001	.000

Second role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	41	5	2	8	15	10	1	2	13	1
P	.000	.191	.092	.048	.090	.008	.034	.092	.053	.000

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

occurs than change away. The change toward both and toward plain are of roughly the same magnitude, with the change toward dance much less. The change away from both styles is considerably greater than the change away from dance or plain; the latter are at a very low level.

This is the pattern one would expect from a performer primarily oriented toward the plain style in the Kabuki work. The dominance of change toward the plain style, in those cases in which any change at all occurred, is most easily explained by an orientation of the performer to the plain style. Indeed, the character Roseann learned, Wakasanosuke, is a plain style character. Nor did she consider herself particularly successful in learning the dance technique involved in the tachimawari sequences she studied. It seems fair to conclude that the primary effect of Kabuki training on her Western work was to assimilate certain aspects of the plain style.

The fact that Roseann shows a more consistent assimilation of Kabuki than does Hal may be explained by the fact that both her roles are from the classic repertory. The stylistic split that may have decreased Hal's assimilation of Kabuki performance patterns in his performance as Astrov would not have been present in Roseann's case.

Tony Soper

Tony Soper performed a cutting from the role of Christy Mahon in The Playboy of the Western World and a speech from the role of Sammy Goldenbaum in The Dark at the Top of the Stairs.

Synopsis of his cutting from Christy

Christy is a young farm boy of Ireland who runs off from home after hitting his father over the head. He thinks he killed him, but as it turns out he did not. After walking for some days, he finally seeks shelter in the public-house of the Flaherty's, a house run by Michael Flaherty and his daughter Margaret, better known as Pegeen Mike. They take pity on him and offer to let him stay on as their pot-boy.

The cutting Tony Soper performed is Christy's monologue that begins Act II. It is the morning after his arrival, and he is loafing around the tavern. He looks about at the furnishings of the bar, and thinks that it's not too bad a life he's fallen into. He finds a mirror and begins to think he might be a handsome lad after all. But then he hears people approaching; they turn out to be "stranger girls. God help me, where'll I hide myself away and my long neck naked to the world?" He takes refuge in the adjoining room.

First performance as Christy

He tends to show more facial expression in the mouth area than in the eyes. The locus of facial expression in the eye area is the eyelids, used to widen or narrow the eyes. For example, as he sizes up his surroundings, counting up the possessions of the public house, his eyes narrow, then widen again as he concludes that the place will make a good home for him. The locus of expression in the mouth area is the lips; he makes a number of small lip movements, smiling, pursing his lips, narrowing them as he counts, and so forth. Facial activity is moderate with only slight posturality. Head movement consists of horizontal rotations. He uses a moderate amount of gesture, usually in the form of single gestures showing slight twist and flexion. He is on his feet throughout, using full steps on the full foot; he uses very low aerial steps when he skips out of the room. He uses straight paths and tends to separate changing direction from taking a path. He uses two torso units, using his torso in a moderately flexible way; he also moves the torso as a whole a moderate amount. He shows only slight posturality.

He shows the effort qualities of boundness, directness, and quickness; weight and activation are neutral. He shows directionality rather than flow or shaping, and is not especially expansive or contractive. He orients himself toward both the saggital axis and the saggital plane. He shows stage focus until he sees the approaching girls offstage. He uses a medium-sized kinesphere and the limb zone.

TABLE 36
TONY SOPER AS CHRISTY MAHON; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	-----				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	---					40 Breathiness	-----				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	---				
08 Limb relation	-					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	---				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps	-----					48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	-----					54 Volume change	-----				
20 Mobility	-----										
						55 Vocal shape	-----				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	-----					58 Duration	---				
25 Time	-----					59 Emphasis	---				
26 Activation	-----					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	---				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	-				
30 Preferred plane	---					64 Compounding	-				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	-				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

He shows active touch only with respect to himself, when he realizes that he is not properly dressed to be seen by outsiders. He shows occasional spatial retention, especially as he leaves; worried that he might not get away in time, he keeps track of the front entrance while he skips out the back of the room.

He uses full voice throughout. His voice sounds moderately tight and breathy, but shows only slight nasality and noise. Moderately precise on consonants, he uses attack, accent and lengthening only slightly. His pitch range is narrow and centered rather high in his voice; his rest pitch is also on the high side. He uses no pitch structure, no vibrato, and only slight slide. His volume range is also narrow, centered at a medium level and with a medial rest level. Volume change is moderate. His use of volume and his use of pitch make his voice sound thin, restricting the timbre of his voice, creating a less resonant, narrower quality.

His vocal phrase shape is oscillating, with short duration and early emphasis. His movement phrases also have short duration and early emphasis. Passage is linked, initiation is in the limb zone, and he uses reversal transitions. He shows no elaboration or compounding. Overall rate is moderate with phrase rate on the fast side and a moderate amount of pause. Meter is free throughout, with little if any rhythmic variety and no metric change.

His vocal and movement phrasing helps convey Christy's callow youth. Through short phrases and early emphasis, he makes Christy seem awkward and impulsive; his quick phrase rate shows Christy's impatience. Tony's use of passage, initiation, and transition also

help to convey Christy's characterization: a gangling, callow field hand, very ill at ease in his new surroundings, trying to adjust.

Comparison of first and second performances as Christy

Several changes in movement structure involve scattered aspects of each area. The locus of eye tension changes from lid to brow and facial posturality increases, creating a more forceful use of facial expression and making Christy seem a little more sure of himself. A different aerial step pattern occurs; not a major change. Three related scales change in the torso area: torso motion becomes more complex, flexibility decreases, and posturality increases. The gangling effect lessens as the torso shows a more unified involvement in gesture. In the effort area, flow, space, and time are stable while weight and activation change to strong and active, respectively. This change gives his movement more punch and energy. He adds shaping to his repertoire in shape mode, and reorients himself to compound axial orientation. Several aspects of his use of space change, though none drastically: kinesphere size increases, kinesphere zone moves farther from the body center, active touch extends from the self to the stage, and spatial retention increases. All of these changes enlarge and extend his use of the space around him.

Every vocal scale changes except volume range center, volume rest level, pitch structure, and vibrato. He includes some use of falsetto voice in his higher peaks and reduces tightness, nasality, noise and breathiness. He uses more lengthening, attack, and precision while

TABLE 37
 TONY SOPER AS CHRISTY MAHON; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	-				
05 Posturality	-----					40 Breathiness	-				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps	-----					48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	-				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-----										
						55 Vocal shape	---				
21 Posturality	-----					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	-----					58 Duration	-----				
25 Time	-----					59 Emphasis	-----				
26 Activation	-----					60 Passage	---				
						61 Initiation	---				
27 Shape mode	-----					62 Transition	-----				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	---				
30 Preferred plane	---					64 Compounding	-----				
						65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	---				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

reducing his use of accent. He brings his vocal pitch down by increasing his range width and lowering the center of the range and the rest pitch. He eliminates his use of slide, volume range width also increases, and volume change becomes more abrupt. This change gives more body and meaning to his vocal work by replacing the thin sound of his first performance with a much more flexible vocal style which he causes to better effect and convey nuances of meaning and change of character mood.

Vocal shape changes from oscillating to ramp, and he uses longer vocal phrasing. Both the duration and the emphasis of his movement phrasing change; his movement phrases are longer and his emphasis is later. Initiation moves closer to the body and transition changes from reversals to plane paths. Elaboration and compounding both increase considerably. His rates slow down and he uses more pause and more rhythmic variety.

Although it seems that Tony did not fundamentally change his conception of Christy, the changes in his performance pattern tend to produce a more confident, less callow, and more mature-looking characterization. For example, his reaction to the approach of the local girls is less extreme. In his first performance, he seemed panic-stricken; in his second performance he seems to simply realize that his state of dress is likely to cause mutual embarrassment and seeks the quickest way to get himself out of sight.

Changes relative to Matagoro in his performance as Christy

In movement structure, Tony changes toward Matagoro with respect to eye tension, facial posturality, torso motion and flexibility. The locus of tension in the eye region shifts from eyelids to eyebrows. Facial posturality increases toward the level of the dance style. His torso motion becomes compound and he shows less flexibility in the torso, both changes toward Matagoro's practice.

His use of aerial steps and torso posturality shifts away from Matagoro. His one small jump changes from a two-feet-to-two-feet jump to a two-feet-to-one-foot jump: the difference shows less urgency. His change in torso posturality is a significant change; it strengthens his performance considerably. He increases his torso posturality considerably, this changing away from Matagoro, who tends to minimize torso posturality.

He changes toward Matagoro in three spatial areas: kinesphere zone, active touch, and spatial retention. He uses a somewhat less center kinesphere zone, matching the dance style in this aspect. He shifts from self touch to stage touch, thus matching the plain style. He increases his use of spatial retention to the same level shown by Matagoro in both styles.

He changes away from Matagoro in weight, axial orientation, and kinesphere size. He shifts from neutral to strength, where Matagoro shows either neutrality or lightness. His axial orientation shifts from sagittal to compound, and he increases his kinesphere size, both shifts away from the dance style.

TABLE 38
 TONY SOPER; CHRISTY MAHON
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 toward both	03 no change	04 no change
05 toward dance	06 no change	07 no change	08 no change
09 no change	10 no change	11 no change	12 no change
13 away dance	14 no change	15 no change	16 no change
17 no change	18 toward dance	19 toward both	20 no change
21 away dance			

Movement dynamics:

22 no change	23 away plain	24 no change	25 no change
26 ambiguous	27 ambiguous	28 no change	29 away plain
30 no change	31 no change	32 away dance	33 toward dance
34 toward plain	35 toward both		

Voice:

36 toward both	37 toward both	38 away plain	39 away both
40 ambiguous	41 toward plain	42 away both	43 toward dance
44 away both	45 toward both	46 toward dance	47 toward both
48 no change	49 no change	50 away both	51 toward plain
52 no change	53 no change	54 toward dance	

Phrasing:

55 away plain	56 toward plain	57 no change	58 away both
59 away both	60 no change	61 away plain	62 toward both
63 toward both	64 ambiguous	65 toward plain	66 toward plain
67 away both	68 no change	69 toward plain	70 no change

His changes in activation and shape mode are ambiguous with respect to Matagoro. He changes from neutral to slightly active, where Matagoro shows passiveness in the plain style and very strong activation in the dance style. In shape mode, although Tony comes to show some shaping, directionality remains the dominant mode, where Matagoro shows shaping as the dominant mode in both styles.

Vocal mode, tightness, lengthening, attack, pitch width, pitch center, rest pitch, volume width and volume change move toward Matagoro. He begins to use the lower part of his falsetto range to some extent, rather than using only full-fold voice as before. He decreases his level of tightness to a level similar to Matagoro's. He shows a bit more lengthening, reaching a level similar to the plain style. His pitch width increases, and he lowers his range center and rest pitch: all changes toward Matagoro. He uses a wider volume range and more abrupt volume transitions, also changes toward Matagoro's pattern. There is one ambiguous change: having started with a level of breathiness greater than Matagoro's, Tony changes to a lower level.

Tony shows changes toward Matagoro in the phrasing area: vocal phrase duration, transition, elaboration, rates, and rhythmic variety. Vocal phrase duration lengthens to match the plain style. Transition mode changes from reversal to plain, matching Matagoro. Elaboration increases to the level Matagoro shows in both styles. Overall rate and phrase rate decrease to the level of the plain style. Rhythmic variety increases to the level of the plain style.

The following table presents the A, B, C, and D values for Tony's performances as Christy Mahon.

TABLE 39

TONY SOPER; CHRISTY MAHON: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 3 2 2 2	03 2 2 2 2	04 3 3 2 2	05 2 3 1 5
06 2 2 2 2	07 3 3 2 4	08 1 1 4 3	09 3 3 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 5 4 0 5	14 1 1 1 1	15 1 1 1 1
16 5 5 5 5	17 2 2 1 1	18 4 5 1 5	19 3 2 2 2	20 3 3 2 4
21 2 4 1 2				
Movement dynamics:				
22 4 4 4 4	23 3 4 3 2	24 4 4 2 2	25 4 4 2 2	26 3 4 2 5
27 3 4 5 5	28 3 3 2 4	29 3 5 3 4	30 2 2 1 3	31 3 3 4 4
32 3 4 2 3	33 3 4 3 4	34 2 3 3 4	35 2 3 3 3	
Voice:				
36 3 4 4 4	37 3 2 2 2	38 2 1 2 3	39 2 1 3 3	40 3 1 2 2
41 2 3 3 2	42 2 1 3 3	43 2 3 2 3	44 3 4 3 3	45 2 3 4 4
46 4 3 4 3	47 4 3 2 2	48 1 1 2 2	49 1 1 1 1	50 2 1 4 5
51 2 3 3 4	52 3 3 4 4	53 3 3 3 4	54 3 4 3 4	
Phrasing:				
55 3 2 3 4	56 2 3 3 2	57 2 2 2 2	58 2 3 2 2	59 2 3 2 2
60 2 2 3 3	61 3 2 3 4	62 2 4 4 4	63 1 2 2 2	64 1 3 2 2
65 3 2 2 3	66 4 3 3 4	67 3 2 3 3	68 1 1 2 3	69 1 3 3 4
70 1 1 2 2				

Synopsis of his cutting from Sammy

In The Dark at the Top of the Stairs, Sammy Goldenbaum is a young man who comes as a date for the Flood's daughter Reenie. A Jewish boy who grew up in military academies, his father is dead and his mother, an actress, apparently doesn't want him. In Act II of the play, he has a monologue in which he explains his life: how he grew up at military academies, how he misses his mother, how he once was able to spend "two whole days" with her: "She let me take her to dinner and a show and to dance. Just like we were sweethearts. It was the most wonderful time I ever had." But then he had to return to the military academy, with its "hard stone walls." He takes Reenie to the dance with him and one sees no more of him; in Act III one learns that he goes to a hotel after the dance and commits suicide by jumping out a fourteenth story window. His monologue in Act II is one of the most important sequences in his characterization; it is this monologue that Tony performed.

First performance as Sammy

Tony places most facial expression in the mouth area. Eye tension usually involves his eyelids; mouth tension most often involves a variety of small expressive movements of his lips. His face is moderately active and moderately postural; most head movement is oriented in the horizontal plane and consists largely of horizontal rotation of the head. He uses only a slight amount of gesture, usually

TABLE 40
 TONY SOPER AS SAMMY GOLDENBAUM; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	-				
05 Posturality	-----					40 Breathiness	-				
06 Head Movement	---					41 Lengthening	---				
07 Gesture amount	---					42 Accent	---				
08 Limb relation	-					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer						47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape						49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	---				
17 Torso units	-					52 Center	-----				
18 Torso motion	-----					53 Rest level	---				
19 Flexibility	-					54 Volume change	---				
20 Mobility	---					55 Vocal shape	-----				
21 Posturality	-----					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----					58 Duration	---				
24 Space	-----					59 Emphasis	---				
25 Time	---					60 Passage	---				
26 Activation	---					61 Initiation	-----				
27 Shape mode	---					62 Transition	-----				
28 Expansion	---					63 Elaboration	-				
29 Preferred axis	-----					64 Compounding	---				
30 Preferred plane	-----					65 Overall rate	-				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	---					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	---				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

single gestures using slight twists and flexion. He is on his feet throughout, but essentially stands in one place for the entire monologue; he therefore does not transfer his weight, take aerial steps, or even take any paths. He does occasionally pivot slightly to one side or the other without moving his feet. Floor contact is on the full foot throughout. He shows upright military posture: one-unit torso, very little flexibility, and only slight mobility. However, there are small compound motions of the torso throughout, providing a moderate sense of posturality and preventing his body from seeming stiff. The military posture seems ingrained in him, more a matter of unselfconscious habit than the result of any attempt to be on his best behavior for the Floods.

He uses very bound flow, which reinforces the military-academy image provided by his posture. Effort weight shows as strength in the very few gestures he makes; these gestures also have the quality of directness. He shows sustainment in time and passive activation. He shows a good deal of flow and also some directionality; he is quite contractive. He is oriented toward the saggital axis and the horizontal plane. He uses audience focus throughout; rather than establishing imaginary fellow performers. He simply delivers the cutting directly to the house. In the context of the full play, the speech is directed to the Flood family. He shows a small kinesphere and uses the central and limb zones. He shows no active touch. There are moments when he shows slight spatial retention; for example, when he remembers his outing with his mother, he briefly focuses off into space while continuing to direct his gestures to the audience. The

effect of his movement dynamics pattern is that of very off-hand discussion of casual matters by a very well-schooled young military academy student; a quality that directly belies the lexical content of his speech: he obviously has considerable emotional stake in what he talks about.

He uses full voice throughout. There is a slight sense of tightness, but no nasality, noise, or breathiness. He uses lengthening, accent, and attack only slightly; he gives his consonants moderate precision. Pitch width is no more than moderate; pitch center is rather high in his voice, with a medial rest pitch. He uses no pitch structure or vibrato. He shows occasional slide. His volume range is rather narrow, centered in his voice, and with a rather soft rest level. Volume change is smooth. Vocally, he is very matter-of-fact, though the actual content of what he says implies deep feeling hidden behind his matter-of-fact exterior.

He uses oscillating vocal shapes of medium length, with early emphasis. Movement phrases are short, since most phrases are only limb gestures; emphasis is early. Passage is linked; initiation is very much in the limb zone; he uses plane path transitions. There is no elaboration and one or occasionally two degrees of compounding. Overall rate is slow, but phrase rate is rather fast; there is a moderate amount of pause and some rhythmic variety. Meter is free throughout.

Tony uses pause to convey that something means more than he lets on--one of the few nonverbal ways Tony shows the depth of feeling behind the words. His oscillating phrases; short, linked, limb-zone

gestures, and lack of elaboration show the control Sammy has over his emotions. Through such devices, the character can speak calmly and matter-of-factly about how his mother essentially abandoned him to a sterile and barren military school existence.

Comparison of his first and second performances as Sammy

There are no differences in his use of gesture and diction. The locus of eye tension changes from the eyelids to the eyeballs, generally reducing the level of activity in the eye region: in his second performance he makes much more use of glance than he does in his first performance. There is somewhat less facial activity in his second performance, and facial posturality also decreases. While he made occasional small pivoting steps in his first performance, he does not do any locomotory turning at all in his second performance. He uses two torso units in his second performance, more flexibility, and more posturality, but instead of the small compound motions he used the first time, his torso movement consists of small horizontal rotations, usually from the hips.

There is considerable alteration in his effort pattern. He shows very bound flow in his first performance, but is neutral in flow in his second; weight also changes to neutral from strength. His use of space quality stays the same while time changes from sustained to quick. Activation is passive the first time, neutral the second. His use of shape is also much different: directionality disappears in his second performance, which usually shows only flow; he is about as

TABLE 41
 TONY SOPER AS SAMMY GOLDENBAUM; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	-----					37 Tightness	---				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	---					39 Noise	---				
05 Posturality	---					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	---					42 Acccent	---				
08 Limb relation	-					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer						47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape						49 Vibrato	-				
15 Turning						50 Slide	-				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	---					52 Center	-				
18 Torso motion	---					53 Rest level	-				
19 Flexibility	---					54 Volume change	---				
20 Mobility	---										
						55 Vocal shape	-----				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	-----					58 Duration	-				
25 Time	-----					59 Emphasis	---				
26 Activation	-----					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-					62 Transition	-				
28 Expansion	-										
29 Preferred axis						63 Elaboration	-				
30 Preferred plane						64 Compounding	---				
						65 Overall rate	-				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-					67 Pause	-----				
33 Kinesphere zone	-					68 Meter	-				
34 Active touch	-					69 Rhythmic variety	-				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

contractive as it is possible to be in his second version, and does not show any particular orientation to axes or planes. Kinesphere size becomes very small indeed, and kinesphere zone becomes whole central most of the time. He uses no spatial retention the second time around.

These choices of movement dynamics give his second performance a much more neurotic tone; Sammy seems much less normal the second time around, and much less in control of himself as well. His self-control shows in the form of a definite effort pattern in the first performance, while the general neutrality of effort in his second performance has somewhat the quality of a dream or trance. Likewise, the relative absence of shaping or directionality and the small and more central use of pace in his second performance makes Sammy seem much more introverted and withdrawn.

His voice is slightly noisy in this second performance, and a bit breathy as well. His rest pitch is somewhat higher than before, and he eliminates all use of slide. He lowers his volume level considerably the second time around, both in the placement of the range center and in the rest pitch. As a result, he speaks much more softly in his second performance than he does in his first. These changes all make Sammy seem much less normal, more disturbed, much less able to cope than he seems in Tony's first performance.

His vocal and movement phrases are shorter than before, and he uses less rhythmic variety. Much of the time, his movement transitions must be described as vague, since they involve only small, shape-flow movement of the arms and torso.

In comparison to his first performance, his second version of Sammy changes the character from someone who is disturbed inwardly but coping outwardly to someone who is very much emotionally disturbed in all aspects. His second performance makes the character's eventual suicide seem all too credible, but it also would make it difficult to play the scenes with the family, were the piece performed according to his second interpretation in the context of the full play. Out of context, the performance is quite credible, perhaps more so than the original interpretation, since it brings out the conflicts one can sense in the brooding verbal content.

Changes relative to Matagoro in his performance as Sammy

Tony changes his performance pattern with respect to Matagoro in several aspects of movement structure. Facial activity and posturality change toward Matagoro, as do torso flexibility and posturality. Tony shows a decrease in facial activity and posturality which brings him closer to the plain style in these aspects. His torso flexibility increases from none to a level similar to Matagoro. His torso posturality decreases slightly to a level similar to the dance style. He changes away from Matagoro both with respect to the number of torso units and with respect to the type of torso motion. He uses his whole torso as one unit at first, but his second performance shows a two-unit torso. He changes his torso motion from compound to rotation, which takes him sharply away from Matagoro's dance style pattern.

TABLE 42
 TONY SOPER; SAMMY GOLDENBAUM
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 ambiguous	03 no change	04 toward both
05 toward plain	06 no change	07 no change	08 no change
09 no change	10 no change	11 no change	12 no change
13 no change	14 no change	15 away both	16 no change
17 away both	18 away dance	19 toward both	20 no change
21 toward dance			

Movement dynamics:

22 ambiguous	23 toward plain	24 no change	25 away both
26 away plain	27 ambiguous	28 away plain	29 away plain
30 away dance	31 no change	32 away plain	33 away both
34 no change	35 away both		

Voice:

36 no change	37 no change	38 no change	39 toward both
40 toward both	41 no change	42 no change	43 no change
44 no change	45 no change	46 no change	47 away both
48 no change	49 no change	50 away both	51 no change
52 away both	53 away both	54 no change	

Phrasing:

55 no change	56 toward dance	57 no change	58 away both
59 no change	60 no change	61 no change	62 away both
63 no change	64 no change	65 no change	66 no change
67 no change	68 no change	69 away both	70 no change

In the area of movement dynamics, Tony trends away from Matagoro. He changes toward him only in the weight aspect; he changes from strong to neutral, thus matching the plain style. He changes away from Matagoro in time, activation, expansion, axial orientation, planar orientation, kinesphere size, kinesphere zone, and spatial retention. His time quality changes from sustainment to quickness, while Matagoro shows sustainment. His activation changes from passive to neutral, thus moving away from the plain style. He becomes less expansive than before, thus moving away from Matagoro. He shows essentially no axial and plane orientation in his second performance, which takes him sharply away from Matagoro's practice. He contracts the size of his kinesphere and uses a more central zone, thus shifting away from Matagoro. He also decreases his use of spatial retention, again a shift away from Matagoro. He changes from very bound to neutral, an ambiguous jump from one side of Matagoro to the other.

In the voice area, Tony changes toward Matagoro with respect to noise and breathiness, and away from him with respect to rest pitch, slide, volume range center, and volume rest level. There is a slight increase in Tony's level of noise and breathiness such that he approaches Matagoro. His rest pitch becomes higher, and he decreases his use of pitch slide, thus moving away from Matagoro in both areas. His volume range center and rest level both decrease, again a shift away from Matagoro.

There is relatively little change in Tony's performance in the phrasing area. He shortens his vocal phrase duration to the level of the dance style. He also shortens his movement phrase duration which

means a shift away from Matagoro. He changes from plane transition to vague, which is a sharp shift away from Matagoro. Finally, he decreases his rhythmic variety, also a change away from Matagoro.

The following table gives the A, B, C, and D values for Tony's performance as Sammy Goldenbaum.

Summary

Tony's performance as Christy shows an overall trend toward Kabuki. 31.4% of 70 scales change toward Kabuki in one way or another, while 21.4% change away. The sheer amount of change is the largest in this study, with only 41.4% of 70 remaining unchanged. One has seen before in other students that the trend is to change with respect to those areas in which Matagoro is consistent; here, however, we find that Tony changes about as frequently with respect to aspects where Matagoro is inconsistent as with respect to Matagoro's consistencies.

On the other hand it seems clear that Tony's performance as Sammy shows a strong trend away from Kabuki styles, especially in the area of movement dynamics; eight of the eighteen scales (44.4%) that change away from the Kabuki are movement dynamics scales, though movement dynamics accounts for only 14 (20%) of the 70 scales. The other two areas of significant change toward Kabuki are voice and phrasing. Most movement structure scales are stable; therefore movement structure does not share the trend.

Tony began with two rather different styles of performance which diverged considerably over the period of the Kabuki program. Given

TABLE 43

TONY SOPER; SAMMY GOLDENBAUM: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 3 4 2 2	03 2 2 2 2	04 3 2 2 2	05 3 2 1 5
06 2 2 2 2	07 2 2 2 4	08 1 1 4 3	09 3 3 1 5	10 3 3 3 5
11 1 1 2 1	12 0 0 5 5	13 0 0 0 5	14 0 0 1 1	15 1 0 1 1
16 5 5 5 5	17 1 2 1 1	18 5 2 1 5	19 1 2 2 2	20 2 2 2 4
21 3 2 1 2				
Movement dynamics:				
22 5 3 4 4	23 4 3 3 2	24 4 4 2 2	25 2 4 2 2	26 2 3 2 5
27 2 1 5 5	28 2 1 2 4	29 3 0 3 4	30 3 0 1 3	31 5 5 4 4
32 2 1 2 3	33 2 1 3 4	34 1 1 3 4	35 2 1 3 3	
Voice:				
36 3 3 4 4	37 2 2 2 2	38 1 1 2 3	39 1 2 3 3	40 1 2 2 2
41 2 2 3 2	42 2 2 3 3	43 2 2 2 3	44 3 3 3 3	45 3 3 4 4
46 4 4 4 3	47 3 4 2 2	48 1 1 2 2	49 1 1 1 1	50 2 1 4 5
51 2 2 3 4	52 3 1 4 4	53 2 1 3 4	54 2 2 3 4	
Phrasing:				
55 3 3 3 4	56 3 2 3 2	57 2 2 2 2	58 2 1 2 2	59 2 2 2 2
60 2 2 3 3	61 3 3 3 4	62 4 1 4 4	63 1 1 2 2	64 2 2 2 2
65 1 1 2 3	66 4 4 3 4	67 4 4 3 3	68 1 1 2 3	69 2 1 3 4
70 1 1 2 2				

this situation, there is such a large amount of change going on in Tony's performance patterns that it is difficult to say that any particular aspect of that change bears a definite relationship to the Kabuki performance patterns. His performance styles show a marked state of flux, in which exposure to Kabuki is presumably only a partial factor. If we look at the totals for both roles, only half of all scales are stable; approximately as many scales change toward Matagoro as change away from him. There is a relatively large amount of ambiguous change.

The state of flux in Tony's performance patterns suggests that although he shows a number of assimilations of Kabuki technique, many of the changes in Tony's performance patterns are not directly related to his exposure to Kabuki, but are changes away from Matagoro or changes not directly related to Matagoro. His own performance patterns seem to have been evolving in a rather complex way, in which exposure to Kabuki is only one factor among many. The assimilations from Kabuki are only part of the total picture.

TABLE 44

TONY SOPER: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	70	13	8	9	30	19	5	9	33	7
P	.000	.088	.102	.124	.050	.003	.023	.124	.073	.000

First role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	29	9	6	7	22	7	3	5	15	4
P	.001	.075	.175	.155	.049	.155	.073	.164	.090	.000

Second role:

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	41	4	2	2	8	12	2	4	18	3
P	.000	.209	.114	.114	.003	.000	.114	.209	.108	.000

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

Carol Honda

Carol Honda did not provide any performances of audition-length materials for this study. The performances examined here are complete performances of major roles in two different full-length plays, Uncle Vanya and And The Soul Shall Dance. The production of Uncle Vanya took place in the academic year preceding the Kabuki-Hawaii program; the production of And The Soul Shall Dance took place two years after the conclusion of the Kabuki-Hawaii program. Therefore her performances provide the most extensive before-and-after comparison in the study, both in terms of the amount of materials available and in terms of the length of time between performances.

In Uncle Vanya, she plays Sonya; in And The Soul Shall Dance, she plays Mrs. Murata, the mother of one of the two families whose lives form the substance of the play. In many respects these two roles are quite similar, as may be seen in the synopses below.

Synopsis of the role of Sonya

Sonya and her uncle Vanya manage a rural estate for the benefit of a relative who is a famous scholar in Moscow. The scholar, a man of advanced years, finds that he must retire to the country with his young wife. Both Vanya and Dr. Astrov fall in love with the wife; Vanya furthermore finds that he has come to hate and despise everything the famous man has done, especially because Vanya has sacrificed his own life to make it possible. Sonya, on the other hand, is willing to keep

working hard; it is all she has ever known. She is secretly greatly in love with Dr. Astrov, a friend of Vanya's; in the course of the play she discovers that he has no love to reciprocate. Despite Sonya's best efforts to keep things on an even keel, Vanya's rage boils over and he actually tries to kill the professor, but fails. Needless to say, the professor and his wife hastily depart. Sonya and Vanya are left with each other; she offers him the cold comfort of a life of unending hard work and peace only in death. She herself faces a long life of loneliness.

Synopsis of the role of Mrs. Murata

Mrs. Murata in And The Soul Shall Dance is the wife of a poor Japanese-American vegetable farmer in the early part of this century. She has one daughter only. Her life is one of constant work, keeping house, helping with the farm work, raising her daughter and trying to help make ends meet. She is a very cheerful, generous person who very strongly controls her behavior according to the Japanese ideas of good manners instilled in her as she grew up in Japan. She has adapted well to their hard new life in America, but still has a longing for the old country. She is a very emotional person who does not easily force her way with others; she gets her husband to do what she wants by gentle nagging. He does as she asks most of the time basically because he loves her very much and enjoys humoring her when he can. The play concerns the differing lives of the Murata's, who adapt to life in America, and the Oka's, who cannot do so. As various crises and

problems face these two families, the Murata family finds greater strength, while the Oka family disintegrates, with Emoki, the mother, finally going insane.

Comparison of Sonya and Mrs. Murata

Sonya and Mrs. Murata share certain traits. Both are deeply emotional women who center their lives on the people close to them. Both women manage households; the fact that Sonya manages a large estate while Mrs. Murata manages a two-room shack means that Sonya has to be much more able to assert herself and influence others. Both women lead lives of hard work; every time they appear they are busy with one aspect or another of their many tasks. Both women deal skillfully with major emotional crises of those close to them, Sonya helping Vanya deal with his crisis of identity, Mrs. Murata helping her family adjust to a new environment.

Perhaps the major difference between them is that Sonya longs for the love of Dr. Astrov, who is basically kind but fundamentally incapable of reciprocating Sonya's very deep emotion. Mrs. Murata has no such emptiness in her life; it is clear that she and her husband love each other very strongly and very deeply.

Her performance as Sonya

As Sonya, Carol places most of her facial expression in the mouth area. Eye tension usually involves the eyelids, and mouth tension

TABLE 45
CAROL HONDA AS SONYA

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	-----				
03 Mouth tension	-----					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	-----				
06 Head Movement	-----										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	---					43 Attack	-----				
09 Turning	-					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	-					52 Center	-----				
18 Torso motion	-----					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-----										
						55 Vocal shape	---				
21 Posturality	-----					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----										
24 Space	-----					58 Duration	---				
25 Time	-----					59 Emphasis	-----				
26 Activation	-----					60 Passage	---				
						61 Initiation	---				
27 Shape mode	-----					62 Transition	---				
28 Expansion	---										
29 Preferred axis	-----					63 Elaboration	-				
30 Preferred plane	-----					64 Compounding	-----				
						65 Overall rate	---				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	---					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

usually involves the muscles of the cheeks more than those of the lips. She shows a moderate amount of facial activity and facial posturality, and orients her head movement toward the lateral plane, cocking it over to the left or to the right more than nodding or shaking it.

Her most characteristic mode of facial expression is to combine rather small movements of the facial features themselves with movement of the head as a whole, also understated. Thus, as she listens with pleasure to Astrov, she smiles softly with just her lips, perhaps narrowing her eyes a trifle, and moves her head forward while cocking it to one side slightly. Later on, expressing her grief and loneliness when she finds out that Astrov cannot love her, the corners of her eyes and mouth pull back somewhat and her cheeks hollow slightly while she closes her eyes and throws her head back till she is actually looking up at the ceiling. In each of these cases, the facial displacement without the head motion would be rather difficult to interpret.

She uses a moderate amount of gesture, usually parallel gestures that do not involve turning but use flexion. Each gesture is very clear and concise; very often she uses a practical movement as an expressive gesture. For example, when angry at Vanya, she does not use purely expressive gesture at Vanya until she really starts laying into him verbally; till then she concentrates on tidying up the room rather violently. Each of the practical gestures she uses as she picks up the clutter on the table and puts it away has strong expressive elements that convey her anger.

She is on her feet most of the time, though she does sit down on occasion, usually at the desk to begin working on the estate books. Most often, however, she is seen moving about the stage, busy keeping house and tidying up after everyone. She moves on straight paths and usually turns in place; her floor contact is on the full foot, giving her a strong, confident walk. She uses a one-unit torso; her most common movement is bending, which she invariably does from the hips without actually flexing in the torso. Her torso is only slightly flexible, but moderately mobile; she also shows a moderate degree of posturality.

She shows a very consistent combination of effort qualities: bound flow, strength, directness, quickness, and activeness. These qualities underline her capable and efficient nature. Directionality is her most frequent choice of shape mode. She tends to be contractive, a choice expressive of her self-control. Her principal orientation is to the sagittal axis and the horizontal plane. Her visual focus is usually on her fellow performers, though she also uses stage focus frequently. She uses the central and limb ranges and keeps her kinesphere small. Active touch extends to the stage and properties, but to other performers only under special circumstances or very strong emotion. She does not use spatial retention.

She uses full-fold voice most of the time, though she does occasionally use falsetto at emotional peaks. Her voice shows moderate tightness and breathiness, but only slight nasality and noise. Lengthening, accent, attack and precision are all moderate. Her pitch range is medium width, centered rather high in her voice with a medial

rest pitch. She does not seem to show any structuring in pitch, nor does she use vibrato; occasionally she uses slide to some extent, usually during moments of somewhat heightened feeling. Her volume range is rather narrow, centered at a medium level and using a medial rest level. Volume change is rather abrupt.

She uses ramp-shaped vocal phrases of moderate duration normally showing emphasis late in the phrase. Her movement phrases are short and, like her vocal phrases, usually show late emphasis. She shows linked passage, central and limb initiation, and reversal transitions. She shows little or no elaboration but a moderate degree of compounding. Her overall rate is slow with a quicker phrase rate and slight use of pause. Meter is free throughout with a moderate degree of rhythmic variety.

Comparison of her performances as Sonya and Mrs. Murata

The locus of mouth tension changes from the cheeks to the lips, and facial posturality increases. The amount of gesture increases and flexure changes from flexion to folding: the first instance of consistent use of this form of flexure. Posturality decreases, unlike facial posturality. Torso motion changes from bending to tilting; she uses a one-unit torso in both performances, but she has much more occasion to lift things as Mrs. Murata. She invariably executes any movement requiring bending over by keeping her torso straight or nearly so and tilting over from the hips.

TABLE 46
CAROL HONDA AS MRS. MURATA

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	-----				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	-				
06 Head Movement	-----					41 Lengthening	---				
07 Gesture amount	-----					42 Acccent	-----				
08 Limb relation	---					43 Attack	-----				
09 Turning	-					44 Precision	-----				
10 Flexure	-----					45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	-					50 Slide	---				
16 Floor contact	-----					51 Width	-----				
17 Torso units	-					52 Center	-----				
18 Torso motion	-					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-----					55 Vocal shape	-----				
21 Posturality	---					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	---					58 Duration	---				
24 Space	-----					59 Emphasis	---				
25 Time	-----					60 Passage	---				
26 Activation	---					61 Initiation	---				
27 Shape mode	---					62 Transition	---				
28 Expansion	---					63 Elaboration	-----				
29 Preferred axis	---					64 Compounding	-----				
30 Preferred plane	-----					65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	---					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	-----					69 Rhythmic variety	-----				
35 Spatial retention	-----					70 Metric change	-				

Inapplicable scales are left blank

Two of her effort qualities change: weight changes from strength to lightness, and activation changes from active to passive. These scales are related in that both are concerned with one's relation to the force of gravity; here one finds that Carol changes from applying her weight and actively resisting or overcoming the pull of gravity to restraining her weight and tending to give in to the pull of gravity. The difference expresses a difference in the attitudes of the two women: Sonya is capable of managing an extensive estate and deals very firmly at times with those around her, while Mrs. Murata, though a very active, busy person, does not establish and use her authority. She gets her way, when she does get her way, through asking favors and nagging.

Her shaping quality changes from the typical directionality of Sonya to a combination of directionality and flow. In her performance as Mrs. Murata, even her directional movement has a large flow component that scatters energy away from the main thrust of her actions. Her axial orientation also changes, from saggital to lateral; Sonya, the more capable of the two, directs herself forward, while Mrs. Murata scatters herself to the sides. Her kinesphere zone is further from her body as Mrs. Murata; she uses the limb zone primarily, while as Sonya she uses a balance between the central and limb zones. She uses considerably more spatial retention as Mrs. Murata, who is perpetually surprised by stimuli from directions she does not expect while she is doing something else in some other direction.

She uses much more falsetto voice as Mrs. Murata than she did as Sonya, and much less breathiness, so that while her tone is more solid, she sounds more shrill and excitable. And indeed Mrs. Murata is more excitable than Sonya. Her diction is nearly the same, except that she uses somewhat less lengthening. As Mrs. Murata, her rest pitch is lower than as Sonya. Her pitch range is somewhat wider in her later performance.

Her vocal phrase shape differs, changing from ramp shapes to peak shapes; she uses the peak-shaped phrases to show Mrs. Murata's constant alarm and surprise. Her vocal phrases are shorter in her second performance and she places emphasis much earlier in the phrase, as she also does with movement phrasing, so that she seems much less solid than Sonya, who builds up through a longer phrase to a powerful and definite conclusion. She uses much more elaboration; a textural change related to her increased use of shape flow that Carol uses to show how she gets flustered and confused. Her rates speed up considerably.

Mrs. Murata is less intelligent, more excitable, and more scattered, both physically and mentally, than Sonya. When she is excited, she flaps her hands and runs about, not really knowing what to do; Sonya would never behave that way. These differences are expressed through Carol's choices of greater facial posturality, folding, lightness, passive activation, flow, lateral orientation, falsetto voice, greater pitch range, peak-shaped vocal phrases, shorter phrasing with earlier emphasis, and greater elaboration, as

discussed above. As Mrs. Murata, she allows herself these patterns that Sonya would never tolerate.

At the crisis, however, Mrs. Murata can be strong. And when she summons that strength, Carol alters her performance pattern to very closely resemble Sonya. The patterns she used through most of her performance as Sonya are very like the patterns she uses during the rather few moments in And The Soul Shall Dance when Mrs. Murata must summon all her strength and firmness to deal with the crisis in the Oka family: a crisis that affects the welfare of her own family as well.

Changes relative to Matagoro

Carol shows a few changes relative to Matagoro in the movement structure area. Mouth tension, facial posturality, gesture amount, torso flexibility, and torso posturality change toward Matagoro, while flexure changes away from him. The locus of mouth tension changes to the lips; facial posturality and amount of gesture both increase; torso flexibility and posturality both decrease, flexibility rather sharply. Carol changes her flexure from flexion to folding, a mode that Matagoro does not use often.

Carol's movement dynamics change toward Matagoro in several respects: weight, activation, kinesphere zone, and spatial retention. She changes from strength to lightness, which matches the dance style; her activation becomes passive, matching the plain style. She changes from the limb/central zone to the limb zone, thereby matching the

TABLE 47
 CAROL HONDA; SONYA AND MRS. MURATA
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 no change	03 toward both	04 no change
05 toward dance	06 no change	07 toward dance	08 no change
09 no change	10 away plain	11 no change	12 no change
13 no change	14 no change	15 no change	16 no change
17 no change	18 toward plain	19 no change	20 no change
21 toward dance			

Movement dynamics:

22 no change	23 toward dance	24 no change	25 no change
26 toward plain	27 ambiguous	28 no change	29 away plain
30 no change	31 no change	32 no change	33 toward plain
34 no change	35 toward both		

Voice:

36 toward both	37 no change	38 no change	39 no change
40 ambiguous	41 toward dance	42 no change	43 no change
44 no change	45 no change	46 no change	47 toward both
48 no change	49 no change	50 no change	51 toward plain
52 no change	53 no change	54 no change	

Phrasing:

55 toward dance	56 toward dance	57 toward both	58 no change
59 toward both	60 no change	61 no change	62 no change
63 ambiguous	64 no change	65 away plain	66 away dance
67 no change	68 no change	69 no change	70 no change

plain style. She increases her level of spatial retention to match Matagoro. She changes away from Matagoro only with respect to axial orientation; her shift from saggital to lateral moves her away from Matagoro. Her use of shape flow increases, moving her away from Matagoro's emphasis on shaping.

Her vocal mode, lengthening, rest pitch, and volume width change toward Matagoro. She uses her falsetto range with Mrs. Murata, which she does not do with Sonya as a general rule. She uses less lengthening, bringing her pattern into agreement with the dance style. Her rest pitch drops slightly, while her volume range widens a bit; both these changes are in harmony with Matagoro's practice.

Her vocal phrasing changes toward Matagoro. Vocal phrase shape changes from ramp to peak, which matches the dance style; vocal phrase duration shortens to a level typical of the dance style, and vocal phrase emphasis moves to the early part of the phrase, a characteristic of both the plain and the dance styles.

Her movement phrase emphasis also moves to the early part of the phrase, matching both Matagoro's styles.

Her overall rate and phrase rate both increase, thereby changing away from Matagoro.

There is one ambiguous change: her level of elaboration starts out below Matagoro's and ends above his.

TABLE 48

CAROL HONDA: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	46	6	7	4	17	0	1	3	4	3
P	.000	.075	.032	.208	.110	.022	.091	.231	.000	.000

This actor performed only one role.

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

Summary

Carol's performance pattern is 65.7% stable (46 out of 70 scales).
 However, of the 21 aspects that change unambiguously, 81% change
 toward Matagoro (17 out of 21). There is no scale that changes away
 from any aspect of performance in which Matagoro is consistent in both
 styles. There is a tendency for the change to be in the direction of

the dance style, since the great majority of the scales that change toward dance or plain style change toward dance.

The conclusion is that Carol's performance patterns evolved toward the Kabuki. Given her trend toward the dance style and the fact that she alone of the students in this study learned a dance role, the conclusion seems to be that Carol's performance patterns were directly modified by her exposure to Kabuki. Considering the length of time (eighteen months) separating the performance of Mrs. Murata from Kabuki-Hawaii, this result is all the more striking.

However, these changes must be seen against the fact that she showed no change at all in two-thirds of her performance. Her performance as Mrs. Murata assimilates a number of particular aspects of Kabuki technique, but does not resemble a Kabuki performance. Fully 75% of her performance pattern was either unchanged by her experience with Kabuki, or in some cases actually shows change away from Kabuki style. The assimilation of Kabuki technique, which very clearly did occur in her case, must be seen against this background of stability, and against the very strong resemblances between her performance as Sonya and her performance as Mrs. Murata. Seen against this larger background, the assimilation of certain aspects of Matagoro's performance pattern is a relatively minor aspect of Carol's development compared to the evident stability and flexibility of her own performance style.

The following table presents the A, B, C, and D values for Carol's performances as Sonya (A) and Mrs. Murata (B).

TABLE 49

CAROL HONDA; SONYA AND MRS. MURATA: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 2 2 2 2	03 3 2.2 2	04 3 3 2 2	05 3 4 1 5
06 3 3 2 2	07 3 4 2 4	08 2 2 4 3	09 1 1 1 5	10 3 4 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 1 1 1 1	15 1 1 1 1
16 5 5 5 5	17 1 1 1 1	18 4 1 1 5	19 2 2 2 2	20 3 3 2 4
21 3 2 1 2				
Movement dynamics:				
22 4 4 4 4	23 4 2 3 2	24 4 4 2 2	25 4 4 2 2	26 4 2 2 5
27 3 2 5 5	28 2 2 2 4	29 3 2 3 4	30 3 3 1 3	31 4 4 4 4
32 2 2 2 3	33 2 3 3 4	34 3 3 3 4	35 1 3 3 3	
Voice:				
36 3 4 4 4	37 3 3 2 2	38 2 2 2 3	39 2 2 3 3	40 3 1 2 2
41 3 2 3 2	42 3 3 3 3	43 3 3 2 3	44 3 3 3 3	45 3 3 4 4
46 4 4 4 3	47 3 2 2 2	48 1 1 2 2	49 1 1 1 1	50 2 2 4 5
51 2 3 3 4	52 3 3 4 4	53 3 3 3 4	54 4 4 3 4	
Phrasing:				
55 2 4 3 4	56 3 2 3 2	57 4 2 2 2	58 2 2 2 2	59 4 2 2 2
60 2 2 3 3	61 2 2 3 4	62 2 2 4 4	63 1 3 2 2	64 3 3 2 2
65 2 4 2 3	66 4 5 3 4	67 3 3 3 3	68 1 1 2 3	69 3 3 3 4
70 1 1 2 2				

Dale Ream

Dale Ream performed an excerpt from A View From Glass Slippers, an unpublished play by Linda Yadao produced at the University of Hawaii by Kumu Kahua, an organization in the Department of Drama and Theatre devoted to producing original plays. The production was done two years before the Kabuki-Hawaii program. Unfortunately, it has proven impossible to obtain a copy of this play. The speech Dale performed is reproduced below in its entirety, as delivered on the videotape.

The wind: racing. My heart: grabbing for the unbound exhilaration of cold air. Headstrong with redoubled youth and the world in my teeth--I saw her. Snow-dazzled sun on her hair and pink laughter melting the winter; I knew she was my love. The next morning, her image in my dreams, I dedicated my life and my efforts to her. Now I am ready. The test is over, the quest--the channels are clear, stamped through yesterday. I am here for my prize. Oh boy, I'm off to a socko start! the moment's ripe and I'm in fine form.

The play seems to have had several titles; A View From Glass Slippers, the title used here, is the title Dale gave. The characters apparently were not given names by the writer in the original script, being referred to as "the boy," "the girl," and so forth, rather in the manner of a German Expressionist play. Apparently the play

presents a love story in a style that alternates between highly imagistic prose and a more everyday diction, as seen at the end of the speech above.

First performance

Dale puts most of his facial expression into the mouth area, leaving his eyes relatively inactive. Where expression does occur in the eye region, most facial expression involved movements of the eyelids according to the rhythms of the speech, widening, narrowing, and at one point actually closing his eyes as in the phrase "I knew she was my love." In the mouth region, he uses his jaw, pushing it slightly forward or slightly to one side or the other to change the shape of his mouth, again reflecting in the expression of the mouth the changing ideas of the speech. This use of the jaw helps to convey the sense of aggressive confidence the character seems to display. His face is only moderately active and only slightly postural. The facial movements described above are not done in an extreme way, nor do they involve large displacements of the facial features. Most of his head movement consists of horizontal rotations, looking back and forth at different areas of the audience, though he sometimes combines horizontal rotation and saggital movement to briefly toss his head toward right back high in a movement that conveys a picaresque sense of arrogant confidence. He uses a moderate amount of gesture, usually showing mirror gestures with a slight twist to turn the palm outward

TABLE 50
DALE REAM IN "GLASS SLIPPERS": "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	-----					37 Tightness	-				
03 Mouth tension	-----					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	---					40 Breathiness	-				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-----					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	---				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	---				
15 Turning	-					50 Slide	-				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	---					52 Center	---				
18 Torso motion	---					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	-										
						55 Vocal shape	-				
21 Posturality	-					56 Duration	---				
22 Flow	-----					57 Emphasis	---				
23 Weight	-----										
24 Space	-----					58 Duration	---				
25 Time	---					59 Emphasis	---				
26 Activation	---					60 Passage	---				
						61 Initiation	---				
27 Shape mode	-----					62 Transition	---				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	---				
30 Preferred plane	-----					64 Compounding	---				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	---				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

or inward with comfortable flexion at the elbow. He is on his feet throughout, often transferring his weight forward and back through step-shifts. When crossing the floor, he uses straight paths and pivots in place.

Floor contact is most often with the full foot, though partial contacts occur when he shifts his weight onto a new support. He shows a two-unit torso, occasionally showing slight rotations in the horizontal plane usually when following head rotations with the torso. His torso shows slight flexibility, and is not at all mobile or postural.

He shows bound flow with strength, accompanied by sustainment with passive activation. His space quality is neutral. This effort constellation is to some extent at odds with the text; it creates the effect of holding back while the text seems to convey a personality that plunges ahead.

He uses directionality and some shaping as well; most of his shaping is distal and is part of directional limb gesture. He is fairly expansive in a medium-size kinesphere; most of his movement takes place in the limb zone. His limb zone initiation also tends to hold him back from the full physical effect that would seem to be indicated by the text; a more central initiation would help convey the feeling of tossing caution to the winds that the text conveys.

He does not use active touch except to indicate the first person by tapping his fingers on his chest while cupping his hands--a two-handed "me" gesture. He shows no spatial retention.

He shows consistent full and fry voice, with no more than slight nasality and noise and no noticeable tightness or breathiness. He shows moderate lengthening and accent, slight attack, and moderate precision, giving a smooth, flowing effect. His pitch range is very narrow, centered low in his voice and having a low rest pitch, giving a romantic effect through the use of the low part of his range with smooth diction--a full, chesty, masculine tone. He shows no structuring of pitch, but occasionally shows a touch of vibrato. He does not show slide.

Like his physical characterization, his vocal characterization appears to hold back rather than expressing the drive of the character as seen in the text. The speech is delivered with a touch of irony; the speaker seems aware of the purple-passage character of the lexical content and rather enjoys it, hence the touch of vibrato. Volume range is also narrow and centered on the soft side with a medial rest level and moderate volume change.

Dale tends to use flat vocal shapes, changing his level from one phrase to the next. His phrasing is short and tends to place the emphasis early in the phrase. Movement phrasing likewise is short with emphasis placed early in the phrase. Passage is linked, with initiation in the limb and central zones and reversal transitions. He shows slight elaboration and compounding; phrase rate and overall rate are both moderate, as is his use of pause. He uses free meter throughout, showing only slight rhythmic variety and no appreciable metric change.

Comparison of first and second performances

His two performances are quite similar: the most similar since Norris Shimabuku. There are no differences in the gesture, shaping, or space areas, nor in vocal quality or diction. The few differences that exist are scattered among the other areas.

The locus of eye tension changes from the eyelids to the eyebrows and the locus of mouth tension changes from the jaw to the lips, giving more participation to the eye region and reducing the use of the jaw to convey the confidence and aggressiveness of the speaker. Turning changes so that he tends to turn while taking a path instead of separating the turn from the path, which gives his movement smoother flow. He uses his torso in a more mobile and more postural way, to the same effect. His weight quality changes from strength to lightness, which tends to weaken the physical impact of his performance. Pitch range width increases slightly, and rest pitch moves up from low to medial; giving less of the low, romantic effect of his first performance. He uses no vibrato in his second performance, but he does use occasional slide, especially on lengthened sounds, mostly in the first part of the speech. He increases his volume range and moves the rest level up to medial, again reducing the low, romantic quality of his voice. His vocal shape changes from flat to ramp and the duration of his vocal phrasing increases. Initiation moves a little farther from the center of the body, using mostly limb initiation and less central initiation, but

TABLE 51
DALE REAM IN "GLASS SLIPPERS"; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	---				
02 Eye tension	---					37 Tightness	-				
03 Mouth tension	---					38 Nasality	---				
04 Facial activity	-----					39 Noise	---				
05 Posturality	---					40 Breathiness	-				
06 Head Movement	---										
						41 Lengthening	-----				
07 Gesture amount	-----					42 Acccent	-----				
08 Limb relation	-----					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	---				
11 Supports	-					46 Center	---				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	-					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	-----				
17 Torso units	---					52 Center	-----				
18 Torso motion	---					53 Rest level	-----				
19 Flexibility	---					54 Volume change	-----				
20 Mobility	---										
						55 Vocal shape	---				
21 Posturality	---					56 Duration	-----				
22 Flow	-----					57 Emphasis	---				
23 Weight	---										
24 Space	-----					58 Duration	---				
25 Time	---					59 Emphasis	---				
26 Activation	---					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	---				
28 Expansion	-----										
29 Preferred axis	-----					63 Elaboration	---				
30 Preferred plane	-----					64 Compounding	---				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	-----				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	---				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

with no corresponding increase in kinesphere size. He shows an increase in phrase rate and an increase in his use of pause.

Changes relative to Matagoro

Dale's structural movement pattern is generally stable. He moves toward Matagoro with respect to locus of eye and mouth tension and torso mobility and posturality. Eye tension changes from lids to brows; mouth tension changes from jaw to lips. There are slight increases in both torso posturality and mobility. He changes away from Matagoro with respect to turning; the change is from pivot in place to pivot in motion, while Matagoro shows pivot in place consistently.

His performance pattern is very stable with respect to movement dynamics. The only change is in weight; Dale changes his weight quality from strong to light, thereby matching Matagoro in the plain style.

In voice, only pitch and volume show change. Pitch width increases toward the wider pitch range that Matagoro shows. Dale shows slight vibrato in his first performance which disappears from his second performance, a change toward Matagoro's practice. He shows a slight use of slide in his second performance; though minor, it seems to indicate a small change toward Matagoro's pattern. Volume range width and range center both become louder, changing toward Matagoro in these respects. His rest pitch rises slightly, becoming somewhat higher than Matagoro's.

TABLE 52
DALE REAM; GLASS SLIPPERS
TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 no change	02 toward both	03 toward both	04 no change
05 no change	06 no change	07 no change	08 no change
09 no change	10 no change	11 no change	12 no change
13 no change	14 no change	15 away both	16 no change
17 no change	18 no change	19 no change	20 toward plain
21 toward dance			

Movement dynamics:

22 no change	23 toward dance	24 no change	25 no change
26 no change	27 no change	28 no change	29 no change
30 no change	31 no change	32 no change	33 no change
34 no change	35 no change		

Voice:

36 no change	37 no change	38 no change	39 no change
40 no change	41 no change	42 no change	43 no change
44 no change	45 toward both	46 no change	47 away both
48 no change	49 toward both	50 toward both	51 toward plain
52 toward both	53 no change	54 no change	

Phrasing:

55 ambiguous	56 toward plain	57 no change	58 no change
59 no change	60 no change	61 toward plain	62 no change
63 no change	64 no change	65 no change	66 toward dance
67 away both	68 no change	69 no change	70 no change

Vocal phrase duration, initiation, and phrase rate are the aspects of phrasing in which Dale moves toward Matagoro. His vocal phrase duration becomes somewhat longer, matching the plain style. Initiation becomes less central, matching the plain style also. Phrase rate speeds up slightly, matching the dance style. Pause, however, changes away from Matagoro, becoming more prominent than in Matagoro's practice.

Summary

There is a fairly strong trend in Dale's performance patterns toward the Kabuki styles. When Dale changes away from Kabuki, it occurs only in cases where Matagoro is consistent. The total change toward Matagoro is much greater than the total change away. Overall, however, less than 23% of Dale's total performance pattern changes in any direction. As with Carol, there is a clear assimilation of a few particular aspects of Kabuki style against the background of general stability.

The following tables show the summary data for Dale and his A, B, C, and D values.

TABLE 53

DALE REAM: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	53	6	3	4	13	3	0	0	3	1
P	.000	.028	.242	.158	.053	.242	.054	.054	.000	.000

This actor performed only one role.

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

TABLE 54

DALE REAM; GLASS SLIPPERS: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 3 3 3 5	02 3 2 2 2	03 4 2 2 2	04 3 3 2 2	05 2 2 1 5
06 2 2 2 2	07 3 3 2 4	08 3 3 4 3	09 3 3 1 5	10 3 3 3 5
11 1 1 2 1	12 3 3 5 5	13 0 0 0 5	14 1 1 1 1	15 1 2 1 1
16 5 5 5 5	17 2 2 1 1	18 2 2 1 5	19 2 2 2 2	20 1 2 2 4
21 1 2 1 2				
Movement dynamics:				
22 4 4 4 4	23 4 2 3 2	24 3 3 2 2	25 2 2 2 2	26 2 2 2 5
27 4 4 5 5	28 4 4 2 4	29 3 3 3 4	30 3 3 1 3	31 5 5 4 4
32 3 3 2 3	33 3 3 3 4	34 2 2 3 4	35 1 1 3 3	
Voice:				
36 2 2 4 4	37 1 1 2 2	38 2 2 2 3	39 2 2 3 3	40 1 1 2 2
41 3 3 3 2	42 3 3 3 3	43 2 2 2 3	44 3 3 3 3	45 1 2 4 4
46 2 2 4 3	47 2 3 2 2	48 1 1 2 2	49 2 1 1 1	50 1 2 4 5
51 2 3 3 4	52 2 3 4 4	53 3 3 3 4	54 3 3 3 4	
Phrasing:				
55 1 2 3 4	56 2 3 3 2	57 2 2 2 2	58 2 2 2 2	59 2 2 2 2
60 2 2 3 3	61 2 3 3 4	62 2 2 4 4	63 2 2 2 2	64 2 2 2 2
65 3 3 2 3	66 3 4 3 4	67 3 4 3 3	68 1 1 2 3	69 2 2 3 4
70 1 1 2 2				

Russell Omori

Russell Omori performed a cutting from In the Boom Boom Room. He plays the role of a gay, who invades the apartment of a girl who has just moved into the building. He seems to have nothing more in mind than making her acquaintance, but he has a most alarming way of doing so. The text of the cutting follows, which is taken verbatim from the videotape of his second performance.

Hi, I'm Guy Smith. I live in the apartment below you--exactly below you? I'm an open kind of person with a very active mind; and this and that occurring here and there, I thought I'd stop by. At first I planned some guise; seeking sugar perhaps! But I found I had plenty, so here I am, in complete honesty. I can hear you move from room to room above me, as I move from room to room below you. There's intimacy in that. It seemed we should meet. May I come in, I should say, but I am in. Oh, no, no, I've frightened you. Please don't worry. Most important of all, let me set up no erroneous expectations of a fearful nature--or of a more hopeful nature, whichever of the two it might be, I don't know, not knowing you--but I can and will promise absolutely that I will make no pass at you whether you long for it or dread the thought. Because I am gay. Oh, I haven't always been, but am now, for the last twelve or thirteen years, and I think it's taken.

There are several aspects of the character that show in the text itself that are important elements of Russell's characterization. Guy's use of language shows a tense, overwrought, overintellectual character, with elaborate sentence structures, involved imagery, and a constant conflict between opening himself up to a stranger and putting up fences to hide behind. His brittle, jumpy way of speaking shows a person hiding behind a facade of would-be suave confidence to conceal a frightened, lonely reality.

First performance

In his first performance, Russell uses the whole face for facial expression. He reflects all the changes of idea and mood in the speech, giving Guy a mercurial, even off-the-wall quality. The locus of eye tension is the eyebrow, which often moves in synchrony with the head as a whole, and the locus of mouth tension is the lips. His face is moderately active and moderately postural. His head movement is oriented along the horizontal plane. There is a sense of great fluidity to his facial expression, as his face changes often, yet smoothly with the flow of ideas and moods in the text. He uses a moderate amount of gesture, most often single gestures using a slight amount of compound turning and a comfortable degree of flexion. He is on his feet for most of the cutting, using full steps on the full foot and moving on curved paths, turning on the path. He circles around the girl, so to speak patrolling or exploring the apartment while he talks to her. He uses a one-unit torso which he rotates and occasionally tilts, often in order to look at the girl as he moves around her, but rarely bends or twists. He allows only slight flexibility in his torso, but it is moderately mobile. He shows no posturality at all, consistently holding Guy back from real involvement in his gesture.

He shows bound flow and active activation, keeping all other effort qualities neutral. This makes Guy seem to keep himself very much under control at all times, never relaxed, never at ease. In context of the very verbal, even verbose speech, it makes one wonder what sort of neurotic and possibly even dangerous character this poor

TABLE 55
 RUSSELL OMORI AS GUY SMITH; "BEFORE"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	-				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	---				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	---					49 Vibrato	-				
15 Turning	---					50 Slide	-				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	-					52 Center	---				
18 Torso motion	---					53 Rest level	-----				
19 Flexibility	---					54 Volume change	---				
20 Mobility	-----										
						55 Vocal shape	-----				
21 Posturality	-					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	-----										
24 Space	-----					58 Duration	-----				
25 Time	-----					59 Emphasis	---				
26 Activation	-----					60 Passage	---				
						61 Initiation	---				
27 Shape mode	---					62 Transition	---				
28 Expansion	-----										
29 Preferred axis	---					63 Elaboration	-----				
30 Preferred plane	-					64 Compounding	-----				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	---				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	-----				
35 Spatial retention	-					70 Metric change	-				

Inapplicable scales are left blank

girl has to deal with. He uses some directionality and quite a lot of shape flow. He is expansive in a moderate-size kinesphere, using the limb and distal zones; rarely the central zone. He orients himself toward the lateral axis and the lateral plane, constantly spreading his movement to the side and approaching objects and people in a sidelong fashion, almost a sneaking kind of approach. This lateral emphasis also makes him seem always ready to move, never tied down to one location, almost as if he were perpetually slightly off balance. His visual focus is on his fellow performer most of the time, but he restricts active touch to himself and the stage. He shows no spatial retention.

He uses full voice throughout, without tightness or nasality but with a slight amount of noise and breathiness. He shows only slight lengthening and attack, but uses a medium amount of accent and gives his consonants rather precise enunciation. He uses a moderately wide pitch range; centered rather high in his voice, with a medial rest pitch. He does not use pitch structure, vibrato, or slide. Volume width is narrow, and his volume range is centered on the soft side, with a medial rest level. Volume change is smooth.

He uses compound vocal shapes, in keeping with Guy's complex phrasing. His vocal phrases are moderate in length and tend to have late emphasis. His movement phrase duration is also moderate, with early emphasis. Passage is linked with central and limb initiation and reversal transitions. He uses a moderate amount of elaboration and quite a bit of compounding.

Overall rate is moderate and phrase rate fast; he shows a great many rather short pauses. He uses free meter throughout with a fair amount of rhythmic variety and no metric change, again reflecting through the use of irregular meter and rhythm the elusive nature of the character.

He does not use overly gay mannerisms. In fact, one might be surprised at Guy when he announces that he is gay. However, Russell does employ certain mannerisms that are not overtly gay but do convey the kind of delicacy or refinement of behavior that one often associates with gay men. He keeps his torso still while using bound, shape-flow, restrained gestures that while expansive, stay within a rather moderate sized kinesphere. He also maintains a slight, but consistent limb rotation during his gestures. The impression that emerges is one of a very controlled, yet very smooth movement pattern such as one may observe among gay men, or among very gentlemanly men, gay or not.

He carries this into his vocal work as well. His voice is always clear and precise, with no noise or roughness in quality and diction. His use of elaboration and compounding in his vocal phrasing as well as his movement phrasing helps to create a sense of texture in his performance that reinforces the smooth, artful, and controlled pattern through which Russell establishes the character of Guy. One might be surprised to find out that Guy is gay, yet his behavior makes sense once the fact comes out, even though Russell avoids stereotypical gay behavior.

Comparison of first and second performances

Russell's performances of Guy were very similar. Russell changed the distribution of his facial expression, moving from the use of the whole face to a concentration in the mouth area. The relative decrease in eye expression takes away from the sense of rapid fluidity of facial expression seen in his first performance. His torso flexibility decreases while his posturality increases. Weight quality changes from neutral to lightness, space quality changes from neutral to directness, and time quality changes from neutral to quick. Shape mode changes from flow and directionality to directionality and shaping. These effort and shape changes make his movement less ambiguous, more directed and sure. He seems to improvise in his first performance, while in his second performance, he seems more to pursue a goal or a plan. In the context of the scene, he is a bit more frightening in his second performance.

He reorients himself from the lateral to the horizontal plane. The sense of sidelong approach is largely gone. In its place one finds a feeling of greater stability; he no longer seems always just slightly off balance, ready to move. He pulls back toward the center of his body somewhat, tending to use the limb zone instead of the limb and distal zone, so that his gestures are not quite so removed from his torso. He increases his use of attack, which reduces the smoothness of his delivery, and begins to use slide occasionally. His volume range center is not as soft in the second performance. Initiation moves

TABLE 56
 RUSSELL OMORI AS GUY SMITH; "AFTER"

	1	2	3	4	5		1	2	3	4	5
01 Facial tension	-----					36 Vocal mode	-----				
02 Eye tension	---					37 Tightness	-				
03 Mouth tension	---					38 Nasality	-				
04 Facial activity	-----					39 Noise	---				
05 Posturality	-----					40 Breathiness	---				
06 Head Movement	---										
						41 Lengthening	---				
07 Gesture amount	-----					42 Accent	-----				
08 Limb relation	-					43 Attack	-----				
09 Turning	-----					44 Precision	-----				
10 Flexure	-----										
						45 Width	-----				
11 Supports	-					46 Center	-----				
12 Weight transfer	-----					47 Rest pitch	-----				
13 Aerial steps						48 Pitch structure	-				
14 Path Shape	---					49 Vibrato	-				
15 Turning	---					50 Slide	---				
16 Floor contact	-----										
						51 Width	---				
17 Torso units	-					52 Center	-----				
18 Torso motion	---					53 Rest level	-----				
19 Flexibility	-					54 Volume change	---				
20 Mobility	-----										
						55 Vocal shape	-----				
21 Posturality	-----					56 Duration	-----				
22 Flow	-----					57 Emphasis	-----				
23 Weight	---										
24 Space	-----					58 Duration	-----				
25 Time	-----					59 Emphasis	-----				
26 Activation	-----					60 Passage	---				
						61 Initiation	-----				
27 Shape mode	-----					62 Transition	---				
28 Expansion	-----										
29 Preferred axis	---					63 Elaboration	-----				
30 Preferred plane	-----					64 Compounding	-----				
						65 Overall rate	-----				
31 Visual focus	-----					66 Phrase rate	-----				
32 Kinesphere size	-----					67 Pause	---				
33 Kinesphere zone	-----					68 Meter	-				
34 Active touch	---					69 Rhythmic variety	-----				
35 Spatial retention	---					70 Metric change	-				

Inapplicable scales are left blank

later, toward the middle of the phrase. Initiation moves from the central and limb zones to the limb zone. Finally, he slightly decreases his use of compounding.

In his second performance, he maintains basically the same characterization of Guy, but with subtle and perhaps ominous changes. He is not quite so smooth, not quite so mercurial. There is a slightly greater sense of menace in Guy the second time around; in the second performance he seems more like the kind of person who could mask something dangerous.

Changes relative to Matagoro

Russell's pattern in movement structure is quite stable. Area tension, flexibility, and torso posturality are the only aspects of movement structure that show change. Area tension changes from showing tension over the whole face to showing the mouth dominant, which is a change toward the plain style. Flexibility decreases, having begun at a level below Matagoro's practice. Posturality increases, to a level greater than Matagoro's.

His pattern in movement dynamics shows some change. His weight quality changes from neutral to light, thus matching the dance style. His axial orientation also changes to match the dance style, moving from lateral to horizontal. He moves from the limb/distal zone into the limb zone, which brings his use of kinesphere zones into agreement with the plain style, and he increases his use of spatial retention, tending toward Matagoro while remaining at a lower level. He increases

TABLE 57
 RUSSELL OMORI; GUY SMITH
 TYPE OF CHANGE FOR EACH SCALE

Movement structure:

01 toward plain	02 no change	03 no change	04 no change
05 no change	06 no change	07 no change	08 no change
09 no change	10 no change	11 no change	12 no change
13 no change	14 no change	15 no change	16 no change
17 no change	18 no change	19 away both	20 no change
21 away plain			

Movement dynamics:

22 no change	23 toward dance	24 ambiguous	25 ambiguous
26 no change	27 ambiguous	28 no change	29 no change
30 toward dance	31 no change	32 away dance	33 toward plain
34 no change	35 toward both		

Voice:

36 no change	37 no change	38 no change	39 no change
40 no change	41 no change	42 no change	43 toward dance
44 no change	45 no change	46 no change	47 no change
48 no change	49 no change	50 toward both	51 no change
52 toward both	53 no change	54 no change	

Phrasing:

55 no change	56 no change	57 no change	58 no change
59 away both	60 no change	61 toward plain	62 no change
63 no change	64 toward both	65 no change	66 no change
67 no change	68 no change	69 no change	70 no change

his kinesphere performance. He moves his movement phrase emphasis to the middle size, trending toward a larger kinesphere relative to Matagoro than found in either the plain or the dance style. He becomes increasingly direct and quick, while Matagoro is indirect and sustained. He shows more shaping in his second performance, but directionality still dominates, while Matagoro is consistently oriented to shaping.

Russell's vocal pattern is stable. He increases his use of attack to the level of the dance style, and shows a slight use of slide, though remaining at a much lower level than Matagoro's use of slide. He uses a slightly higher volume range center, tending toward Matagoro but remaining at a lower level.

His phrasing pattern is also generally stable. He changes his initiation to the limb zone, thus matching the plain style. He decreases the level of compounding he uses, tending toward Matagoro while still showing a somewhat higher level than Matagoro. Finally he changes his movement phrase emphasis from early to medial, thereby changing away from Matagoro.

Summary

What change does occur in Russell's performance pattern tends to be toward the Kabuki. Ten of the fourteen scales that change move toward Matagoro. As with other student performances, there is a tendency to change more often relative to those aspects of Matagoro's

TABLE 58

RUSSELL OMORI: SUMMARY RELATIVE TO MATAGORO.

Total for all roles: see key below.

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
S	53	4	3	3	10	2	1	1	4	3
P	.000	.125	.227	.227	.012	.284	.218	.218	.000	.000

This actor performed only one role.

S = number of changes noted. P = probability of S. NC = no change.
 T = toward. A = away. B = both styles. D = dance style. P = plain
 style. TT = total change toward Matagoro. TA = total change away.
 AM = ambiguous change.

performance pattern that are consistent between the two styles. The changes that occur in Russell's performance pattern are largely in the area of movement dynamics.

Overall, however, Russell's performance pattern is 75.8% stable. The changes that occur in his performance appear to be assimilations of specific Kabuki stylisms into an established performance pattern. As we have seen in several of the student actors, Russell seems to have come into the program with a well established style, at least so

far as this character is concerned. There are certain assimilations from Kabuki, but the overall pattern remains true to itself.

The above table gives the summary data and the following table the A, B, C, and D values for Russell's performance.

TABLE 59

RUSSELL OMORI; GUY SMITH: A, B, C, AND D VALUES.

A = before. B = after. C = plain style. D = dance style

A B C D	A B C D	A B C D	A B C D	A B C D
Movement structure:				
01 5 3 3 5	02 2 2 2 2	03 2 2 2 2	04 3 3 2 2	05 3 3 1 5
06 2 2 2 2	07 3 3 2 4	08 1 1 4 3	09 5 5 1 5	10 3 3 3 5
11 1 1 2 1	12 5 5 5 5	13 0 0 0 5	14 2 2 1 1	15 2 2 1 1
16 5 5 5 5	17 1 1 1 1	18 2 2 1 5	19 2 1 2 2	20 3 3 2 4
21 1 3 1 2				
Movement dynamics:				
22 4 4 4 4	23 3 2 3 2	24 3 4 2 2	25 3 4 2 2	26 4 4 2 5
27 2 4 5 5	28 4 4 2 4	29 2 2 3 4	30 1 3 1 3	31 4 4 4 4
32 3 4 2 3	33 4 3 3 4	34 2 2 3 4	35 1 2 3 3	
Voice:				
36 3 3 4 4	37 1 1 2 2	38 1 1 2 3	39 2 2 3 3	40 2 2 2 2
41 2 2 3 2	42 3 3 3 3	43 2 3 2 3	44 4 4 3 3	45 3 3 4 4
46 4 4 4 3	47 3 3 2 2	48 1 1 2 2	49 1 1 1 1	50 1 2 4 5
51 2 2 3 4	52 2 3 4 4	53 3 3 3 4	54 2 2 3 4	
Phrasing:				
55 5 5 3 4	56 3 3 3 2	57 4 4 2 2	58 3 3 2 2	59 2 3 2 2
60 2 2 3 3	61 2 3 3 4	62 2 2 4 4	63 3 3 2 2	64 4 3 2 2
65 3 3 2 3	66 4 4 3 4	67 2 2 3 3	68 1 1 2 3	69 3 3 3 4
70 1 1 2 2				

Chapter VIII

Conclusions

The findings for each student are given in the preceding chapter. However, it remains to evaluate the results for the group as a whole. Therefore this chapter will be devoted to discussion of the findings in terms of the group, to a statement of the overall conclusions of the study, and to a summary of the study.

Patterns of assimilation

Tables 60-63 present an analysis of how the group assimilated Matagoro's performance behavior in their Western performances. In each of the four tables, the actors are denoted by their initials across the top of the page; the scales used in this study go in order down the left side of the page. An asterisk at the intersection of an actor's column and the row of a particular scale shows that assimilation of Matagoro's pattern of performance with respect to that scale by that actor did take place. The four tables break up the scale set in the now-familiar pattern: movement structure, movement dynamics, voice, and phrasing. Unfortunately, space does not permit providing divisions by sub-groups.

Most of the students did assimilate certain aspects of Matagoro's performance pattern. The particular aspects assimilated by each student varied, and no single aspect measured in this study was assimilated by all the students. In fact, no single scale shows assimilation by more than five of the seven student actors. However, there are a few assimilations that occurred very frequently. These are, in scale order, weight, kinespheric zone, spatial retention, lengthening, rest pitch, and vocal phrase duration. Several other scales were assimilated by more than half of the actors; these are area tension, facial activity, facial posturality, torso posturality, lengthening, and volume center.

The students do not tend to show assimilation on the scales which are invariant for Matagoro. Of the thirteen invariant scales, four students showed assimilation toward Matagoro on facial activity and three students do so on mouth tension, flexibility, and compounding. The rest of the thirteen are assimilated by only one or two actors at most; in four cases there is no assimilation at all. It would seem, therefore, that assimilation of a given trait is not related to Matagoro being consistent with respect to it.

It would seem that the predisposition of the actors to observe certain performance patterns probably played a part in producing differential assimilation by scale. For example, in the movement structure area, much more assimilation is seen in the area of facial expression than in any other area of movement structure. This could have much to do with the fact that Western acting is face-oriented; in Western spoken drama, facial expression is much more frequently used

TABLE 60:

ASSIMILATIONS BY SCALE: MOVEMENT STRUCTURE

<u>Scale:</u>	<u>Actors:</u>	N.S.	H.B.	R.C.	T.S.	C.H.	D.R.	R.O.
01. Area tension		*	*	*				*
02. Eye tension			*		*		*	
03. Mouth tension			*			*	*	
04. Facial activity		*	*	*	*			
05. Facial posturality		*		*	*	*		
06. Head movement		*		*				
07. Gesture amount						*		
08. Limb relation				*				
09. Turning		*		*				
10. Flexure								
11. Supports								
12. Weight transfer								
13. Aerial steps								
14. Path shape			*					
15. Turning			*					
16. Floor contact				*				
17. Torso units								
18. Torso motion					*			
19. Flexibility		*			*	*		
20. Mobility			*	*			*	
21. Posturality			*	*			*	

for effect than gesture, support, or torso. In contrast, gesture, support, and torso are very important in the Kabuki tradition. American actors, already face-oriented, will tend to absorb the use of facial expression by their Kabuki teacher. The relatively exotic technique of the rest of the body will be less absorbed since the student has less predisposition to it. The student learns the Kabuki gesture, support, and torso techniques, and applies them in Kabuki performance, but is less apt to assimilate them in Western work. Hence the pattern that shows in Table 60.

In movement dynamics, the students show more assimilation in the areas of effort and space than in shape. Much of the assimilation in this area is with respect to only three scales: weight, kinespheric zone, and spatial retention. Matagoro is remarkably effective in these three aspects of movement dynamics. His varied use of weight often gives considerable expressiveness to his acting. His distinction between different kinespheric zones in his movement gives clarity and simplicity to his gesture. Finally, his use of spatial retention gives not only clarity, but often a strikingly forceful presentation of the character's focus, mood, and attention. It would seem logical to suppose that Matagoro's effective employment of these traits would attract the attention of the student actor and therefore have a high probability of assimilation.

Untrained observers can recognize and communicate the effect of effort factors. An actor can see and learn the use of effort from another actor relatively easily. Shape, however, is another matter.

TABLE 61:
ASSIMILATIONS BY SCALE: MOVEMENT DYNAMICS

<u>Scale:</u>	<u>Actors:</u>	N.S.	H.B.	R.C.	T.S.	C.H.	D.R.	R.O.
22. Flow			*					
23. Weight		*			*	*	*	*
24. Space								*
25. Time		*	*					*
26. Activation						*		
27. Shape mode								
28. Expansion								
29. Axial orient.			*					*
30. Planar orient.				*				
31. Visual focus								
32. Kinespheric size			*	*				
33. Kinespheric zone		*		*	*	*		*
34. Active touch					*			
35. Spatial retent.			*	*	*	*		*

Western actors, like most Western people, consider their bodies to be solid objects with a definite shape that is not subject to change. Hence, the student actors would not readily have perceived the differences in the Kabuki use of shape, and would therefore be less likely to assimilate it.

In general, the students did not assimilate Matagoro's use of vocal quality. Matagoro's vocal quality does not change much; in fact, tightness and breathiness are invariant in his performances. Since he makes little use of vocal quality for effect, there is little to attract the student actor's attention to his use of vocal quality. Therefore, it is relatively unlikely to be assimilated. The other areas of vocal performance, where Matagoro does use voice for effect, all show a fair amount of assimilation.

There are interesting exceptions to this, however. Clear diction is traditionally valued highly in the Western theater, both in principle and in practice. Matagoro's speech shows only moderate precision at best. None of the student actors assimilated this aspect of his performance pattern.

This may seem trivial, but it illustrates a valuable point. The student actor is not a mechanical reproducing device; the mind and attitudes of the student are brought to bear. Valuing clear diction, and hearing diction that does not match that standard of clarity, he is not likely to emulate what he hears. By the same token, if a movement pattern seems odd or ridiculous, the student will be hesitant to learn and perform it. The student has, after all, a certain fund of knowledge and experience and judgement that serves as a guide. Therefore, the Asian theater director cannot simply impose an exotic style. The burden of proof is clearly on the director of a production using exotic patterns of performance to demonstrate the value of the exotic or foreign performance style.

TABLE 62:
ASSIMILATIONS BY SCALE: VOICE

<u>Scale:</u>	<u>Actors:</u>	N.S.	H.B.	R.C.	T.S.	C.H.	D.R.	R.O.
36. Vocal mode					*			
37. Tightness			*		*			
38. Nasality								
39. Noise			*		*			
40. Breathiness					*			
41. Lengthening			*	*	*	*		
42. Accent			*	*				
43. Attack			*		*			*
44. Precision								
45. Pitch width					*		*	
46. Pitch center				*	*			
47. Rest pitch		*	*	*	*	*		
48. Pitch structure								
49. Vibrato							*	
50. Slide			*				*	*
51. Volume width					*	*	*	
52. Volume center			*	*			*	*
53. Rest level				*				
54. Volume change			*	*	*			

A further illustration may help. Matagoro uses the Kabuki sliding-pitch intonation on sentence endings rather sparingly, but he tends to use it effectively when he does use it. It would be hard to imagine an intonation that is likelier to sound more foolish in the context of a Western performance. However, there is a certain amount of assimilation of slide among the actors of this study; usually judiciously placed and performed where it does not sound peculiar. In this case, in which the instructor is able to demonstrate the value of an exotic technique, the students can and do assimilate it to some extent.

Assimilation patterns in phrasing show the native theatrical culture of the students. Vigorous physical expression through movement is rather uncommon in mainstream Western theater. It is a mark, indeed, it is almost a cliché of the avant-garde. In this study, there is considerably more assimilation of vocal phrasing than of movement phrasing. Again, it would seem that the student assimilates what he has a predisposition to emulate.

Except in the classic repertory, Western theater makes relatively little expressive use of rhythm when compared to Kabuki. Western rhythmic expression in drama tends to be subtle and in the background. Kabuki, on the other hand, makes bold and powerful use of rhythm. The student actors assimilate the metrical aspects of Matagoro's phrase structure almost not at all. The Kabuki rhythm simply does not find a home in the Western repertory. In the absence of such a locus of acceptability, the student actors do not assimilate what they can find little use for.

TABLE 63:
ASSIMILATIONS BY SCALE: PHRASING

<u>Scale:</u>	<u>Actors:</u>	N.S.	H.B.	R.C.	T.S.	C.H.	D.R.	R.O.
55. V. phr. shape				*		*		
56. V. phr. duration		*	*		*	*	*	
57. V. phr. emphasis			*		*			
58. M. phr. duration								
59. M. phr. emphasis						*		
60. Passage				*				
61. Initiation		*		*			*	*
62. Transition				*	*			
63. Elaboration		*			*			
64. Compounding			*	*				*
65. Overall rate			*		*			
66. Phrase rate			*		*		*	
67. Pause								
68. Meter								
69. Rhythmic variety				*	*			
70. Metric change								

It must be underlined that these observations do not apply to the Kabuki performances by the student actors. In general, the students made good to excellent progress in mastering the application of Kabuki technique to Kabuki performance. The variables discussed above apply only to the question of assimilation of Kabuki patterns into the Western acting of the student.

Levels of assimilation

In the preceding sections, the presence or absence of assimilation has been discussed. The question remains as to the degree or intensity of assimilation shown by the group. The level of assimilation shown by this group of student actors can be assessed by examining Table 64. This table shows what percentage of the student's performance pattern changed or did not change in terms of percentage of all 70 scales (for a single role) or of 140 scales (for two roles).

The possible types of change are across the top, and the actors range down the left side. The overall results for each actor are given by each actor's name. The results for each separate role are given for those actors that performed more than one role. There is a key to the abbreviations at the foot of the table.

The percentages in the table are all rounded. Therefore, NC + TT + TA + AM may equal 101 or 99, likewise, TB + TD + TP may not quite equal TT, and AB + AD + AP not quite equal TA.

Table 64 shows that ambiguous change occurred in all the actors, but never amounted to more than 9% of their performance pattern for

TABLE 64

TYPES OF CHANGE OF CHANGES BY ACTORS AND ROLES

TYPES OF CHANGE (% OF ALL SCALES)

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
Shimabuku.....	77%	5%	4%	2%	00%	5%	4%	1%	11%	1%
Act II.....	71%	7%	1%	4%	13%	6%	6%	3%	14%	1%
Act IV.....	83%	3%	6%	0%	9%	4%	3%	0%	7%	1%
Brown.....	49%	14%	6%	6%	26%	7%	2%	8%	17%	8%
Astrov.....	54%	9%	3%	6%	17%	9%	3%	10%	21%	7%
Macbeth.....	43%	19%	10%	7%	36%	6%	1%	6%	13%	9%
Concannon.....	59%	9%	3%	11%	24%	11%	1%	2%	14%	4%
Hero.....	59%	11%	3%	11%	26%	9%	0%	1%	10%	6%
Agave.....	59%	11%	3%	11%	26%	9%	0%	1%	10%	6%
Soper.....	50%	9%	6%	6%	21%	14%	4%	6%	24%	5%
Christy.....	41%	13%	9%	10%	31%	10%	4%	7%	21%	6%
Sammy.....	59%	6%	3%	3%	11%	17%	3%	6%	26%	4%
Honda.....	66%	9%	10%	6%	24%	0%	1%	4%	6%	4%
Ream.....	76%	9%	4%	6%	19%	4%	0%	0%	4%	1%
Omori.....	76%	6%	4%	4%	14%	3%	1%	1%	6%	4%

S = number of changes noted. P = probability of S. NC = no change.

T = toward. A = away. B = both styles. D = dance style. P = plain style. TT = total change toward Matagoro. TA = total change away.

AM = ambiguous change.

any one role. This suggests that some of the change to be seen in the performance patterns of the actors was due to experience not related to Kabuki-Hawaii.

Table 64 shows that the stable proportion of the student's performance pattern ranges between 80% and 40%. Most of these actors came into the program with relatively firm styles, at least for the pieces they performed for this study, due to prior training, performance background, and other experience. In most cases, these were pieces they either had performed before or took a special interest in. Given the intensity and duration of the Kabuki-Hawaii program, these numbers are rather high. They indicate a relatively firm style in Western material, not easily susceptible to influence.

Just as a ballet dancer who has been trained to perform according to classic standards feels he knows how to perform the dance and does not need exotic techniques, so the Western actor naturally feels knowledgeable on how to perform Inge or Chekhov and does not need Kabuki technique to help. The relatively high level of stability points to influence from this factor as well as to the existence of relatively firm style.

Nevertheless, there is assimilation, as the second, third, and fourth columns of the table show. The fact that there is more change toward both styles (TB) than toward either plain or dance separately shows that there is more assimilation where Matagoro is consistent on both the plain and dance styles. There is more change toward the plain style than toward the dance style; there was also more exposure to the plain style in the course of the program. Of the three actors who

reverse this trend, one, Carol Honda, was given special training in the dance style to perform the role of Bannai. Norris Shimabuku's existing style at the start of the program had definite affinities with the dance style. Hal Brown's interest in the dance style led to some interesting experimentation with his cutting from Macbeth. These three actors, therefore, had particular relationships to the dance style not shared by the other actors in this study which could account for the reversal of the general trend seen in their cases.

There is also change away from Matagoro to be seen in the group, as the next four columns show. In one case, that of Tony Soper, there is actually an overall preponderance of change away from Matagoro over change toward him.

One possible factor that could produce change away from Matagoro, anti-assimilation as it were, would be an effort on the actor's part to separate Kabuki training from Western training, just as a modern dancer might well deliberately separate training in the modern dance tradition from training in ballet. The student actor working to master new techniques feels a special need to keep the old and the new unconfused. Due to this reaction, such an actor might deliberately emphasize purely Western technique when performing in the Western repertory.

Another factor that could produce anti-assimilation is the strain of attempting to master an exotic art from a foreign culture. It is known that one invests a good deal of emotional energy in one's habitual behavior patterns. One's way of moving and speaking is an important part of one's identity, though usually well below the level

of conscious awareness. The student actor who has been intensively working on Kabuki may find the occasion to perform in the Western repertory rather a relief, and therefore find himself exercising Western performance style more vigorously than usual.

Since this study focuses on assimilation, the ramifications of this need not be pursued further. However, the Asian theater director should take note of the energies in the student actors of this study that produced significant trends away from the object of their work. The ability to deal with such trends might be very important in the context of Asian theater production in the West. Such a director should take good note that in all cases where considerable change occurred, much of the change trended away from Matagoro; in some cases, more of the change was directed away from Matagoro than toward him.

The nature of assimilation

No one came out of the Kabuki program with performances of material from the Western repertory that overall looked or sounded like Kabuki performances. None of the well-known devices of the Kabuki theater were shown by the student actors in their Western work. Wholesale adoption of Kabuki technique in large, undigested units simply did not occur.

There are several reasons for this. As noted above, the student actor brings prior experience, training, taste and judgement to the work. Having a certain tradition of performance and experience

representing a large investment of considerable time and effort, the student will not arbitrarily dump that tradition in favor of something that seems exotic and possibly, in some ways, odd or even ridiculous. This, plus the desire to keep Kabuki and Western technique in separate compartments, and the personal investment in Western ways of behavior, pose a formidable obstacle to wholehearted adoption of exotic technique.

It is logical, therefore, that those elements of Kabuki technique would be assimilated that lie rather beneath the level of full awareness, and in fact, this may be seen to be the case. Throughout this study, it is clear that the aspects of Kabuki performance that are assimilated are the subtle, the qualitative, the general rather than the bold, the crystallized, and the specific. The students assimilated a habit of using the weight in certain ways, not the habit of using Kabuki poses as such. They picked up on a principle of relatively sharp kinespheric distinctions, not on stylized gesture patterns or fan technique as such. They picked up on the habit of using a lower rest pitch and higher volume center to give their voices more power, not on the very stylized rhythmic and metrical devices on the Kabuki vocal delivery.

Part of the subliminal nature of the assimilations found in this study is that they tend to occur through repetition. No one instructed the students in Laban movement theory or speech science; only a very few specific aspects of performance were actually identified and discussed in the course of their training.

But through constant repetition of the specific material which they learned to perform, certain qualities were reinforced.

Directing the attention of the students to particular aspects of performance did not necessarily lead to assimilation. No one, for example, assimilated the one-unit torso, even though considerable stress was laid on it in training.

And finally, it is interesting, especially in view of the subliminal nature of this assimilation, that the actors tended to pick up what they could use. Norris, for example, needed relatively little work on the body; his habits were already fairly close to the Kabuki style to begin with. However, by assimilating Matagoro's characteristic use of facial expression, he added an additional dimension to his performance.

Table 65 is a summary of the probabilities values from the earlier data for each actor. As before, a value of 1 shows high probability that the result in question is due to chance, while a value of 0 shows low probability. It can be observed from this table that the results shown here are generally very likely to be not due to chance. First of all, the relatively high proportion of stable scales is almost certainly not due to chance in any performance by any of the actors in this study. Secondly, the data for overall change toward Matagoro (TT) and away from him (TA) are also very low, indicating a very small probability that the observed overall changes are due to chance. Thirdly, even in the very specific categories such as change toward and away from specific styles, no probability exceeds .30. The

TABLE 65
PROBABILITIES OF CHANGE BY ACTORS AND ROLES

	NC	TB	TD	TP	TT	AB	AD	AP	TA	AM
Shimabuku.....	.00	.11	.19	.14	.00	.11	.16	.07	.00	.00
Act II.....	.00	.12	.12	.24	.01	.19	.19	.21	.01	.00
Act IV.....	.00	.30	.07	.13	.00	.18	.30	.13	.00	.00
Brown.....	.00	.00	.13	.13	.07	.14	.00	.13	.01	.00
Astrov.....	.00	.14	.10	.20	.04	.14	.10	.08	.09	.00
Macbeth.....	.00	.00	.14	.18	.01	.15	.01	.15	.01	.00
Concannon.....	.00	.04	.03	.01	.07	.01	.00	.01	.00	.00
Hero.....	.00	.03	.13	.03	.11	.12	.01	.05	.00	.00
Agave.....	.00	.19	.09	.05	.09	.01	.03	.09	.05	.00
Soper.....	.00	.09	.10	.05	.05	.00	.02	.12	.07	.00
Christy.....	.00	.07	.17	.00	.05	.15	.07	.16	.09	.00
Sammy.....	.00	.21	.11	.11	.00	.00	.11	.21	.11	.00
Honda.....	.00	.08	.03	.05	.11	.02	.09	.23	.00	.00
Ream.....	.00	.03	.24	.16	.05	.24	.05	.05	.00	.00
Omori.....	.00	.12	.23	.23	.01	.28	.22	.22	.00	.00

NC = no change. T = toward. A = away. B = both styles. D = dance style. P = plain style. TT = total change toward Matagoro. TA = total change away. AM = ambiguous change.

probability that the results of this study are due to chance would appear to be rather low.

Summary of the study

This study develops a methodology for the analysis of live performance. The results obtained from the analyses in this study show that a systematic, behavioral approach such as that employed here can be a very sensitive tool for describing and comparing performance behavior, even across genre and cultural boundaries. This approach enables the researcher in the performing arts to deal directly with the basic stuff of the subject: the behavior of performers. Any research project involving performance practice can benefit from application of procedures like those used here.

The methodology of this study is based on the work of authors in the field of Kabuki acting, Laban movement analysis, speech science, and ethnomusicology, particularly Ann Hutchinson, Cecily Dell, Milton Cown, and Alan Lomax.

In some cases, the observations made in the prior literature on Kabuki acting support the finding of this study. In general, this study involves a much more systematic and detailed study than does the prior literature. Furthermore, this study devotes its attention to the work of a particular Kabuki actor in a very restricted range of the Kabuki repertory. Hence there are relatively few points of contact between this study and the prior literature on Kabuki acting.

The literature from the fields of Laban movement analysis, speech science, and ethnomusicology is used as methodological guidance and inspiration. The conceptual structure of Laban movement analysis forms the basis of the theory of movement underlying the analysis in this study; likewise the work used from the field of speech science informs the analyses of vocal behavior presented here. The form of this study and of the analysis procedures used here owes a great deal to the ethnomusicological work of Alan Lomax. The contribution made by these fields to the present study underscores their importance for this type of research in the performing arts.

A general theory of performance and a method of performance analysis is presented. This theory sees performance as behavior, as human social behavior involving a transaction between performer and audience. It suggests that the mutual responses of the performer and the audience may be broadly described as a mixture of cognition, affect, and aesthesis. The transaction between performer and audience is seen as a set of perception and response loops in which stimuli and responses are mutually exchanged through consensually validated interpretation of the behavior of the performer and of the audience. It focuses the attention of the researcher on the necessity for studying the behavior of the performer as the key element in the performance process and as the sole medium by which the performance process can operate.

It then goes on to describe the particular methodology used in this study to implement this theory of performance. Behavior is to

be described by a system of rating scales such that each scale describes the state or level of a particular aspect of performance. The problems of implementing the particular scale set used in this study are then analyzed.

Finally, it presents the numerical procedures used to deal with the data generated by applying the scale set to a set of performances. These procedures permit systematic comparisons between a set of performances furnished by the subjects of this study and a benchmark set of performances furnished by Nakamura Matagoro. While these procedures are specifically adapted to this study, they could be adapted to the general problem of comparing any set of performances to any benchmark set.

A manual of performance analysis is presented based on the methodology developed in the study. It describes and defines in detail each scale used in the scale set developed for this study. This manual is sufficiently general to permit its use in research on a wide variety of performance forms. Needless to say, those who undertake any further application of this manual will adapt, modify, or extend it to suit their particular needs and purposes. Nevertheless, it forms a base of measurements that can be useful in the study of almost any performing art.

This study applies this method of performance analysis to performances by Nakamura Matagoro II, Chief Instructor in Kabuki at the National Theater of Japan, who conducted the program in Kabuki acting involving the students in this study. The principal finding of this chapter is that Matagoro shows two distinct styles of

performance, referred to here as the "plain" and "dance" styles. While certain elements of these styles are common to both, the distinction between them is clear-cut and affects most areas of Matagoro's performance patterns.

This method for performance analysis is then applied to the analysis of the performance patterns of a group of Western acting students participating in an intensive Asian theater training program. These students had prior experience in Western performance but little prior exposure to Asian performance.

Samples of performance in materials from the Western repertory were collected from each student early in the program and near the end of the program. Each student's performance patterns are compared to those of Matagoro, their instructor, to show whether they tend to change toward his style, to change away from it, or to show no change. Analyses are presented of how the performance patterns of the student actors changed over the course of an intensive program in the acting techniques of the Kabuki theatre of Japan. A conclusion is reached as to the nature of the change shown by each actor.

Finally, the results are interpreted in terms of the group as a whole. Overall, the group showed a dominant stability of performance pattern. Assimilation to Matagoro's performance patterns did occur, as does change away from Matagoro's performance. Assimilation of Matagoro's performance patterns is at the level of subtle aspects of performance, those most likely to be beneath the student's level of awareness.

General conclusions

The effect of studying Kabuki acting on the performances of materials from the Western repertory by the student actors in this study can be stated as follows:

1. The group shows a dominant stability of performance pattern.
2. There is assimilation of Kabuki performance patterns. The assimilated material is either in an area the student is predisposed to observe, demonstrates its value so convincingly that the student's resistance is overcome, is repeated until it becomes habit, or is independently found to be valuable by the student.
3. This group of students tended to place Kabuki and Western acting in different worlds. The personal, cultural, and artistic reasons for so doing are probably to be expected in most Asian theater production work.
4. The assimilations tend to be lasting. Since they are assimilated rather beneath the level of full consciousness, they tend to remain so. Observations of members of the Kabuki-Hawaii program in later years, such as those of Carol Honda presented here, have tended to indicate that the Kabuki influence definitely lasts, though only time will tell whether it will eventually fade.

Appendix

The following computer programs analyze the data and print the figures used in this study. The program listings are generated directly from properly functioning source code, hence the difference in type style.

CHARTS/DPG produces the bar-graph profiles used to portray the performance patterns of Matagoro and the student actors. STUDENTS/DPG produces the charts used to compare the student actors to Matagoro. MATAGORO/DPG produces the figures used to analyze Matagoro's performance patterns in Chapter VII.

These programs are written in TRS-80 Model III BASIC. In Model III BASIC, the LET statement is optional. To conserve memory space, it is omitted throughout these programs.

```

10 CLEAR 500:CLS:DIMD(70)
20 PRINT"Don't bother me, I'm running CHARTS/DFG."
30 OPEN"D",1,"CHARTS01/DTX"
40 FORP=1TO26:READT$'                               Top of the loop
50 IFF=05THENCLOSE:OPEN"D",1,"CHARTS02/DTX"
60 IFF=13THENCLOSE:OPEN"D",1,"CHARTS03/DTX"
70 IFF=21THENCLOSE:OPEN"D",1,"CHARTS04/DTX"
80 MC=00:CR=45:Z=2
90 M2=MC+31:S1=MC+20:S2=M2+20
100 PRINT#1,STRING$(60,45)
110 PRINT#1,TAB(30-LEN(T$)/2)T$
120 PRINT#1,STRING$(60,45)
130
PRINT#1,TAB(S1);"1";TAB(S1+Z);"2";TAB(S1+2*Z);"3";TAB(S1+3*Z
);"4";TAB(S1+4*Z);"5";TAB(S2);"1";TAB(S2+Z);"2";TAB(S2+2*Z);
"3";TAB(S2 + 3*Z);"4";TAB(S2 + 4*Z)"5"
140 FORI=1TO70:READX:IFX=0THEND(I)=0:GOTO160
150 D(I)=(X-1)*Z+1
160 NEXTI
170 PRINT#1,TAB(MC) "01 Area tension";TAB(S1);
STRING$(D(1),CR);TAB(M2); "36 Vocal mode";TAB(S2);
STRING$(D(36),CR)
180 PRINT#1,TAB(MC) "02 Eye tension";TAB(S1);
STRING$(D(2),CR);TAB(M2); "37 Tightness";TAB(S2);

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```
STRING$(D(37),CR)
190 PRINT#1,TAB(MC) "03 Mouth tension";TAB(S1);
STRING$(D(3),CR);TAB(M2); "38 Nasality";TAB(S2);
STRING$(D(38),CR)
200 PRINT#1,TAB(MC) "04 Facial activity"; TAB(S1);
STRING$(D(4),CR);TAB(M2); "39 Noise";TAB(S2);
STRING$(D(39),CR)
210 PRINT#1,TAB(MC) "05 Posturality";TAB(S1);
STRING$(D(5),CR);TAB(M2); "40 Breathiness";TAB(S2);
STRING$(D(40),CR)
220 PRINT#1,TAB(MC) "06 Head movement";TAB(S1);
STRING$(D(6),CR)
230 PRINT#1,TAB(M2); "41 Lengthening";TAB(S2);
STRING$(D(41),CR)
240 PRINT#1,TAB(MC) "07 Gesture amount";TAB(S1);
STRING$(D(7),CR);TAB(M2); "42 Accent";TAB(S2);
STRING$(D(42),CR)
250 PRINT#1,TAB(MC) "08 Limb relation";TAB(S1);
STRING$(D(8),CR);TAB(M2); "43 Attack";TAB(S2);
STRING$(D(43),CR)
260 PRINT#1,TAB(MC) "09 Turning";TAB(S1);
STRING$(D(9),CR);TAB(M2); "44 Precision";TAB(S2);
STRING$(D(44),CR)
270 PRINT#1,TAB(MC) "10 Flexure";TAB(S1); STRING$(D(10),CR)
280 PRINT#1,TAB(M2); "45 Width";TAB(S2); STRING$(D(45),CR)
```

```

290 PRINT#1,TAB(MC) "11 Supports";TAB(S1);
STRING$(D(11),CR); TAB(M2); "46 Center";TAB(S2);
STRING$(D(46),CR)
300 PRINT#1,TAB(MC) "12 Weight transfer"; TAB(S1);
STRING$(D(12),CR); TAB(M2); "47 Rest pitch"; TAB(S2);
STRING$(D(47),CR)
310 PRINT#1,TAB(MC) "13 Aerial steps"; TAB(S1);
STRING$(D(13),CR); TAB(M2); "48 Pitch structure";TAB(S2);
STRING$(D(48),CR)
320 PRINT#1,TAB(MC) "14 Path shape";TAB(S1);
STRING$(D(14),CR); TAB(M2); "49 Vibrato"; TAB(S2);
STRING$(D(49),CR)
330 PRINT#1,TAB(MC) "15 Turning";TAB(S1);
STRING$(D(15),CR); TAB(M2); "50 Slide";TAB(S2);
STRING$(D(50),CR)
340 PRINT#1,TAB(MC) "16 Floor contact";TAB(S1);
STRING$(D(16),CR);
350 PRINT#1,TAB(M2); "51 Width";TAB(S2); STRING$(D(51),CR)
360 PRINT#1,TAB(MC) "17 Torso units";TAB(S1);
STRING$(D(17),CR); TAB(M2); "52 Center";TAB(S2);
STRING$(D(52),CR)
370 PRINT#1,TAB(MC) "18 Torso motion"; TAB(S1);
STRING$(D(18),CR); TAB(M2); "53 Rest level"; TAB(S2);
STRING$(D(53),CR)
380 PRINT#1,TAB(MC) "19 Flexibility";TAB(S1);

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```
STRING$(D(19),CR); TAB(M2); "54 Volume change"; TAB(S2);  
STRING$(D(54),CR)  
390 PRINT#1,TAB(MC) "20 Mobility";TAB(S1);  
STRING$(D(20),CR)  
400 PRINT#1,TAB(MC) "21 Posturality";TAB(S1);  
STRING$(D(21),CR)  
410 PRINT#1,TAB(M2); "55 Vocal  
shape"; TAB(S2); STRING$(D(55),CR);  
420 PRINT#1,TAB(M2); "56 Duration";TAB(S2);  
STRING$(D(56),CR)  
430 PRINT#1,TAB(MC) "22 Flow";TAB(S1); STRING$(D(22),CR);  
TAB(M2); "57 Emphasis";TAB(S2); STRING$(D(57),CR)  
440 PRINT#1,TAB(MC) "23 Weight"; TAB(S1); STRING$(D(23),CR)  
450 PRINT#1,TAB(MC) "24 Space";TAB(S1); STRING$(D(24),CR);  
TAB(M2); "58 Duration";TAB(S2); STRING$(D(58),CR)  
460 PRINT#1,TAB(MC) "25 Time";TAB(S1); STRING$(D(25),CR);  
TAB(M2); "59 Emphasis";TAB(S2); STRING$(D(59),CR)  
470 PRINT#1,TAB(MC) "26 Activation";TAB(S1);  
STRING$(D(26),CR); TAB(M2); "60 Passage"; TAB(S2);  
STRING$(D(60),CR);  
480 PRINT#1,TAB(M2); "61 Initiation"; TAB(S2);  
STRING$(D(61),CR)  
490 PRINT#1,TAB(MC) "27 Shape mode";TAB(S1);  
STRING$(D(27),CR); TAB(M2); "62 Transition"; TAB(S2);  
STRING$(D(62),CR)
```

```

500 PRINT#1,TAB(MC) "28 Expansion"; TAB(S1);
STRING$(D(28),CR)
510 PRINT#1,TAB(MC) "29 Preferred axis";TAB(S1);
STRING$(D(29),CR); TAB(M2); "63 Elaboration";TAB(S2);
STRING$(D(63),CR)
520 PRINT#1,TAB(MC) "30 Preferred plane"; TAB(S1);
STRING$(D(30),CR); TAB(M2); "64 Compounding";TAB(S2);
STRING$(D(64),CR);
530 PRINT#1,TAB(M2); "65 Overall rate";TAB(S2);
STRING$(D(65),CR)
540 PRINT#1,TAB(MC) "31 Visual focus"; TAB(S1);
STRING$(D(31),CR); TAB(M2); "66 Phrase rate";TAB(S2);
STRING$(D(66),CR)
550 PRINT#1,TAB(MC) "32 Kinesphere size"; TAB(S1);
STRING$(D(32),CR); TAB(M2); "67 Pause";TAB(S2);
STRING$(D(67),CR)
560 PRINT#1,TAB(MC) "33 Kinesphere zone"; TAB(S1);
STRING$(D(33),CR); TAB(M2); "68 Meter";TAB(S2);
STRING$(D(68),CR)
570 PRINT#1,TAB(MC) "34 Active touch"; TAB(S1);
STRING$(D(34),CR); TAB(M2); "69 Rhythmic variety"; TAB(S2);
STRING$(D(69),CR)
580 PRINT#1,TAB(MC) "35 Spatial retent."; TAB(S1);
STRING$(D(35),CR); TAB(M2); "70 Metric change"; TAB(S2);
STRING$(D(70),CR)

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```

590 PRINT#1,STRING$(60,45)
600 PRINT#1,TAB(12) "Inapplicable scales are left blank."
610 NEXT P           'LOOP BACK FOR THE NEXT CHART
620 CLOSE:END
630 DATA Nakamura Matagoro; plain style
composite,3,2,2,2,1,2,2,4,1,3,2,5,0,1,1,5,1,1,2,2,1,4,3,2,2,
2,5,2,3,1,4,2,3,3,3,4,2,2,3,2,3,3,2,3,4,4,2,2,1,4,3,4,3,3,3,
3,2,2,2,3,3,4,2,2,2,3,3,2,3,2
640 DATA Nakamura Matagoro; dance style
composite,5,2,2,2,5,2,4,3,5,5,1,5,5,1,1,5,1,5,2,4,2,4,2,2,2,
5,5,4,4,3,4,3,4,4,3,4,2,3,3,2,2,3,3,3,4,3,2,2,1,5,4,4,4,4,4,
2,2,2,2,3,4,4,2,2,3,4,3,3,4,2
650 DATA Nakamura Matagoro as
Enju,3,3,2,2,1,2,2,4,1,3,1,5,0,1,1,5,1,1,2,2,1,4,3,4,2,2,2,1
,2,3,4,1,3,3,3,4,2,2,2,2,3,2,4,3,4,4,3,3,1,4,3,3,3,1,4,3,1,2
,4,2,3,3,2,2,2,2,3,2,3,1
660 DATA Nakamura Matagoro as
Bimyo,2,3,2,2,1,5,2,4,1,3,2,5,0,2,1,5,1,1,2,3,2,3,3,2,4,1,1,
2,3,2,4,2,3,4,1,3,2,2,3,2,3,3,3,3,3,3,3,2,1,2,2,3,3,2,3,3,3,
4,4,2,3,4,1,2,2,2,4,2,2,1
670 DATA Norris Shimabuku as Launce; Act II;
"before",5,2,2,3,2,3,4,1,3,3,1,5,0,1,1,5,2,5,3,3,3,4,2,4,4,4
,3,4,5,1,5,4,4,3,3,2,2,2,2,2,3,3,3,3,4,3,3,1,1,2,4,3,3,3,3,2
,2,2,2,2,4,4,1,4,3,4,3,1,3,1
680 DATA Norris Shimabuku as Launce; Act II;

```

"after", 5, 2, 2, 4, 4, 3, 3, 1, 3, 3, 1, 5, 0, 1, 1, 5, 2, 4, 2, 3, 3, 4, 4, 4, 2, 4,
3, 4, 5, 1, 5, 4, 3, 3, 2, 3, 2, 1, 2, 1, 3, 3, 3, 3, 3, 2, 2, 1, 1, 2, 4, 4, 3, 3, 2, 3,
2, 2, 2, 2, 3, 4, 2, 4, 3, 4, 3, 1, 3, 1

690 DATA Norris Shimabuku as Launce; Act IV;

"before", 3, 2, 2, 2, 2, 3, 3, 1, 3, 3, 1, 3, 0, 1, 1, 5, 2, 5, 3, 3, 2, 4, 4, 4, 4, 4,
, 3, 4, 2, 1, 5, 3, 4, 3, 3, 2, 2, 2, 2, 2, 2, 3, 3, 3, 4, 4, 3, 1, 1, 2, 3, 4, 3, 3, 2, 2,
, 2, 2, 2, 2, 3, 4, 1, 4, 3, 4, 3, 1, 3, 1

700 DATA Norris Shimabuku as Launce; Act IV;

"after", 5, 2, 2, 4, 3, 5, 3, 1, 5, 3, 3, 5, 0, 2, 1, 5, 2, 5, 3, 3, 3, 2, 2, 4, 2, 4,
3, 4, 2, 1, 5, 3, 4, 3, 3, 2, 2, 2, 2, 2, 2, 3, 3, 3, 4, 4, 3, 1, 1, 2, 3, 4, 3, 3, 2, 2,
2, 2, 2, 2, 3, 4, 1, 4, 3, 4, 3, 1, 3, 1

710 DATA Hal Brown as Astrov;

"before", 4, 4, 1, 2, 3, 2, 3, 1, 3, 3, 1, 5, 0, 1, 2, 5, 2, 5, 2, 2, 2, 4, 3, 2, 4, 2,
, 3, 4, 3, 3, 4, 4, 3, 2, 1, 3, 2, 2, 2, 2, 2, 2, 3, 3, 3, 2, 2, 1, 1, 2, 4, 3, 4, 3, 3, 4,
, 3, 2, 2, 5, 3, 4, 1, 3, 3, 4, 3, 1, 3, 1

720 DATA Hal Brown as Astrov;

"after", 5, 2, 2, 3, 3, 2, 3, 1, 5, 3, 1, 5, 0, 1, 2, 5, 3, 5, 4, 3, 2, 4, 4, 2, 4, 4,
2, 4, 3, 3, 4, 4, 2, 1, 2, 2, 2, 2, 4, 2, 3, 3, 4, 3, 2, 2, 3, 1, 1, 2, 4, 3, 2, 3, 5, 3,
2, 4, 2, 2, 2, 4, 1, 2, 2, 3, 3, 1, 2, 1

730 DATA Hal Brown as Macbeth;

"before", 3, 4, 2, 2, 2, 2, 3, 3, 4, 3, 1, 5, 0, 2, 3, 5, 2, 2, 3, 3, 3, 2, 4, 2, 1, 1,
, 3, 4, 2, 3, 1, 4, 2, 1, 1, 2, 3, 2, 2, 2, 4, 2, 4, 3, 4, 2, 3, 1, 1, 1, 3, 2, 3, 2, 2, 4,
, 4, 3, 2, 2, 3, 4, 1, 3, 1, 3, 4, 2, 3, 1

740 DATA Hal Brown as Macbeth;

"after", 3, 2, 2, 3, 3, 2, 3, 1, 2, 3, 1, 5, 0, 1, 2, 5, 2, 5, 3, 2, 2, 4, 4, 4, 2, 4,

2,4,3,3,1,3,2,2,2,3,2,1,3,2,3,2,3,3,2,2,2,1,1,2,3,3,4,3,2,2,
3,2,3,2,1,4,1,2,2,3,4,1,2,1

750 DATA Roseann Concannon as Hero;

"before",1,3,2,3,2,3,2,1,3,3,1,5,0,1,2,2,2,5,2,3,2,4,2,2,3,3,
,2,2,3,1,4,3,4,2,1,3,1,1,2,2,3,2,2,3,3,1,3,1,1,1,2,2,3,1,2,2,
,2,2,2,2,4,2,2,2,3,4,2,1,2,1

760 DATA Roseann Concannon as Hero;

"after",3,3,2,2,1,2,2,4,2,3,1,5,0,1,1,5,2,5,2,2,1,3,2,2,3,4,
2,3,3,3,4,3,3,1,3,3,1,1,1,2,2,3,2,3,2,4,3,1,1,1,1,2,3,1,2,2,
2,4,1,5,3,4,2,2,3,4,3,1,2,1

770 DATA Roseann Concannon as Agave;

"before",3,3,2,3,3,2,3,2,3,3,1,5,0,1,2,5,2,4,2,2,2,4,4,2,2,2,
,5,4,3,3,5,3,3,1,2,2,2,1,2,3,2,2,4,3,3,4,4,1,1,2,3,1,2,2,1,3,
,2,2,2,2,3,4,1,4,3,4,3,1,5,1

780 DATA Roseann Concannon as Agave;

"after",3,3,2,3,2,2,3,2,3,3,1,5,0,1,2,5,2,4,2,2,1,4,4,4,4,3,
1,3,1,1,5,2,3,1,1,3,2,1,1,3,3,3,4,3,2,4,2,1,1,2,3,4,3,4,3,3,
3,3,3,3,4,3,1,2,3,4,3,1,3,1

790 DATA Tony Soper as Christy Mahon;

"before",3,3,2,3,2,2,3,1,3,3,1,5,5,1,1,5,2,4,3,3,2,4,3,4,4,3,
,3,3,3,2,3,3,3,2,2,3,3,2,2,3,2,2,2,3,2,4,4,1,1,2,2,3,3,3,3,2,
,2,2,2,2,3,2,1,1,3,4,3,1,1,1

800 DATA Tony Soper as Christy Mahon;

"after",3,2,2,3,3,2,3,1,3,3,1,5,4,1,1,5,2,5,2,3,4,4,4,4,4,4,
4,3,5,2,3,4,4,3,3,4,2,1,1,1,3,1,3,4,3,3,3,1,1,1,3,3,3,4,2,3,

2,3,3,2,2,4,2,3,2,3,2,1,3,1

810 DATA Tony Soper as Sammy Goldenbaum;

"before",3,3,2,3,3,2,2,1,3,3,1,0,0,0,1,5,1,5,1,2,3,5,4,4,2,2
,2,2,3,3,5,2,2,1,2,3,2,1,1,1,2,2,2,3,3,4,3,1,1,2,2,3,2,2,3,3
,2,2,2,2,3,4,1,2,1,4,4,1,2,1

820 DATA Tony Soper as Sammy Goldenbaum;

"after",3,4,2,2,2,2,2,1,3,3,1,0,0,0,0,5,2,2,2,2,2,3,3,4,4,3,
1,1,0,0,5,1,1,1,1,3,2,1,2,2,2,2,2,3,3,4,4,1,1,1,2,1,1,2,3,2,
2,1,2,2,3,1,1,2,1,4,4,1,1,1

830 DATA Carol Honda as

Sonya,3,2,3,3,3,3,3,2,1,3,1,5,0,1,1,5,1,4,2,3,3,4,4,4,4,4,3,
2,3,3,4,2,2,3,1,3,3,2,2,3,3,3,3,3,3,4,3,1,1,2,2,3,3,4,2,3,4,
2,4,2,2,2,1,3,2,4,3,1,3,1

840 DATA Carol Honda as Mrs.

Murata,3,2,2,3,4,3,4,2,1,4,1,5,0,1,1,5,1,1,2,3,2,4,2,4,4,2,2
,2,2,3,4,2,3,3,3,4,3,2,2,1,2,3,3,3,3,4,2,1,1,2,3,3,3,4,4,2,2
,2,2,2,2,2,3,3,4,5,3,1,3,1

850 DATA Dale Ream in Glass Slippers;

"before.",3,3,4,3,2,2,3,3,3,3,1,3,0,1,1,5,2,2,2,1,1,4,4,3,2,
2,4,4,3,3,5,3,3,2,1,2,1,2,2,1,3,3,2,3,1,2,2,1,2,1,2,2,3,3,1,
2,2,2,2,2,2,2,2,2,3,3,3,1,2,1

860 DATA Dale Ream in Glass Slippers;

"after",3,2,2,3,2,2,3,3,3,3,1,3,0,1,2,5,2,2,2,2,2,4,2,3,2,2,
4,4,3,3,5,3,3,2,1,2,1,2,2,1,3,3,2,3,2,2,3,1,1,2,3,3,3,3,2,3,
2,2,2,2,3,2,2,2,3,4,4,1,2,1

870 DATA Russell Omori as Guy Smith;

"before.",5,2,2,3,3,2,3,1,5,3,1,5,0,2,2,5,1,2,2,3,1,4,3,3,3,
4,2,4,2,1,4,3,4,2,1,3,1,1,2,2,2,3,2,4,3,4,3,1,1,1,2,2,3,2,5,
3,4,3,2,2,2,2,3,4,3,4,2,1,3,1

880 DATA Russell Omori as Guy Smith;

"after",3,2,2,3,3,2,3,1,5,3,1,5,0,2,2,5,1,2,1,3,3,4,2,4,4,4,
4,4,2,3,4,4,3,2,2,3,1,1,2,2,2,3,3,4,3,4,3,1,1,2,2,3,3,2,5,3,
4,3,3,2,3,2,3,3,3,4,2,1,3,1

890 SAVE "CHARTS/DFG",A

```

10 CLS:PRINT"Don't bother me, I'm running STUDENTS/DPG."
20 CLEAR150:DEFINTI,T,L,M,C,D,E,V
30 DIM N$(26,3)      '26 performances, 3 labels
40 DIM V(26,70)      '26 performances, 70 scale values
50 DIM C(8,70,2)     '8 actors, 70 changes, 2 roles each
60 DIM D(8,10,2)     '8 actors, 10 types of change, 2 roles
70 DIM E(12,4,70)    '12 roles, ABCD values for 70 scales
80 DIM F(8,10,2)     '8 actors, 10 probabilities, 2 roles
90 FL$="      NC   TB   TD   TP   TT   AB   AD   AP   TA
AM"
100 FM$="           NC   TB   TD   TP   TT   AB   AD   AP
TA   AM"
110 TC$="%          % ##%   ##% ##% ##%   ##%   ##% ##%
##%   ##%"
120 FZ$="          NC   TB   TD   TP   TT   AB   AD   AP
TA   AM"
130 TZ$="%      % .###   .### .### .### .###   .### .### .###
.### .###"
140 NZ$="%      % ###   ###  ###  ###  ###   ###  ###  ###
###  ###"
150 BC$="### # # # # "
160 AB$="  A B C D   A B C D   A B C D   A B C D
A B C D"
170 TF$="%          % .##   .## .## .## .##   .## .## .##
.##   .##"

```

```

180 TW$="## %           %
190 W$(0)="ERROR";W$(1)="no change";W$(2)="twrd both"
200 W$(3)="twrd dance";W$(4)="twrd plain"
210 W$(5)="all toward";W$(6)="away both";W$(7)="away dance"
220 W$(8)="away plain";W$(9)="all away";W$(10)="ambiguous"
230 P$="  ###";FP$=" .###"
240 '                               read data from data lines
250 FORPF=1T026:READN$(PF,1),N$(PF,2),N$(PF,3)
260 FORM=1T070:READV(PF,M):NEXTM,PF
270 '                               set control numbers and ABCD values
280 FORL=1T012:V1=3+((L-1)*2):V2=V1+1
290 '                               get actor (I) from role (L)
300 IFL=1THENI=1
310 IFL=2ORL=3THENI=2
320 IFL=4ORL=5THENI=3
330 IFL=6ORL=7THENI=4
340 IFL=8ORL=9THENI=5
350 IFL=10THENI=6
360 IFL=11THENI=7
370 IFL=12THENI=8
380 '                               get before/after flag (J)
390 J=2:IFL/2=INT(L/2)THENJ=1
400 IFL=11THENJ=1
410 '                               get ABCD values
420 FORM=1T070

```

```

430 A=V(V1,M):B=V(V2,M):C=V(1,M):D=V(2,M):
440 E(L,1,M)=A:E(L,2,M)=B:E(L,3,M)=C:E(L,4,M)=D:GOSUB460
450 NEXTM,L:GOTO790
460 '                                     types-of-change driver
470 X=1
480 IFM<4OR(M>7ANDM<17)OR(M>21ANDM<32)THENX=2
490 IFM=6ORM=18ORM=34ORM=36ORM=55ORM=60THENX=2
500 IFM=62ORM=68THENX=2
510 ONXGOSUB520 ,630 :GOSUB740 :RETURN
520 '                                     continuous-scales logic
530 IFA=BTHEN T=1:TT=0:TA=0:RETURN
540
IF(C=DANDB=C)OR(A<BANDB<CANDC<=D)OR(A<BANDB<DANDD<=C)OR(C<=D
ANDD<BANDB<A)OR(D<=CANDC<BANDB<A)THEN T=2:TT=1:TA=0:RETURN
550
IF(B=DANDA<>C)OR(A<CANDC<BANDB<D)OR(D<BANDB<CANDC<A)THEN T=3:
TT=1:TA=0:RETURN
560
IF(B=CANDA<>D)OR(A<DANDD<BANDB<C)OR(C<BANDB<DANDD<A)THEN T=4:
TT=1:TA=0:RETURN
570
IF(C=DANDA=C)OR(C<=DANDD<AANDA<B)OR(D<=CANDC<AANDA<B)OR(B<AA
NDA<CANDC<=D)OR(B<AANDA<DANDD<=C)THEN T=6:TT=0:TA=1:RETURN
580
IF(A=DANDB<>C)OR(D<AANDA<CANDC<B)OR(B<CANDC<AANDA<D)THEN T=7:

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TT=0:TA=1:RETURN
590
IF (A=CANDB<>D) OR (C<AANDA<DANDD<B) OR (B<DANDD<AANDA<C) THEN T=8:
TT=0:TA=1:RETURN
600
IF (A=CANDD=B) OR (C<AANDA<BANDB<D) OR (D<BANDB<AANDA<C) THEN T=3: T
T=1:TA=0:RETURN
610
IF (A=DANDB=C) OR (D<AANDA<BANDB<C) OR (C<BANDB<AANDA<D) THEN T=4: T
T=1:TA=0:RETURN
620 T=10:TT=0:TA=0:RETURN
630 '                               discontinuous-scales logic
640 IFA=BTHEN T=1:TT=0:TA=0:RETURN
650 IFC=DANDB=CTHEN T=2:TT=1:TA=0:RETURN
660 IFB=DANDA<>CTHEN T=3:TT=1:TA=0:RETURN
670 IFB=CANDA<>DTHEN T=4:TT=1:TA=0:RETURN
680 IFC=DANDA=CTHEN T=6:TT=0:TA=1:RETURN
690 IFA=DANDB<>CTHEN T=7:TT=0:TA=1:RETURN
700 IFA=CANDB<>DTHEN T=8:TT=0:TA=1:RETURN
710 IFA=CANDB=DTHEN T=3:TT=1:TA=0:RETURN
720 IFA=DANDB=CTHEN T=4:TT=1:TA=0:RETURN
730 T=10:TT=0:TA=0:RETURN
740 C(I,M,J)=T
750 D(I,T,0)=D(I,T,0)+1:D(I,T,J)=D(I,T,J)+1
760 D(I,5,0)=D(I,5,0)+TT:D(I,5,J)=D(I,5,J)+TT

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770 D(I,9,0)=D(I,9,0)+TA:D(I,9,J)=D(I,9,J)+TA
780 RETURN
790 *                               probability calculator
800 FORI=1TO8:FORJ=0TO2:FORT=1TO10
810 IFT=1ORT=5QRT=9ORT=10THENGOTO820 ELSEGOTO830
820 N=D(I,1,J)+D(I,5,J)+D(I,9,J)+D(I,10,J):GOTO840
830 N=D(I,5,J)+D(I,9,J)
840 Y=D(I,T,J):IFT=1ORT=5QRT=9ORT=10THENP=1/4ELSEP=1/6
850 F=1:G=N-Y:IFG=0THENG=1
860 H=P[Y*(1-P)]/(N-Y)
870 FORL=1TON:IFY=0THENF=1:GOTO910
880 F=F*(N/(Y*G))
890 N=N-1:IFY>1THENY=Y-1ELSEY=1
900 IFG>1THENG=G-1ELSEG=1
910 NEXTL:F(I,T,J)=F*H
920 NEXTT,J,I
930 *                               call printout routines
940 FORRT=1TO6
950 ON RT GOSUB 970 ,1260 ,1550 ,1690 ,1980
960 NEXTRT:END
970 *                               printout relative summaries
980 OPEN"0",1,"RELASUMM/DTX"
990 FORI=2TO8:IFI=2THENGOSUB2280 ELSEGOSUB2270
1000 IFI=2THENV1=5
1010 IFI=3THENV1=9

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1020 IFI=4THENV1=13
1030 IFI=5THENV1=17
1040 IFI=6THENV1=21
1050 IFI=7THENV1=23
1060 IFI=8THENV1=25
1070 TT#=N$(V1,1)+": SUMMARY RELATIVE TO MATAGORO."
1080 PRINT#1,TT#:GOSUB2280
1090 PRINT#1,"Total for all roles: see key
below.":PRINT#1,PZ#
1100
PRINT#1,USINGNZ#;"S";D(I,1,0);D(I,2,0);D(I,3,0);D(I,4,0);D(I
,5,0);D(I,6,0);D(I,7,0);D(I,8,0);D(I,9,0);D(I,10,0)
1110
PRINT#1,USINGTZ#;"P";F(I,1,0);F(I,2,0);F(I,3,0);F(I,4,0);F(I
,5,0);F(I,6,0);F(I,7,0);F(I,8,0);F(I,9,0);F(I,10,0)
1120 IFI>5PRINT#1,"This actor performed only one
role.":GOTO1190
1130 PRINT#1,"First role:":PRINT#1,PL#
1140
PRINT#1,USINGNZ#;"S";D(I,1,1);D(I,2,1);D(I,3,1);D(I,4,1);D(I
,5,1);D(I,6,1);D(I,7,1);D(I,8,1);D(I,9,1);D(I,10,1)
1150
PRINT#1,USINGTZ#;"P";F(I,1,1);F(I,2,1);F(I,3,1);F(I,4,1);F(I
,5,1);F(I,6,1);F(I,7,1);F(I,8,1);F(I,9,1);F(I,10,1)
1160 PRINT#1,"Second role:":PRINT#1,PL#

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1170
PRINT#1,USINGNZ#;"S";D(I,1,2);D(I,2,2);D(I,3,2);D(I,4,2);D(I
,5,2);D(I,6,2);D(I,7,2);D(I,8,2);D(I,9,2);D(I,10,2)
1180
PRINT#1,USINGTZ#;"P";F(I,1,2);F(I,2,2);F(I,3,2);F(I,4,2);F(I
,5,2);F(I,6,2);F(I,7,2);F(I,8,2);F(I,9,2);F(I,10,2)
1190 GOSUB2280 :
1200 PRINT#1,"S = number of changes noted. P = probability
of S. NC = no "
1210 PRINT#1,"change. T = toward. A = away. B = both
styles. D = dance "
1220 PRINT#1,"style. P = plain style. TT = total change
toward Matagoro. "
1230 PRINT#1,"TA = total change away. AM = ambiguous
change, i. e. change "
1240 PRINT#1,"neither toward nor away from Matagoro.
"
1250 GOSUB2280 :NEXT I:CLOSE:RETURN
1260 ' printout summary of changes
1270 OPEN"O",1,"CHANSUMM/DTX"
1280 GOSUB2270
1290 TT#="SUMMARY OF CHANGES BY ACTORS AND ROLES"
1300 PRINT#1,TT#:
1310 GOSUB2280
1320 PRINT#1,"TYPES OF CHANGE (% OF ALL SCALES)":

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1330 PRINT#1,FM#:
1340 PRINT#1,"ACTORS":
1350 AC#="Shimabuku..":I=2:J=0:DP=140:GOSUB1540
1360 AC#=" Act II...":I=2:J=1:DP=70:GOSUB1540
1370 AC#=" Act IV...":I=2:J=2:DP=70:GOSUB1540
1380 AC#="Brown.....":I=3:J=0:DP=140:GOSUB1540
1390 AC#=" Astrov...":I=3:J=1:DP=70:GOSUB1540
1400 AC#=" Macbeth..":I=3:J=2:DP=70:GOSUB1540
1410 AC#="Concannon..":I=4:J=0:DP=140:GOSUB1540
1420 AC#=" Hero.....":I=4:J=1:DP=70:GOSUB1540
1430 AC#=" Agave....":I=4:J=1:DP=70:GOSUB1540
1440 AC#="Soper.....":I=5:J=0:DP=140:GOSUB1540
1450 AC#=" Christy..":I=5:J=1:DP=70:GOSUB1540
1460 AC#=" Sammy....":I=5:J=2:DP=70:GOSUB1540
1470 AC#="Honda.....":I=6:J=0:DP=70:GOSUB1540
1480 AC#="Ream.....":I=7:J=0:DP=70:GOSUB1540
1490 AC#="Omori.....":I=8:J=0:DP=70:GOSUB1540 :GOSUB2280
1500 PRINT#1,"NC = no change. T = change toward. A = away.
P = plain. D = "
1510 PRINT#1,"dance. B = both. TT = total change toward
Matagoro. TA = "
1520 PRINT#1,"total change away from Matagoro. AM =
ambiguous change. "
1530 GOSUB2280 :CLOSE:RETURN
1540

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```

PRINT#1,USINGTC#;AC#;D(I,1,J)/DP*100;D(I,2,J)/DP*100;D(I,3,J
)/DP*100;D(I,4,J)/DP*100;D(I,5,J)/DP*100;D(I,6,J)/DP*100;D(I
,7,J)/DP*100;D(I,8,J)/DP*100;D(I,9,J)/DP*100;D(I,10,J)/DP*10
0: RETURN

1550 '                                print out A, B, C, and D
values
1560 OPEN"0",1,"ABCDVALS/DTX"
1570 FORK=2TO12:GOSUB2270 :V1=3+((K-1)*2)
1580 I=E(K,0,0):J=E(K,0,1):TT#=N$(V1,1)+"; "+N$(V1,2)+" : A,
B, C, AND D VALUES.":PRINT#1,TT#;
1590 GOSUB2280 :PRINT#1,AB#;
1600 PRINT#1,"Movement structure:":ST=1:FI=21:GOSUB1650
:PRINT#1,
1610 PRINT#1,"Movement dynamics:":ST=22:FI=35:GOSUB1650
:PRINT#1,
1620 PRINT#1,"Voice:":ST=36:FI=54:GOSUB1650 :PRINT#1,
1630 PRINT#1,"Phrasing:":ST=55:FI=70:GOSUB1650 :PRINT#1,
1640 GOSUB2280 :NEXTK:CLOSE:RETURN
1650 FORM=STTOFISTEP5:FORMM=OT04
1660 IFM+MM>FITHENRETURN
1670
PRINT#1,USINGBC#;M+MM;E(K,1,M+MM);E(K,2,M+MM);E(K,3,M+MM);E(
K,4,M+MM);
1680 NEXTMM:PRINT#1,:NEXTM:RETURN
1690 '                                printout probabilities of

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change

```
1700 OPEN"0",1,"PROBCHAN/DTX"
1710 GOSUB2270
1720 TT$="PROBABILITIES OF CHANGE BY ACTORS AND ROLES"
1730 PRINT#1,TT$:
1740 GOSUB2280
1750 PRINT#1,"TYPES OF CHANGE":
1760 PRINT#1," "+PM$:
1770 PRINT#1,"ACTORS":
1780 AC$="Shimabuku..":I=2;J=0;GOSUB1970
1790 AC$=" Act II...":I=2;J=1;GOSUB1970
1800 AC$=" Act IV...":I=2;J=2;GOSUB1970
1810 AC$="Brown.....":I=3;J=0;GOSUB1970
1820 AC$=" Astrov...":I=3;J=1;GOSUB1970
1830 AC$=" Macbeth..":I=3;J=2;GOSUB1970
1840 AC$="Concannon..":I=4;J=0;GOSUB1970
1850 AC$=" Hero.....":I=4;J=1;GOSUB1970
1860 AC$=" Agave.....":I=4;J=2;GOSUB1970
1870 AC$="Soper.....":I=5;J=0;GOSUB1970
1880 AC$=" Christy..":I=5;J=1;GOSUB1970
1890 AC$=" Sammy....":I=5;J=2;GOSUB1970
1900 AC$="Honda.....":I=6;J=0;GOSUB1970
1910 AC$="Ream.....":I=7;J=0;GOSUB1970
1920 AC$="Omori.....":I=8;J=0;GOSUB1970 :GOSUB2280
1930 PRINT#1,"NC = no change. T = change toward. A = away.
```

```

P = plain. D = "
1940 PRINT#1,"dance. B = both. TT = total change toward
Matagoro. TA = "
1950 PRINT#1,"total change away from Matagoro. AM =
ambiguous change. "
1960 GOSUB2280 :CLOSE:RETURN
1970
PRINT#1,USINGTP$;AC$;F(I,1,J);F(I,2,J);F(I,3,J);F(I,4,J);F(I
,5,J);F(I,6,J);F(I,7,J);F(I,8,J);F(I,9,J);F(I,10,J):RETURN
1980 ' printout types of change
1990 OPEN"0",1,"TYPECHAN/DTX"
2000 FORI=2TO8:
2010 IFI=2THENV1=5
2020 IFI=3THENV1=9
2030 IFI=4THENV1=13
2040 IFI=5THENV1=17
2050 IFI=6THENV1=21
2060 IFI=7THENV1=23
2070 IFI=8THENV1=25
2080 FORJ=1TO2:IFI=>6ANDJ=2THENNEXTI
2090 GOSUB2270
2100 IFI>8RETURN
2110 TT$=N$(V1,1)+"; "+N$(V1+J,2)
2120 PRINT#1,TT$:
2130 PRINT#1,"TYPE OF CHANGE FOR EACH SCALE":

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```

2140 GOSUB2220
2150 PRINT#1,"Structure.....";:ST=1:FI=21:GOSUB2200
2160 PRINT#1,"Dynamics.....";:ST=22:FI=35:GOSUB2200
2170 PRINT#1,"Voice.....";:ST=36:FI=54:GOSUB2200
2180 PRINT#1,"Phrasing.....";:ST=55:FI=70:GOSUB2200
2190 GOSUB2280 :NEXTJ:NEXTI:CLOSE:RETURN
2200 FORM=STTOST+2
2210 PRINT#1,USINGTW#;M;W#(C(I,M,J));:NEXTM:PRINT#1,
2220 FORM=(ST+3)TOFISTEP4:FORMM=OTD3
2230 IF(M+MM)>FITHENPRINT#1,:RETURN
2240 PRINT#1,USINGTW#;M+MM;W#(C(I,M+MM,J));
2250 NEXTM:PRINT#1,:NEXTM:RETURN
2260 '                line-drawing and page-end routines
2270 PRINT#1,STRING$(59,45):RETURN
2280 PRINT#1,STRING$(59,45):RETURN
2290 DATA NAKAMURA MATAGORO,PLAIN
STYLE,composite,3,2,2,2,1,2,2,4,1,3,2,5,0,1,1,5,1,1,2,2,1,4,
3,2,2,2,5,2,3,1,4,2,3,3,3,4,2,2,3,2,3,3,2,3,4,4,2,2,1,4,3,4,
3,3,3,3,2,2,2,3,3,4,2,2,2,3,3,2,3,2
2300 DATA NAKAMURA MATAGORO,DANCE
STYLE,composite,5,2,2,2,5,2,4,3,5,5,1,5,5,1,1,5,1,5,2,4,2,4,
2,2,2,5,5,4,4,3,4,3,4,4,3,4,2,3,3,2,2,3,3,3,4,3,2,2,1,5,4,4,
4,4,4,2,2,2,2,3,4,4,2,2,3,4,3,3,4,2
2310 DATA NAKAMURA MATAGORO,ENJU,National Theatre of
Japan,3,3,2,2,1,2,2,4,1,3,1,5,0,1,1,5,1,1,2,2,1,4,3,4,2,2,2,

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1,2,3,4,1,3,3,3,4,2,2,2,2,3,2,4,3,4,4,3,3,1,4,3,3,3,1,4,3,1,
2,4,2,3,3,2,2,2,2,3,2,3,1

2320 DATA NAKAMURA MATAGORO, BIMYO, National Theatre of
Japan, 2,3,2,2,1,5,2,4,1,3,2,5,0,2,1,5,1,1,2,3,2,3,3,2,4,1,1,
2,3,2,4,2,3,4,1,3,2,2,3,2,3,3,3,3,3,3,2,1,2,2,3,3,2,3,3,3,
4,4,2,3,4,1,2,2,2,4,2,2,1

2330 DATA NORRIS SHIMABUKU, LAUNCE (ACT
II), before, 5,2,2,3,2,3,4,1,3,3,1,5,0,1,1,5,2,5,3,3,3,4,2,4,4
,4,3,4,5,1,5,4,4,3,3,2,2,2,2,2,3,3,3,3,4,3,3,1,1,2,4,3,3,3,3
,2,2,2,2,2,4,4,1,4,3,4,3,1,3,1

2340 DATA NORRIS SHIMABUKU, LAUNCE (ACT
II), after, 5,2,2,4,4,3,3,1,3,3,1,5,0,1,1,5,2,4,2,3,3,4,4,4,2,
4,3,4,5,1,5,4,3,3,2,3,2,1,2,1,3,3,3,3,3,2,2,1,1,2,4,4,3,3,2,
3,2,2,2,2,3,4,2,4,3,4,3,1,3,1

2350 DATA NORRIS SHIMABUKU, LAUNCE (ACT
IV), before, 3,2,2,2,2,3,3,1,3,3,1,3,0,1,1,5,2,5,3,3,2,4,4,4,4
,4,3,4,2,1,5,3,4,3,3,2,2,2,2,2,2,3,3,3,4,4,3,1,1,2,3,4,3,3,2
,2,2,2,2,2,3,4,1,4,3,4,3,1,3,1

2360 DATA NORRIS SHIMABUKU, LAUNCE (ACT
IV), after, 5,2,2,4,3,5,3,1,5,3,3,5,0,2,1,5,2,5,3,3,3,2,2,4,2,
4,3,4,2,1,5,3,4,3,3,2,2,2,2,2,2,3,3,3,4,4,3,1,1,2,3,4,3,3,2,
2,2,2,2,2,3,4,1,4,3,4,3,1,3,1

2370 DATA HAL
BROWN, ASTROV, before, 4,4,1,2,3,2,3,1,3,3,1,5,0,1,2,5,2,5,2,2,
2,4,3,2,4,2,3,4,3,3,4,4,3,2,1,3,2,2,2,2,2,2,3,3,3,2,2,1,1,2,

4,3,4,3,3,4,3,2,2,5,3,4,1,3,3,4,3,1,3,1

2380 DATA HAL

BROWN, ASTROV, after, 5,2,2,3,3,2,3,1,5,3,1,5,0,1,2,5,3,5,4,3,2
,4,4,2,4,4,2,4,3,3,4,4,2,1,2,2,2,2,4,2,3,3,4,3,2,2,3,1,1,2,4
,3,2,3,5,3,2,4,2,2,2,4,1,2,2,3,3,1,2,1

2390 DATA HAL

BROWN, MACBETH, before, 3,4,2,2,2,2,3,3,4,3,1,5,0,2,3,5,2,2,3,3
,3,2,4,2,1,1,3,4,2,3,1,4,2,1,1,2,3,2,2,2,4,2,4,3,4,2,3,1,1,1
,3,2,3,2,2,4,4,3,2,2,3,4,1,3,1,3,4,2,3,1

2400 DATA HAL

BROWN, MACBETH, after, 3,2,2,3,3,2,3,1,2,3,1,5,0,1,2,5,2,5,3,2,
2,4,4,4,2,4,2,4,3,3,1,3,2,2,2,3,2,1,3,2,3,2,3,3,2,2,2,1,1,2,
3,3,4,3,2,2,3,2,3,2,1,4,1,2,2,3,4,1,2,1

2410 DATA ROSEANN

CONCANNON, HERO, before, 1,3,2,3,2,3,2,1,3,3,1,5,0,1,2,2,2,5,2,
3,2,4,2,2,3,3,2,2,3,1,4,3,4,2,1,3,1,1,2,2,3,2,2,3,3,1,3,1,1,
1,2,2,3,1,2,2,2,2,2,2,4,2,2,2,3,4,2,1,2,1

2420 DATA ROSEANN

CONCANNON, HERO, after, 3,3,2,2,1,2,2,4,2,3,1,5,0,1,1,5,2,5,2,2
,1,3,2,2,3,4,2,3,3,3,4,3,3,1,3,3,1,1,1,2,2,3,2,3,2,4,3,1,1,1
,1,2,3,1,2,2,2,4,1,5,3,4,2,2,3,4,3,1,2,1

2430 DATA ROSEANN

CONCANNON, AGAVE, before, 3,3,2,3,3,2,3,2,3,3,1,5,0,1,2,5,2,4,2
,2,2,4,4,2,2,2,5,4,3,3,5,3,3,1,2,2,2,1,2,3,2,2,4,3,3,4,4,1,1
,2,3,1,2,2,1,3,2,2,2,2,3,4,1,4,3,4,3,1,5,1

2440 DATA ROSEANN

CONCANNON, AGAVE, after, 3, 3, 2, 3, 2, 2, 3, 2, 3, 3, 1, 5, 0, 1, 2, 5, 2, 4, 2,
2, 1, 4, 4, 4, 4, 3, 1, 3, 1, 1, 5, 2, 3, 1, 1, 3, 2, 1, 1, 3, 3, 3, 4, 3, 2, 4, 2, 1, 1,
2, 3, 4, 3, 4, 3, 3, 3, 3, 3, 4, 3, 1, 2, 3, 4, 3, 1, 3, 1

2450 DATA TONY SOPER, CHRISTY

MAHON, before, 3, 3, 2, 3, 2, 2, 3, 1, 3, 3, 1, 5, 5, 1, 1, 5, 2, 4, 3, 3, 2, 4, 3, 4
, 4, 3, 3, 3, 3, 2, 3, 3, 3, 2, 2, 3, 3, 2, 2, 3, 2, 2, 2, 3, 2, 4, 4, 1, 1, 2, 2, 3, 3, 3
, 3, 2, 2, 2, 2, 2, 3, 2, 1, 1, 3, 4, 3, 1, 1, 1

2460 DATA TONY SOPER, CHRISTY

MAHON, after, 3, 2, 2, 3, 3, 2, 3, 1, 3, 3, 1, 5, 4, 1, 1, 5, 2, 5, 2, 3, 4, 4, 4, 4,
4, 4, 4, 3, 5, 2, 3, 4, 4, 3, 3, 4, 2, 1, 1, 1, 3, 1, 3, 4, 3, 3, 3, 1, 1, 1, 3, 3, 3, 4,
2, 3, 2, 3, 3, 2, 2, 4, 2, 3, 2, 3, 2, 1, 3, 1

2470 DATA TONY SOPER, SAMMY

GOLDENBAUM, before, 3, 3, 2, 3, 3, 2, 2, 1, 3, 3, 1, 0, 0, 0, 1, 5, 1, 5, 1, 2, 3,
5, 4, 4, 2, 2, 2, 2, 3, 3, 5, 2, 2, 1, 2, 3, 2, 1, 1, 1, 2, 2, 2, 3, 3, 4, 3, 1, 1, 2, 2,
3, 2, 2, 3, 3, 2, 2, 2, 2, 3, 4, 1, 2, 1, 4, 4, 1, 2, 1

2480 DATA TONY SOPER, SAMMY

GOLDENBAUM, after, 3, 4, 2, 2, 2, 2, 2, 1, 3, 3, 1, 0, 0, 0, 0, 5, 2, 2, 2, 2, 2, 3
, 3, 4, 4, 3, 1, 1, 0, 0, 5, 1, 1, 1, 1, 3, 2, 1, 2, 2, 2, 2, 2, 3, 3, 4, 4, 1, 1, 1, 2, 1
, 1, 2, 3, 2, 2, 1, 2, 2, 3, 1, 1, 2, 1, 4, 4, 1, 1, 1

2490 DATA CAROL HONDA, SONYA AND MRS.

MURATA, composite, 3, 2, 3, 3, 3, 3, 3, 2, 1, 3, 1, 5, 0, 1, 1, 5, 1, 4, 2, 3, 3, 4
, 4, 4, 4, 4, 3, 2, 3, 3, 4, 2, 2, 3, 1, 3, 3, 2, 2, 3, 3, 3, 3, 3, 3, 4, 3, 1, 1, 2, 2, 3
, 3, 4, 2, 3, 4, 2, 4, 2, 2, 2, 1, 3, 2, 4, 3, 1, 3, 1

2500 DATA CAROL HONDA, SONYA AND MRS.

MURATA, composite, 3, 2, 2, 3, 4, 3, 4, 2, 1, 4, 1, 5, 0, 1, 1, 5, 1, 1, 2, 3, 2, 4
, 2, 4, 4, 2, 2, 2, 2, 3, 4, 2, 3, 3, 3, 4, 3, 2, 2, 1, 2, 3, 3, 3, 3, 4, 2, 1, 1, 2, 3, 3
, 3, 4, 4, 2, 2, 2, 2, 2, 2, 3, 3, 4, 5, 3, 1, 3, 1

2510 DATA DALE REAM, GLASS

SLIPPERS, before, 3, 3, 4, 3, 2, 2, 3, 3, 3, 3, 1, 3, 0, 1, 1, 5, 2, 2, 2, 1, 1, 4,
4, 3, 2, 2, 4, 4, 3, 3, 5, 3, 3, 2, 1, 2, 1, 2, 2, 1, 3, 3, 2, 3, 1, 2, 2, 1, 2, 1, 2, 2,
3, 3, 1, 2, 2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 1, 2, 1

2520 DATA DALE REAM, GLASS

SLIPPERS, after, 3, 2, 2, 3, 2, 2, 3, 3, 3, 3, 1, 3, 0, 1, 2, 5, 2, 2, 2, 2, 2, 4, 2
, 3, 2, 2, 4, 4, 3, 3, 5, 3, 3, 2, 1, 2, 1, 2, 2, 1, 3, 3, 2, 3, 2, 2, 3, 1, 1, 2, 3, 3, 3
, 3, 2, 3, 2, 2, 2, 2, 3, 2, 2, 2, 3, 4, 4, 1, 2, 1

2530 DATA RUSSELL OMORI, GUY

SMITH, before, 5, 2, 2, 3, 3, 2, 3, 1, 5, 3, 1, 5, 0, 2, 2, 5, 1, 2, 2, 3, 1, 4, 3, 3
, 3, 4, 2, 4, 2, 1, 4, 3, 4, 2, 1, 3, 1, 1, 2, 2, 2, 3, 2, 4, 3, 4, 3, 1, 1, 1, 2, 2, 3, 2
, 5, 3, 4, 3, 2, 2, 2, 2, 3, 4, 3, 4, 2, 1, 3, 1

2540 DATA RUSSELL OMORI, GUY

SMITH, after, 3, 2, 2, 3, 3, 2, 3, 1, 5, 3, 1, 5, 0, 2, 2, 5, 1, 2, 1, 3, 3, 4, 2, 4,
4, 4, 4, 4, 2, 3, 4, 4, 3, 2, 2, 3, 1, 1, 2, 2, 2, 3, 3, 4, 3, 4, 3, 1, 1, 2, 2, 3, 3, 2,
5, 3, 4, 3, 3, 2, 3, 2, 3, 3, 3, 4, 2, 1, 3, 1

2550 SAVE "STUDENTS/DPG", A

10 DATA 1,NAKAMURA

MATAGORO,ENJU,3,3,2,2,1,2,2,4,1,3,1,5,0,1,1,5,1,1,2,2,1,4,3,
4,2,2,2,1,2,3,4,1,3,3,3,4,2,2,2,2,3,2,4,3,4,4,3,3,1,4,3,3,3,
1,4,3,1,2,4,2,3,3,2,2,2,2,3,2,3,1

20 DATA 2,NAKAMURA

MATAGORO,BIMYO,2,3,2,2,1,5,2,4,1,3,2,5,0,2,1,5,1,1,2,3,2,3,3
,2,4,1,1,2,3,2,4,2,3,4,1,3,2,2,
,2,3,3,3,3,3,3,3,2,1,2,2,3,3,2,3,3,3,4,4,2,3,4,1,2,2,2,4,2,2
,1

30 DATA 4,NAKAMURA MATAGORO,PLAIN

STYLE,3,2,2,2,1,2,2,4,1,3,2,5,0,1,1,5,1,1,2,2,1,4,3,2,2,2,5,
2,3,1,4,2,3,3,3,4,2,2,3,2,3,3,2,3,4,4,2,2,1,4,3,4,3,3,3,3,2,
2,2,3,3,4,2,2,2,3,3,2,3,2

40 DATA 3,NAKAMURA MATAGORO,DANCE

STYLE,5,2,2,2,5,2,4,3,5,5,1,5,5,1,1,5,1,5,2,4,2,4,2,2,2,5,5,
4,4,3,4,3,4,4,3,4,2,3,3,2,2,3,3,3,4,3,2,2,1,5,4,4,4,4,4,2,2,
2,2,3,4,4,2,2,3,4,3,3,4,2

50 DATA

E=B=P=D,E=B=D,E=B=P,E=P=D,B=P=D,E=B/P=D,E=P/B=D,E=D/B=P,E=B,
E=P,E=D,B=P,B=D,P=D,NM

60 CLS: CLEAR1000

61 DIMV(70,4):DIMR\$(4):DIMO(19,4):DIMP(19,4):DIMQ(70)

62 DIMT\$(15):DIML\$(19):LM=00

70 PRINT"Don't bother me, I'm running MATAGORO/DPG."

```

80 OPEN"Q",1,"MATAGORO/DTX"
90 FORL=1TO4:READ I,N#,R#(I):FORM=1TO70:READV(M,I):NEXTM,L
100 FORL=1TO15:READT#(L):NEXTL
110 FORL=1TO70
120 E=V(L,1):B=V(L,2):D=V(L,3):P=V(L,4)
130 IFE=BANDB=DANDD=PTHENY=1
140 IFE=BANDB=DANDE<>PANDB<>PANDD<>PTHENY=2
150 IFE=BANDB=PANDE<>DANDB<>DANDP<>DTHENY=3
160 IFE=PANDP=DANDE<>BANDP<>BANDD<>BTHENY=4
170 IFB=PANDP=DANDB<>EANDP<>EANDD<>ETHENY=5
180 IFE=BANDP=DANDP<>EANDD<>BTHENY=6
190 IFE=PANDB=DANDE<>BANDP<>DTHENY=7
200 IFE=DANDB=PANDE<>BANDP<>DTHENY=8
210 IFE=BANDE<>DANDE<>PANDP<>DTHENY=9
220 IFE=PANDE<>BANDE<>DANDB<>DTHENY=10
230 IFE=DANDE<>BANDE<>PANDB<>PTHENY=11
240 IFB=PANDB<>DANDB<>EANDE<>DTHENY=12
250 IFB=DANDB<>PANDB<>EANDP<>ETHENY=13
260 IFP=DANDP<>EANDP<>BANDE<>BTHENY=14
270 IFE<>BANDE<>PANDE<>DANDB<>DANDB<>PANDP<>DTHENY=15
280 IFL<=21THENX=1
290 IFL=>22ANDL<=35THENX=2
300 IFL=>36ANDL<=54THENX=3
310 IFL>54THENX=4
320

```

IFY=1ORY=4ORY=5THEND(16,0)=0(16,0)+1:0(16,X)=0(16,X)+1'tall

ys matches to both

330

IFY=3ORY=10ORY=12THEND(17,0)=0(17,0)+1:0(17,X)=0(17,X)+1'tal

lys matches to plain style

340

IFY=2ORY=11ORY=13THEND(18,0)=0(18,0)+1:0(18,X)=0(18,X)+1'tal

lys matches to dance style

350

IFY=6ORY=7ORY=8ORY=9ORY=14THEND(19,0)=0(19,0)+1:0(19,X)=0(19,

,X)+1'tallys split situations

360 Q(Y,0)=0(Y,0)+1:0(Y,X)=0(Y,X)+1' general tally by type

370 Q(L)=Y

380 NEXTL

390 P=1/15:FORI=0T04

400 IFI=0THENN=70

410 IFI=1THENN=21

420 IFI=2THENN=14

430 IFI=3THENN=19

440 IFI=4THENN=16

450 FORJ=1T019

460 Y=D(J,I)

470 F=1:G=N-Y:IFG=0THENG=1

480 H=P[Y*(1-P)](N-Y)

490 FORL=1TON:IFY=0THENF=1:G0T0540

```

500 F=F*(N/(Y*G))
510 N=N-1:IFY>1THENY=Y-1ELSEY=1
520 IFG>1THENG=G-1ELSEG=1
530 NEXTL:P(J,I)=F*H
540 NEXTJ,I
550 T1#=N#+": ANALYSIS OF SCALE RELATIONSHIPS
560 T2#=N#+": PROBABILITIES OF SCALE RELATIONSHIPS
570 T3#=N#+": SCALE VALUES BY ROLE AND SCALE NUMBER"
580 T4#=N#+": TYPE OF MATCH BY SCALE NUMBER"
590 H1#=" SCALE GROUPS"
600 H2#="MATCHING COMBINATIONS All Mv.St. Mv.Dy.
Vce. Phr.":H3#=" E B D P E B D P E B D P E
B D P E B D P":H4#=" E = Enju. B = Bimyo. D = dance
style. P = plain style."
610 L$(1)="Four-way match"+STRING$(11,46)
620 L$(2)="Enju=Bimyo=dance"+STRING$(9,46)
630 L$(3)="Enju=Bimyo=plain"+STRING$(9,46)
640
L$(4)="Enju=plain=dance"+STRING$(9,46):L$(5)="Bimyo=plain=da
nce"+STRING$(8,46)
650 L$(6)="Enju=Bimyo/plain=dance"+STRING$(3,46)
660 L$(7)="Enju=plain/Bimyo=dance"+STRING$(3,46)
670 L$(8)="Enju=dance/Bimyo=plain"+STRING$(3,46)
680 L$(9)="Enju=Bimyo"+STRING$(15,46)
690 L$(10)="Enju=plain"+STRING$(15,46)

```

```

700 L$(11)="Enju=dance"+STRING$(15,46)
710 L$(12)="Bimyo=plain"+STRING$(14,46)
720 L$(13)="Bimyo=dance"+STRING$(14,46)
730 L$(14)="Plain=dance"+STRING$(14,46):L$(15)="No
match"+STRING$(16,46)
740 L$(16)="All matches to both"+STRING$(6,46)
750 L$(17)="All matches to plain"+STRING$(5,46)
760 L$(18)="All matches to dance"+STRING$(5,46)
770 L$(19)="All split situations"+STRING$(5,46)
780 FA$="%          % ##      ##      ##
##      ##  "
790 FB$="%          % .##      .##      .##
.##      .##  "
800 FC$="###:## # # # #   ":FD$="%          %"
810 LS$="STRUCTURE"+STRING$(13,46)
820 LT$="DYNAMICS"+STRING$(14,46)
830 LU$="VOICE"+STRING$(17,46)
840 LV$="PHRASING"+STRING$(14,46)
850 FE$="##:%          %"
860 PRINT#1,STRING$(60,45)
870 PRINT#1,TAB(LM+(60-LEN(T1$)-1)/2)T1$:GOSUB1300
880 PRINT#1,TAB(LM)H1$
890 PRINT#1,TAB(LM)H2$
900
FORL=1TO19:PRINT#1,TAB(LM)USINGFA$;L$(L),O(L,0),O(L,1),O(L,2

```

```

),D(L,3),D(L,4):NEXTL
910 GOSUB1300
920 GOSUB1290
930 GOSUB1300
940 PRINT#1,TAB(LM+(60-LEN(T2#)-1)/2)T2#
950 GOSUB1300
960 PRINT#1,TAB(LM)H1#
970 PRINT#1,TAB(LM)H2#
980
FORL=1TO19:PRINT#1,TAB(LM)USINGFB#;L#(L),P(L,0),P(L,1),P(L,2
),P(L,3),P(L,4):NEXTL
990 GOSUB1300
1000 GOSUB1290
1010 GOSUB1300
1020 PRINT#1,TAB(LM+(60-LEN(T3#)-1)/2)T3#
1030 GOSUB1300
1040 PRINT#1,TAB(LM)H4#
1050 GOSUB1300
1060 PRINT#1,TAB(LM)H3#
1070 PRINT#1,TAB(LM)USINGFD#;LS#;;ST=1:FI=21:GOSUB1120
1080 PRINT#1,TAB(LM)USINGFD#;LT#;;ST=22:FI=35:GOSUB1120
1090 PRINT#1,TAB(LM)USINGFD#;LU#;;ST=36:FI=54:GOSUB1120
1100 PRINT#1,TAB(LM)USINGFD#;LV#;;ST=55:FI=70:GOSUB1120
1110 GOSUB1300 :GOTO1140
1120

```

```

FORM=STTOST+2:PRINT#1,USINGFC#:M,V(M,1),V(M,2),V(M,3),V(M,4)
;:NEXTM:PRINT#1,
1130
FORM=ST+3TDFISTEP5:FORMM=OTQ4:IFMM+M>FITHENPRINT#1,:RETURN
SEPRINT#1,TAB(LM)USINGFC#:M+MM,V(M+MM,1),V(M+MM,2),V(M+MM,3)
,V(M+MM,4);:NEXTMM:PRINT#1,:NEXTM:RETURN
1140 GOSUB1290
1150 GOSUB1300
1160 PRINT#1,TAB(LM+(60-LEN(T4#)-1)/2)T4#
1170 GOSUB1300
1180 PRINT#1,TAB(LM)H4#
1190 GOSUB1300
1200 PRINT#1,TAB(LM)USINGFD#:LS#;:ST=1:FI=21:GOSUB1250
1210 PRINT#1,TAB(LM)USINGFD#:LT#;:ST=22:FI=35:GOSUB1250
1220 PRINT#1,TAB(LM)USINGFD#:LU#;:ST=36:FI=54:GOSUB1250
1230 PRINT#1,TAB(LM)USINGFD#:LV#;:ST=55:FI=70:GOSUB1250
1240 GOSUB1300 ;CLOSE:END
1250
FORM=STTOST+2:PRINT#1,USINGFE#:M;T#(Q(M));:NEXTM:PRINT#1,
1260
FORM=ST+3TDFISTEP5:FORMM=OTQ4:IFM+MM>FITHENPRINT#1,:RETURN
1270
PRINT#1,TAB(LM)USINGFE#:M+MM,T#(Q(M+MM));:NEXTMM:PRINT#1,:
1280 NEXTM:RETURN
1290 RETURN

```

```
1300 PRINT#1, TAB(LM) STRING$(60,45):RETURN
```

```
1310 SAVE "MATAGORO/DPG",A
```

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