THE WAY OF THE WARRIOR

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ABSTRACT

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THE WAY OF THE WARRIOR

A super 8mm. sound film was produced, describing the characteristics of five Oriental psychophysical disciplines: Yoga, T'AI Chi, Tae Kwon Do, Judo and Aikido.

The scope of the film was to provide the viewer with the essential information necessary to allow him to choose, among such disciplines, the one, if any, he would prefer to practise.

An experiment was conducted to assess the amount of factual learning provided by the film. The sample included sixty subjects. Forty subjects completed both a pretest and a posttest questionnaire, while twenty subjects, representing a control group, completed only a posttest questionnaire. No difference in performance was found between the experimental and the control group. The results of the evaluation confirmed at the .01 level of confidence, the hypothesis of a difference in performance between the pretest and the posttest.
N.B. The book "La Voie du Guerrier" and the film accompanying this evaluation are available in the library of Concordia University.
ACKNOWLEDGEMENTS

The author gratefully acknowledges the help and assistance of his colleagues, friends and pupils who made possible the realization of the film:

Yoga

Bruce Barnes

T’Ai Chi

Allan Weiss

Ella Feig

Tae Kwon Do

Ronald Belanger

Alain Belanger

Judo

Terry Farnsworth

Robert Adams

Aikido

Robert Saad

Claude Barthiaume

Music

Ted Renzinger (cello)

Robert Langvin (flute)

Voice

Bruce Barnes

Camera

Pedro Bonilla

Ian Kohos

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INTRODUCTION
Chapter I

SCOPE OF THE STUDY

During the past twenty years there has been an increasing trend of interest, in the West, in the Oriental techniques of psychophysical development. Among such techniques the most popular are Yoga, which originated in India, and Martial Arts such as Kempo and T'Ai Chi from China, Tae Kwon Do from Korea and Judo, Karate and Aikido of Japanese heritage.

In Montreal, for instance, some of these disciplines are offered among the activities of the Physical Education Department of all universities and by several CEGEPs, they are taught at several branches of the Y.M.C.A. as well as in several Community Centres. In addition there are the commercial schools. Over fifty schools, specialized in the teaching of Martial Arts, and more than thirty Yoga schools are listed in the "yellow pages" and the list is not even complete, because there are schools that do not advertise.
It seems therefore that thousands of people are involved in the practice of such disciplines.

Despite this fact, very few students further their training to a level of competency and less than one per cent reaches a "black belt" level.

In the first few months of practice the drop-out rate is enormous.

My experience, shared by all the instructors I spoke with, is that in universities and GEEPS, where the student does not have to pay fees, fifteen to twenty per cent of the enrolled students take no more than four or five training sessions.

In commercial schools the drop-out rate reaches seventy per cent in the first month of practice, despite the fact that the student generally is asked to pay three months in advance.

These figures have not been statistically verified, but, even allowing for some error, the turnover is much higher than desirable, from the point of view of an instructor.

My opinion, shared by many instructors in different disciplines, is that the reason for the turnover is that the student, at the time of his enrollment, does not have more than the faintest idea of what he is getting involved with.
In fact, despite the apparent popularity of Oriental Disciplines, very few people, even among those who decide to enroll in a course, know about their meaning, their historical development, and their philosophical premises. Often they confuse one discipline with the other, lacking the basic information necessary to distinguish among them.

Personally, in the ten years or more that I have been teaching professionally one of these disciplines, I have heard the same general question repeatedly asked by most beginners:

"How does a discipline differs from others and, most important of all, which is the best?"

Faced with such a question I have always been puzzled realizing how difficult it is to give an honest and intelligible answer to the non-initiated.

The exponents of these disciplines claim that their efforts are directed toward a common goal: the search for the actualization of the full potential of the individual, the awareness and control of a form of "energy" (that the Indian calls Prana, the Chinese Chi and the Japanese Ki) which is regarded as the very essence of life, impregnating the whole Universe.
Despite this common goal, the techniques developed by each of these disciplines are extremely different; the essence of the respective modes of training (that goes far beyond physical fitness or proficiency in self-defense, popularly taken as main concern) can be understood only through experience. Such experience can be achieved only at the price of involvement, commitment and practice.

The differing techniques of each discipline are in fact nothing else than means of expression, and to choose among them is equivalent to the choice that the artist has to make when, in order to express himself, he has to decide (or discover) which medium better responds to his needs.

This choice cannot be made at random, because different media, like different techniques, place different requirements upon the adept; it is important that the techniques are as compatible as possible with the character, inclination and personality of the neophyte.

For a person to get involved in a discipline he is not attuned to, means having to face much greater effort and stress than if he follows the path that is most amenable, for stress increases the chances of discouragement and failure.
Therefore the real question is not "Which Way is better?" but "Which Way is better for whom?" and the problem consists in finding a way to give the questioner the basis upon which he can independently decide what is best for him.

To solve such a problem I have often been tempted to reply: "Try all the disciplines and find out by yourself." But I have to readily admit that such a reply is hardly of any value to the beginner who generally lacks the time for a systematic search among alternatives and the sophistication to determine his fitness in them.

In order to give a broad picture of Oriental psychophysical disciplines and techniques and of the relationship existing among them, I decided to attempt the use of audiovisual media, that, by their own nature, permit an easier approach than printed material.

The purpose of such work was to make factual information more meaningful, by combining such information with a visual presentation, delineating different modes of training and the demands they put on the adept.

Such a project - if successful - beside facilitating the eventual choice of the non-initiated,
could be very useful to those who already practise one
discipline and who — as in the case of the majority —
are not aware of the relation between the discipline
they practise and other disciplines.

To the best of my knowledge, no similar work has
been already attempted. There are films concerned with
a particular discipline, but none of them attempts to
relate the disciplines to each other, to offer a broad
overview of the field.

Despite its ambition, this project had its limit-
tations. The field of Oriental disciplines goes from
several different meditation techniques, to bare-
handed combat, to the use of the most different weapons.
This field is so wide that it would be impossible to
cover it in a single film of reasonable length.

Five disciplines were therefore chosen: Hatha
Yoga, T'AI Chi, Tae Kwon Do, Judo and Aikido.

Among the reasons that contributed to such a choice,
the most important are: these disciplines present
extremely different training techniques, especially
from the visual point of view; they are the product of
four different cultures; they are the most available
and popular in the West.
Chapter II

THE COMPOSITION OF THE THESIS EQUIVALENT

The thesis equivalent is composed of three different items:

1) A research document in the form of a book, entitled "La Voie du Guerrier", covering the main elements of the development of Buddhism in India, China and Japan, and the different techniques developed by such cultures. This book has been published in French by Les Editions de l'Homme (c.1975).

2) A 30-minute super 8mm sound color film, based on the research document, divided into five sections, concerned respectively with:
   - Yoga
   - T'Ai Chi
   - Tae Kwon Do
   - Judo
   - Aikido

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3) A film evaluation intended to measure:

- The amount of factual learning included in the film's sound track.
- The viewer's rating of the educational, motivational, and entertainment value of the film.
- The objectivity of the film and its usefulness in helping the viewer to choose among the five disciplines presented.
Chapter III

THE RESEARCH DOCUMENT

The research document is presented in the form of a book, whose content is as follows:

Introduction:

- The raison d'être of Oriental disciplines in Western contemporary society.
- The concept of energy.
- The development of concentration, meditation and contemplation.

The Indian Way:

- The life and teaching of Buddha
- Hinayana
- Mahayana
- Tantric Vehicle
- Hatha Yoga
- Raja Yoga
- Karma Yoga
- Bhakthi Yoga
- Mantra Yoga
- Laya Yoga
- Gyana Yoga
The Chinese Way:
- The concept of synchronicity
- Yin and Yang
- The I Ching
- Confucianism
- Taoism
- Ch' an Buddhism
- Kung Fu
- T'AI Chi
- T'AI Chi Chuan

The Japanese Way:
- Zen
- Zazen
- The Samurai
- Kendo
- Kyudo
- Karate
- Ju-jitsu
- Judo
- Aikido

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Chapter IV

THE FILM

The film, entitled "The Way of the Warrior", is divided into five sections:

- Yoga
- T'ai Chi
- Tae Kwon Do
- Judo
- Aikido

Each section presents a performance by one or more "experts" in the discipline concerned.

The visual content of the film is articulated as follows:

YOGA:
- Yoga asanas or postures.

T'Ai CHI:
- A shortened version of the "solo" exercise.
- The application of the "solo" exercise to bare-handed fighting.

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**TAE KWON 'DO:**

- A "kata" or form
- The application of the "form" to bare-handed fighting
- Competition

**JUDO:**

- A Judo "kata" or form
- The application of the "form" in training
- Competition

**AIKIDO:**

- "Conduction" exercises
- Projections and controls
- Free style

The film is accompanied by the following commentary:

**YOGA**

To be born is sorrow - to grow old is sorrow - death is sorrow - sorrow is the union with what one does not love and sorrow is separation from what one loves - sorrow is the impossibility to satisfy desire.
The Four Noble Truths, enunciated by Gautama Siddharta, the Buddha, state that:

- All life is sorrow.
- The cause of sorrow is desire.
- To put an end to sorrow, man must put an end to desire.
- Only discipline can put an end to desire.

Yoga, which means yoke, provides such discipline.

The material world is Maya, illusion. Avidity or ignorance and the consequent illusion that individuality and permanence exist, keep man the prisoner of Karma, the law of action and reaction, of cause and effect, which enslaves him to the painful cycle of birth, death and rebirth.

To escape from such a cycle, man must reach Nirvana, he must purify his soul and cease to nourish ambition, the cause of action. He must extinguish his ambition like a lamp that, without
fuel, cannot communicate its fire.
The body is the receptacle in which
the soul is housed and by which it
is necessarily affected. Thus purity
of soul demands purity of body.
Hatha Yoga is the discipline that leads
to such purity.
It is through the practice of Pranayama
correct breathing and Asana, correct
postures, that the body becomes a good
conductor of Prana, the Universal
Energy, whose free circulation is
vital to moral and spiritual development.

T'AI CHI

When the teaching of the Buddha came
to China, it was profoundly affected
by Confucianism and Taoism.

The concept of universal sorrow had
no place in the Chinese humanistic
culture.

Confucianism and Taoism see man in the
central position between Heaven and
Earth, between the material and the
transcendental.

It is an ordered universe, perennially in search of an equilibrium between opposites: between Yin and Yang.

It is this perennial interaction between Yin and Yang that forms the continuously changing flux of reality.

In the fluid uninterrupted motion of alternative Yin and Yang postures, which constitutes the practise of T'AI Chi, the Supreme Ultimate, the adept learns to unify mind and body and to mobilize and control Chi, Energy, in harmony with the environment.

In such a way the body becomes so light that the added weight of a feather will be felt, and so mobile that a fly cannot alight on it without setting it in motion.

When man is born he is tender and weak.
At death he is stiff and hard.
All things, the grass as well as the trees,
are tender and supple while alive,
when dead they are withered and dried.
The stiff and the hard are companions
of death.
The tender and the weak are companions
of life.
I have heard that one who is a good
preserver of his life
in fighting will not try to escape from
weapons of war
and weapons of war cannot thrust their
blades into him
because in him there is no room for
death.
It is the application of non resistance
that, beside ensuring mental and physical
health, makes T'ai Chi a fighting art
where not strength, but skill and
fluidity ensure victory.

TAE KWON DO

The art of bare-handed fighting has
been developed into a powerful system
of attack and defense under the names
of Kempo in China, of Karate in Japan
and Tae Kwon Do in Korea.

Three disciplines that, despite the stylistic differences characteristic of the cultural and psychological makeup of their country of origin, have in common an attitude toward combat which aims at literally destroying the opponent.

Physical strength, endurance, speed, concentration, precision, willpower, and, most of all, control over Ki, or energy, are the components of these arts that aim to forge man like fire forges metal.

It is in the practice of Kata, or forms, that the adept develops his technical skill and learns to subdue the body to mental control, mobilizing his energy in the endless repetition of combinations of parries and blows performed against an imaginary opponent.

It is in the practice of competition that the adept can test his degree of control, he must be able to stop at
a hair's-breadth from the target a blow delivered at full speed, and his skill must allow him to choose and apply the proper technique subconsciously, without any thought or hesitation, which is possible only upon reaching that mental state of absolute spontaneity that Zen Buddhism calls no-mind, a state in which one does not react to a situation, but acts constantly as an integral part of it.

Judo, the Way of Suppleness, originated from Ju-jitsu, the traditional Japanese Art of unarmed combat, and was codified in a set of techniques at the beginning of this century by its founder: Jigoro Kano.

Today it is a competitive sport included in the Olympic Games.

Push when the opponent pulls and pull when the opponent pushes is the way Judo applies the principle of non-resistance, which aims at gaining
the maximum result with the minimum of effort.

It is in the endless repetition of the Go-kyo, composed of five groups of eight projections of increasing complexity, that the adept refines his skill.

It is in the practice of Randori, a sort of friendly competition, that he learns to apply these techniques realistically and spontaneously.

It is in competition that the adept can evaluate the degree of his physical and mental preparedness, that will allow him to throw his opponent effortlessly, taking advantage of his very energy.

It is this lack of effort which transforms the practice of Judo into a Zen experience, Zen being the Art of becoming the creator of the inevitable.
Aikido, developed in Japan during the first half of this century by Master Morihei Ueshiba, is the youngest of the Martial Arts and is characterized by its attitude toward violence and aggression.

According to Aikido, violence and aggression are the product of frustration, fear and insecurity. An attack therefore is a manifestation of mental disorder that disturbs the harmony of the environment.

Aikido aims to re-establish order where such a disorder is created.

Power and speed in Aikido are never the result of brute force or frantic haste, but rather the result of precision, trained intuition and body-mind coordination, derived from understanding the natural laws of movement.

The techniques are not designed to destroy the opponent, but to envelop the momentum of his attack in a spiral motion and, avoiding any collision, to re-direct this momentum back to its very source.
Therefore there is no place for competition in Aikido. The goal of the practise is not victory or defeat, but mutual training toward the awareness and control of the vital energy that fills the Universe and that, in man, is the measure of his creativity and vitality.

It is the same energy that the Indians call Prana, the Chinese Chi and the Japanese Ki.
Chapter V

THE OBJECTIVES

A film, entitled "The Way of the Warrior", has been made in order to fulfil the task of introducing the viewer to the specific modes of practice of five different Oriental psychophysical disciplines and to convey factual information on the origin and the characteristics of such disciplines.

The film is meant for two kinds of audience:
- Those who never practised a discipline, but are interested in them and would like to be presented with an overview in order to choose the one that can fulfil their expectancies and better integrate their character and taste.
- Those who already practice a discipline but feel they do not know enough of its origin, historical development and relation with other disciplines.

The film is therefore an introduction to oriental psychophysical disciplines and offers a number of practical applications for instructors as well as for organizations that provide instruction in one or more of such disciplines.

It would be valuable, for instance, to present
the film at the time of enrollment in universities and CESPs when a great number of students are offered the opportunity to enroll, free of charge, in a course, but do not have the information necessary to make a choice. They are therefore forced to choose at random or on the basis of limited information. Such a situation contributes to the probability of their not finding a response to their expectancies and dropping out from the course at an early stage, which is a waste of time for them, as well as for their instructor.

The film could fulfill the same function in commercial schools that offer training in more than one discipline.

A second practical application is to enable the instructor to present the student with an overview of the related disciplines, enhancing in such a way a greater consciousness, fostering the motivation of the student to place his training in a bigger context and to become aware of the characteristics of the discipline he is involved with.

To meet such requirements the film should optimally provoke a certain amount of factual learning and should convey the mood of the mode of practice of the different disciplines, to provide the viewer with the basic elements necessary to decide in which discipline he would prefer to get involved.
The film should also enhance the interest of the viewer and motivate him toward farther research in the field.

The evaluation of the film was therefore articulated in two sections.

The first aims to assess objectively the amount of factual learning provoked by the film's sound track.

The second aims to assess the subjective evaluation of the viewer concerning:

- The entertainment value.
- The educational value.
- The motivating value.
- The relative value of the five sections that compose the film.
- The usefulness of the film in providing some element of choice among the five disciplines.
Chapter VI

THE FACTUAL LEARNING

In the attempt to evaluate the amount of information the film's sound track conveys to the viewer, a questionnaire of thirty questions was developed.

The design of the questionnaire follows the advice of the literature on the subject; the most important sources were Wood (1961), Best (1970), Tuckman (1972), an interview with Dr. Huntley of Concordia University, as well as the study of some handouts provided by him.

All the questions related to information explicitly provided by the commentary of the film. Each question offered four alternatives as a reply and the subject was asked to choose one.

The thirty questions composing the questionnaire were divided into five groups of six questions each.

Each group was related to one of the five sections of the film.

The same questions were used in the pretest and in the posttest, but their order, as well as the order of the possible answers was different in the two cases. (See appendix).
The distribution of the questions was as follows:

**YOGA**

- In Yoga "energy" is called:
  
  Correct answer: Pranā

  Alternatives: Chi
  Do
  Ki

- Karma can be defined as:
  
  Correct answer: The law of cause and effect

  Alternatives: The absence of desire
  The principle of non-resistance
  The state of ultimate consciousness

- Yoga means:

  Correct answer: Yoke

  Alternatives: Desire
  Illusion
  Discipline

- Gautama Siddharta, the Buddha, enunciated that all life is:

  Correct answer: Sorrow

  Alternatives: Indifference
  Happiness
  Violence
- Yoga postures are called:
  Correct answer: Asana
  Alternatives: Hatha
                         Nirvana
                         Pranayama

- Maya means:
  Correct answer: Illusion
  Alternatives: Desire
                 Sorrow
                 Ignorance

T'AI CHI

- Buddhism, upon reaching China, was:
  Correct answer: Modified
  Alternatives: Persecuted
                Rejected
                Ignored

- As a fighting technique T'AI Chi applies:
  Correct answer: The principle of non-resistance
  Alternatives: Superior physical strength
                 Supernatural powers
                 It is not concerned with fighting
In the practice of T'AI Chi the adept mobilizes his energy

Correct answer: In harmony with the environment

Alternatives:
Despite the environment
Against the environment
With no concern about the environment

Yin and Yang are:

Correct answer: Opposite

Alternatives:
The same
Different
Similar

When Buddhism reached China, Chinese culture was essentially:

Correct answer: Humanistic

Alternatives:
Idealistic
Monotheistic
Materialistic

In China, "energy" is called:

Correct answer: Chi

Alternatives:
Ki
Do
Prana
TAE KWON DO

- Kempo, as a Martial Art, was developed in:
  Correct answer: China
  Alternatives: Korea
          Japan
          India

- Kempo and Karate aim to:
  Correct answer: Destroy the opponent
  Alternatives: Avoid the opponent
                Control the opponent
                Reconcile the opponent

- Tae Kwon Do was developed in:
  Correct answer: Korea
  Alternatives: Japan
                India
                China

- In Tae Kwon Do competition is:
  Correct answer: Currently practised
  Alternatives: Practised only by experts
                Secretly practised
                Never practised
Karate was developed in

Correct answer: Japan
Alternatives: India, China, Korea

In Tae Kwon Do the practice of "kata" consists in

Correct answer: Combinations of parries and blows
Alternatives: Competition, Defence against weapons, Forty different projections

Judo

In Judo competition is:

Correct answer: Generally practised
Alternatives: Never practised, Secretly practised, Practised only by experts

Jigoro Kano is the founder of

Correct answer: Judo
Alternatives: Tae Kwon Do, T'ai Chi, Aikido
- The Martial Art included in the Olympic Games is
  
  Correct answer: Judo
  
  Alternatives: Karate
  Aikido
  Tae Kwon Do

- Judo originated from:
  
  Correct answer: Ju-jitsu
  
  Alternatives: Aikido
  Kempo
  Kung Fu

- The practice of Go kyo consists in
  
  Correct answer: Forty different projections
  
  Alternatives: Combinations of parries and blows
  Defence against weapons
  Competition

- "The Way of Suppleness" is roughly the translation of
  
  Correct answer: Judo
  
  Alternatives: Tae Kwon Do
  Aikido
  T'AI Chi
AIKIDO

- Morihei Ueshiba is the founder of
  Correct answer: Aikido
  Alternatives: Karate, Judo, Tae Kwon Do

- Aikido was developed in
  Correct answer: Japan
  Alternatives: China, India, Korea

- Aikido was developed
  Correct answer: In the 20th century
  Alternatives: In the 19th century, In the 18th century, Many centuries ago

- According to Aikido violence is the product of
  Correct answer: Fear and frustration
  Alternatives: The environment, Human nature, Desire
In Aikido an attack is perceived as

Correct answer: A manifestation of disorder
Alternatives: A consequence of human nature
The best defense
A challenge

In Aikido competition is

Correct answer: Never practised
Alternatives: Secretly practised
Currently practised
Practised only by experts
Chapter VII

THE VIEWERS' EVALUATION

A second questionnaire, composed of five questions, was developed as a tool to measure the subjective evaluation of the viewer.

Each question was meant to evaluate a different aspect of the film.

1) The first question, aiming to evaluate the entertainment value of the film, was phrased as follows:

- How entertaining did you find the film?

The viewer was asked to choose among the following answers:

Very entertaining
Entertaining
Fair
Boring

A space was provided for comments.

2) The second question, aiming to assess the feeling of the viewer about the educational value of the film, was phrased as follows:
- How would you evaluate the educational value of the film? (From the point of view of the amount of information it clearly conveys about Oriental Disciplines)

The viewer was asked to choose among the following answers:

Excellent
Good
Fair
Poor

A space was provided for comments.

3) The third question was meant to determine if the film had any motivational value, in the sense of awakening the viewer's curiosity and encouraging him to research in the field.

The question was phrased as follows:
- After viewing the film, do you think you will try to find out more about Oriental Disciplines?

The viewer was asked to choose among the following answers:

No, I think I know enough
Yes, if I have the opportunity
Yes, if I can find the time
Yes, I certainly will.

A space was provided for comments.
4) The fourth question had the purpose of detecting eventual biases in the presentation of the different disciplines. The viewer was asked to rank in order of preference the five sections that compose the film. The assumption was made that if the film does not present any of the disciplines in a light more favorable than the others, the degree of preference should be normally distributed among the five sections.

The question was phrased as follows:
- Please rank from 1 to 5 the sections of the film in order of preference (Rank as 1 the one you liked most).

A space was provided to allow the viewer to explain the reason for his first choice.

5) The fifth question was meant to assess the value of the film as an instrument capable of allowing the viewer to choose from the five disciplines the one he would like to practice.

The film was not intended to induce the viewer to shift from the discipline he already practices to another. Therefore it was made explicit that he was supposed to choose with exclusion of the discipline
he was already practicing, if any.
The question was formulated as follows:
- If you would have time to practice one of the disciplines introduced by the film, beside the one(s) you already practice, if any, which one would you choose?
The possible answers provided in the questionnaire were:

Yoga
T'ai Chi
Tae Kwon Do
Judo
Aikido
None of them
I do not know

A space was provided to explain the reason of the choice.
Chapter VIII

SUBJECTS

The audience intended for the film included subjects totally unfamiliar with Oriental psychophysical disciplines as well as subjects who already had some exposure to one, but had no knowledge of the others.

The subjects were chosen by visiting commercial schools where one of the disciplines is taught and by asking them to view a film and complete a questionnaire, with the permission of their instructor.

The "unfamiliar" subjects were chosen among acquaintances who never practised any of the disciplines. To randomize the sample as much as possible, the "unfamiliar" subjects were chosen among people who did not know each other.

The sample included 60 subjects. Forty subjects completed both a pretest and a posttest questionnaire, while twenty, representing a control group, completed only the posttest questionnaire.

The distribution of the sample by discipline is shown in table 1.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Experimental group (Pretest and posttest)</th>
<th>Control group (Posttest only)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>T'AI Chi</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Tae Kwon Do</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Judo</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Aikido</td>
<td>9</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>None</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total subjects</strong></td>
<td><strong>40</strong></td>
<td><strong>20</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
Chapter IX

THE EXPERIMENTAL DESIGN

To evaluate the amount of factual learning provided by the film, it was important to evaluate the amount of knowledge already existing in the subjects before viewing the film. The majority of the subjects, in fact, had already some exposure to at least one discipline and could therefore be expected to have some previous knowledge of the information in the film.

For this reason it was felt that a pretest was necessary.

Tuckman, however, warns of the danger of the use of a pretest.

The use of a pretest does introduce additional slight design difficulties than those encountered in the posttest-only control group design. There is no control for a testing effect, (i.e. gain on the posttest due to the experience on the pretest) which may reduce internal validity; nor is there any control for the possible sensitization to the treatment that the subject might gain by having the pretest experience, thus affecting external validity.
In other words, a testing by treatment interaction is not controlled for in this design. Moreover this design lacks control for the artificiality of an experiment, a set which may well be established through the use of a pretest."

(Tuckman, 1972)

Several other studies indicate that a pretest, before providing the actual learning material, facilitates the learning of the material itself.

This effect can be due to several reasons: the pretest can provide the function of an "advance organizer" where "The learning and retention of unfamiliar but meaningful material could be facilitated by the advance introduction of relevant subsuming concepts."

(Ausbel, 1969)

Moreover the same author suggests that the facilitating effect of a pretest on learning can be attributed to "The selective mobilization of the most relevant existing concepts in the learner's cognitive structure for integrative use as part of the subsuming focus for the new learning task, thereby increasing the task's familiarity and meaningfulness....and the provision of optimal anchorage for the learning material in the form of relevant and appropriate subsuming concepts at proximate level of inclusiveness."

(Ausbel, 1969)
Despite the conclusion that "Ability of the students, length and type of instruction, and the relevance of the pretest are crucial variables" (Hartley, 1972) a number of studies, confirming the hypothesis that pretest enhances posttest performance, allow us to extend this conclusion to various kinds of instruction like industrial training (Warr, Bird and Rackham, 1970) and film research (Lumsdaine, 1963).

For this reason it was felt important to attempt to control for testing effect, particularly in this case, where the similarity between pretest and posttest is very accentuated.

It was therefore decided that the experimental group should complete the pretest questionnaire, see the film, and then complete the posttest questionnaire.

The control group should not receive a pretest and should complete only the posttest questionnaire, after viewing the film.

The experimental design selected was:

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>$O_1$</th>
<th>$X$</th>
<th>$O_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>$X$</td>
<td>$O_2$</td>
<td></td>
</tr>
</tbody>
</table>

Where $O_1$ is the pretest,

$X$ is the treatment (the film)

$O_2$ is the posttest

This design was selected to allow the experimenter
to detect testing effects by comparison of the posttest scores of the experimental group and the posttest scores of the control group.
Chapter X

PROCEDURE

The evaluation took place in seven different sessions: one session for each group of subjects already practising a discipline and two sessions for the "unfamiliar" subjects.

The procedure followed in all sessions was the same.

The subjects were asked to cooperate in a research project for a Master's Thesis for Concordia University, dealing with Oriental psychophysical disciplines. The subjects were informed that their cooperation would consist in completing a questionnaire, viewing a film, and completing a second questionnaire after the film.

The subjects who were willing to participate in the evaluation were divided at random in two groups in a ratio of 2:1. To operate this random division the subjects were counted from left to right, according to their physical position in the room. The first two were assigned to the experimental group, the third...
to the control group, the following two to the experimental group, etc.

Subjects assigned to the experimental group received the pretest questionnaire and were instructed to complete it. They were asked not to guess, but to answer only those questions to which they thought they could reply correctly. They were assured that the questionnaire would remain strictly confidential and that its purpose was to evaluate the film and not the viewer. However, they were asked to identify the questionnaire by signing it, so as to allow the experimenter to match the pretest with the posttest questionnaires. They were therefore permitted to sign with a fictitious name, as long as they would use the same name for both the pretest and the posttest questionnaire. Twenty minutes were allowed to complete the pretest questionnaire. During this time the experimenter was chatting with the subjects assigned to the control group, but avoiding any topic related to the experiment. After twenty minutes were elapsed, the questionnaires were collected and the film was presented to the totality of the subjects. After the film all the subjects (experimental and control group) were asked to complete the posttest questionnaire. They were asked not to guess but to answer only if they
thought they knew the proper answer. They were also asked to reply as sincerely as possible to the evaluation section, and to make extensive use of the space provided for comments. Thirty minutes were allowed to complete the posttest questionnaire.
Chapter XI

RESULTS

Internal consistency.

To assess if the test was consistent, its reliability was measured applying the K-R21 test.

The value obtained for the pretest (40 subjects) was .87.

The value obtained for the posttest, by combining the scores of the experimental group and of the control group, was .80.

Both values are high enough to accept the internal consistency of the test.

Pretest effect.

A comparison of the scores of the posttest of the 40 subjects who received the pretest, and the 20 subjects who did not receive the pretest, gave a value of $t = .78$

We can therefore conclude, at .01 level of confidence that there was no significant difference between the performance of the subjects who received
the pretest and those who did not receive the pretest.

In this particular experiment the pretest did not affect the result of the posttest.

Learning

The Sandler's t test for matched pairs was applied to compare the scores of the pretest and posttest of the experimental group.

The value obtained was $A = 0.030$, which allows us to accept at .01 level of confidence the hypothesis of a significant difference in performance between the pretest and the posttest.

A comparison of the number of correct answers in the pretest of the experimental group, in the posttest of the experimental group and in the posttest of the control group, is shown in table 2.

The percentage of correct answers in the pretest and in the posttest, is shown in table 3 and in figure 1.

Considering that there was no significant difference between the experimental group and the control group in the posttest performance, the scores of the two groups have been combined.
Table 2. Number of correct answers per subject.

<table>
<thead>
<tr>
<th>Number of correct answers</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>1 - 5</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>6 - 10</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>11 - 15</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>16 - 20</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>21 - 25</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>26 - 30</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Total Subjects</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>
Table 3. Pretest and posttest correct answers. (Posttest data combine the experimental and the control groups).

<table>
<thead>
<tr>
<th>Number of correct answers</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subjects</td>
<td>%</td>
</tr>
<tr>
<td>1 - 5</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>6 - 10</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>11 - 15</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>16 - 20</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>21 - 25</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>26 - 30</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 1. Distribution of pretest and posttest scores
Even though the preceding data indicate a significant
difference between the pretest and the posttest scores, the
experimenter was interested in determining if such a dif-
ference was due to some or all the sections of the film.

To determine if the individual sections of the
film enhanced any learning, the scores of each section
in the pretest were compared to the scores in the posttest.

The application of the Sandler's t test for matched
pairs gave the following A values: Yoga = 0.033;
T'ai Chi = 0.042; Tae Kwon Do = 0.055; Judo = 0.045;
Aikido = 0.050. We can therefore accept at .01 level of
confidence, the hypothesis of a significant difference
between the pretest and the posttest scores of each
section of the film.

Table 4 to 8 and figure 2 compare the percentage
of correct answers in the pretest and in the posttest.

The posttest data combine the experimental and the
control group.

The number of questions correctly answered per
section of the film in the pretest and in the posttest
is shown in table 9.
Table 4. YOGA - Correct answers to each question.

<table>
<thead>
<tr>
<th>Question #</th>
<th>% of correct answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>
Table 5. T'AI CHI - Correct answers to each question.

<table>
<thead>
<tr>
<th>Question #</th>
<th>% of correct answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prétest</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Table 6. Tae Kwon Do - Correct answers to each question

<table>
<thead>
<tr>
<th>Question #</th>
<th>% of correct answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>$\bar{x}$</td>
</tr>
</tbody>
</table>
Table 7.  JUDO - Correct answers to each question.

<table>
<thead>
<tr>
<th>Question #</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% of correct answers</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>18</td>
<td></td>
<td>.75</td>
<td></td>
<td>87</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td></td>
<td>40</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>17</td>
<td>14</td>
<td></td>
<td>85</td>
<td></td>
<td>93</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td></td>
<td>70</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td>29</td>
<td>8</td>
<td></td>
<td>12</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>30</td>
<td>.3</td>
<td></td>
<td>22</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>🌟</td>
<td>🌟</td>
<td></td>
<td></td>
<td>50</td>
<td>67</td>
</tr>
<tr>
<td>Question #</td>
<td>% of correct answers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>60</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>67</td>
<td>77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>22</td>
<td>45</td>
<td>77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>17</td>
<td>67</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>29</td>
<td>40</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>27</td>
<td>50</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| $\bar{x}$ | 55 | 81 |
Figure 2. Correct answers per section in the pretest and in the posttest.
Table 9. - Number of questions correctly answered per subjects in each section of the film.

<table>
<thead>
<tr>
<th>Film section</th>
<th>correct answers</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Tot Ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>Pre T</td>
<td>10</td>
<td>11</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Post T</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>T'Al Chi</td>
<td>Pre T</td>
<td>2</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Post T</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>TaeKwonDo</td>
<td>Pre T</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Post T</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>Judo</td>
<td>Pre T</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Post T</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>Aikido</td>
<td>Pre T</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Post T</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>11</td>
<td>16</td>
<td>40</td>
</tr>
</tbody>
</table>
Entertainment value.

Table 10 shows the answers that the subjects gave to the question: "How entertaining did you find the film?"

Table 10. - Entertainment value.

<table>
<thead>
<tr>
<th></th>
<th>Subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very entertaining</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Entertaining</td>
<td>28</td>
<td>47</td>
</tr>
<tr>
<td>Fair</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Boring</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total subjects</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The most meaningful comments to this question fell into the following categories:

**Very entertaining:**
- Aesthetically pleasing
- Clarity of the commentary
- It was relaxing and easy to follow
- It was a good survey
- It should have been longer

**Entertaining**
- Aesthetically pleasing
- Keeps the attention of the viewer
- Variety
- Clarity
- Good music
- Too serious
- T'ai Chi too long
- Judo too long

Fair
- It does not look professional enough
Educational value.

Table II shows the answers that the subjects gave to the question: "How would you evaluate the educational value of the film? (From the point of view of the amount of information it clearly conveys about Oriental Disciplines)

Table II. - Educational value.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>30</td>
</tr>
<tr>
<td>Good</td>
<td>21</td>
</tr>
<tr>
<td>Fair</td>
<td>6</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
</tr>
<tr>
<td>Total subjects</td>
<td>60</td>
</tr>
</tbody>
</table>

The most meaningful comments to this question fell in the following categories.

Excellent
- Conveys a great deal of information.
- It is clear
- It is an useful introduction.
- Goes beyond the technical aspect of the training.
Good
- Conveys a great deal of information
- It is clear
- It looks professional

Fair
- Too sketchy

Poor
- Too sketchy
Motivational value.

Table 12 shows the answers that the subjects gave to the question: "After viewing the film, do you think you will try to find out more about Oriental Disciplines?"

Table 12. - Motivational value

<table>
<thead>
<tr>
<th>Answer</th>
<th>Subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, I think I know enough</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Yes, if I have the opportunity</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Yes, if I can find the time</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Yes, I certainly will</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total subjects</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

No comments were given to this question.
Preference.

Table 13 shows the ranking of the five sections of the film in order of preference.

The instructions given to the subjects were: "Please rank from 1 to 5 the sections of the film in order of preference. (Rank as 1 the one you liked most)"

Table 13. - Preference.

<table>
<thead>
<tr>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>9</td>
<td>8</td>
<td>22</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>T'AI Chi</td>
<td>8</td>
<td>18</td>
<td>11</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Tae Kwon Do</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Judo</td>
<td>-</td>
<td>5</td>
<td>7</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Aikido</td>
<td>29</td>
<td>15</td>
<td>7</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Total subjects</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

The explanations of the reasons for the first preference fell in the following categories:

Yoga
- Aesthetic
- Easy to practise
- Easy to understand
It is clearly presented by the film.
I am already familiar with it.

**T'AI CHI**
- Aesthetically pleasing
- I did not know it existed
- Covered in greater detail
- Well filmed
- Precision of the movement

**TAE KWON DO**
- The skill involved
- I am familiar with it

**Judo**
- 

**AIKIDO**
- Aesthetically pleasing
- Well filmed
- Precision and simplicity
- Speed
- Philosophical implications.
Choice.

Table 14 shows the answers that the subjects gave to the question: "If you would have time to practice one of the disciplines introduced by the film, beside the one(s) you already practice, if any, which one would you choose?"

Table 14. - Choice

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>T'AI Chi</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>Tae Kwon Do</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Judo</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Aikido</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>None</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>I do not know</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total subjects</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The reason for the choice fell in the following categories:

**Yoga:**
- Harmony
- It can be practised everywhere
- It can be practiced without a partner
- For its philosophy
- To soften up

**T'ai Chi**
- For the aesthetics of the movements
- For the degree of self-control
- For its suppleness

**Taekwondo**
- Efficacy
- Physical fitness
- Speed of the movements

**Judo**

**Aikido**
- Efficacy
- Non-violent approach
- Self-control
- Aesthetics of the movements
- Speed.
Chapter XII

DISCUSSION

The purpose of the "thesis equivalent" was to develop a film concerned with Oriental psychophysical disciplines, particularly Yoga and Martial Arts. The film was meant to be employed as an instructional and motivational tool.

The feeling for the need of such a tool was due to the observation that (despite the wide range of opportunities offered by non-commercial institutions like universities and CEGEPs, as well as by a number of commercial schools) many potential adepts do not take proper advantage of the opportunities to practise a discipline because they lack the basic information on which to base a choice.

An instrument that could objectively convey factual information as well as the visual image of the modes of training and the aesthetic impact of the different disciplines would be useful in directing the student's choice from the very beginning. It would diminish the chances of random choice and
consequent delusion, which may lead the student to abandon
the discipline at an early stage of training—a waste
of time and energy for both the instructor and the pupil.

Such a film would be also useful to those students
who, even if already practising a discipline, might
 Desire to choose an alternative one, as a complementary
training, especially when it is offered free of charge
in universities and CBMEPs.

A third possible use foreseen for the film was to
awaken the curiosity of people already involved in one
discipline, and to motivate them to broaden their
knowledge of the general field and to acquire some
insight of the relation existing among different disci-
plines, and their historical and philosophical background.

To be useful the film was intended to transmit
factual information as well as a mood.

The experiment that was conducted, however, was
very much limited to test the knowledge of specific-
provided by the film.

To evaluate learning from the film, it was necessary
to assess the familiarity with the field that the viewer
had before viewing the film. For this reason it was
decided to conduct a pretest. To control the effect of a
pretest on the posttest performance, a control group
was used who did not receive the pretest. Analysis of
the scores indicated that there was no significant
difference in the posttest performance of those viewers
who received the pretest and those who did not.

Comparison of the scores indicated a significant
difference between the pretest and posttest performance.
Such a finding indicates that the film actually provided
some learning.

The performance of the subjects was also evaluated
for each section of the film and all sections showed a
significant difference between the pretest and the
posttest.

More difficult to evaluate was the subjective
response of the viewer. The experimenter was chiefly
interested in five points:

1) The entertainment value, because such a value would
indicate the possibility of marketing the film and
would extend its utility to the role of a promotional
instrument.

2) The educational value as subjectively experienced
by the viewer.

3) The motivational value. A half-hour film can be
only a very superficial introduction to the field.
To be valuable the film should awaken the curiosity.
they would like to find out more under favorable circumstances, like availability of time and opportunity. Opportunity seemed to play a more prominent role (35%) than the time factor (15%).

Most subjects showed a definite preference for Aikido (Nearly 50% ranked it as the first choice and none ranked it as the last choice.)

This preference, however, might be due to an Hawthorne effect - the viewer knew that the experimenter was deeply involved with this Martial Art, and he was even performing in the film.

Judo was the least appreciated. Nobody ranked it as first choice and nearly 50% ranked it at the last place.

These results seem to indicate that the film is not properly balanced in presenting all the disciplines under the same light. A larger sample, composed by subjects ignorant of the role of the experimenter, would however be desirable to confirm such a conclusion.

Asked which discipline they would practise beside the one they were already practising, if any, 27% of the subjects choose Aikido and only 3% Judo, Yoga, T'AI Chi and Tae Kwon Do share the remaining preferences quite evenly. Only ten per cent of the subjects declared that
they would not know which discipline to choose.

To summarize the results of the experiment, it seems that the film is a teaching instrument that stimulates learning, is perceived as entertaining, educational and motivating, but may be biased toward some disciplines.

This last point would be a major limitation to its practical use because it would antagonize the instructors of the others disciplines.

It is the author's opinion that this limitation would be overcome using more camera movements, shortening the T'Ai Chi section and presenting more dynamically the Judo "kata".

It is the intention of the author to produce the film commercially, remaking it in 16mm, and taking advantage of the greater flexibility of this medium and of the experience obtained from this first effort.
Chapter XIII

NOTES TO THE USER

Many of the people who would like to get involved in the practice of an Oriental psychophysical discipline, lack both the sophistication to distinguish among the alternatives and the time for a systematic search among them.

To help such people to make a choice, they should be presented with a broad picture of Oriental psychophysical disciplines and techniques, of the different modes of training and of the relationship existing among them.

One of the practical uses intended for the film is to provide such information, communicated by the visual content and by the commentary.

The film, however, has two major limitations: the time allowed to each discipline is so limited that the presentation is necessarily sketchy, and the visual impact of the film might distract the viewer from the commentary and hamper its recollection.

It is therefore suggested to provide the audience, before the presentation of the film, with a handout.
summarizing the characteristics of each discipline and, possibly, including the text of the commentary.

Reading this handout before the presentation of the film could help to set the viewer's attention and could be a useful reference after such presentation.
REFERENCES


N.B. All information gathered by means of this questionnaire is strictly confidential, and will be used only for the evaluation of the film.

**NAME:**

Have you practiced any of the following disciplines? If yes, check the corresponding item and indicate on the same line for how many years and/or months.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Years</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>( )</td>
<td>______</td>
</tr>
<tr>
<td>T'AI Chi</td>
<td>( )</td>
<td>______</td>
</tr>
<tr>
<td>Tae Kwon Do</td>
<td>( )</td>
<td>______</td>
</tr>
<tr>
<td>Judo</td>
<td>( )</td>
<td>______</td>
</tr>
<tr>
<td>Aikido</td>
<td>( )</td>
<td>______</td>
</tr>
<tr>
<td>None</td>
<td>( )</td>
<td>______</td>
</tr>
</tbody>
</table>

Please reply to the following questions by encircling the letter preceding the answer of your choice.

1) Kempo is a Martial Art developed in
   a) Korea 
   b) China 
   c) India 
   d) Japan 

2) Morihei Ueshiba is the founder of
   a) Aikido 
   b) Judo 
   c) T'AI Chi 
   d) Karate
3) In Yoga "energy" is called
   a) Chi
   b) Ki
   c) Do
   d) Prana

4) Buddhism, upon reaching China, was
   a) Modified
   b) Persecuted
   c) Rejected
   d) Ignored

5) Karma can be defined as
   a) The state of ultimate consciousness
   b) The absence of desire
   c) The principle of non-resistance
   d) The law of cause and effect

6) In Judo, competition is
   a) Generally practiced
   b) Never practiced
   c) Secretly practiced
   d) Practiced only by experts

7) Aikido was developed in
   a) China
   b) India
   c) Japan
   d) Korea

8) Jigoro Kano is the founder of
   a) Aikido
   b) Taekwondo
   c) Judo
   d) T'ai Chi
9) Aikido was developed
   a) In the 20th century
   b) In the 19th century
   c) In the 18th century
   d) Many centuries ago

10) Yoga means
   a) Desire
   b) Yoke
   c) Illusion
   d) Discipline

11) In the practice of T'AI Chi the adept mobilizes his energy
   a) With no concern about the environment
   b) In harmony with the environment
   c) Against the environment
   d) Despite the environment

12) As a fighting technique T'AI Chi applies
   a) Supernatural powers
   b) Superior physical atrength
   c) The principle of non-resistance
   d) It is not concerned with fighting

13) Kempo and Karate aim to
   a) Avoid the opponent
   b) Destroy the opponent
   c) Control the opponent
   d) Reconcile the opponent

14) Tae Kwon Do was developed in
   a) India
   b) China
   c) Japan
   d) Korea
15) According to Aikido, violence is the product of
   a) Desire
   b) Human nature
   c) The environment
   d) Fear and frustration

16) Yin and Yang are
   a) Similar
   b) The same
   c) Different
   d) Opposite

17) The Martial Art included in the Olympic Games is
   a) Judo
   b) Aikido
   c) Karate
   d) Tae Kwon Do

18) Gautama Siddharta, The Buddha, enunciated that all life is
   a) Sorrow
   b) Violence
   c) Happiness
   d) Indifference

19) In Aikido an attack is perceived as
   a) A challenge
   b) The best defence
   c) A manifestation of disorder
   d) A consequence of human nature

20) Yoga postures are called
   a) Pranayama
   b) Nirvana
   c) Asana
   d) Hatha
21) In Aikido competition is
   a) Practiced only by experts
   b) Currently practiced
   c) Secretly practiced
   d) Never practiced

22) Judo originated from
   a) Ju-jitzu
   b) Kung Fu
   c) Aikido
   d) Kempo

23) Maya means
   a) Ignorance
   b) Illusion
   c) Desire
   d) Sorrow

24) In Tae Kwon Do competition is
   a) Never practiced
   b) Secretly practiced
   c) Currently practiced
   d) Practiced only by experts

25) When Buddhism reached China, Chinese culture was essentially
   a) Materialistic
   b) Monotheistic
   c) Humanistic
   d) Idealistič

26) Karate was developed in
   a) India
   b) Korea
   c) China
   d) Japan
27) In Tae Kwon Do the practice of "kata" consists in
   a) Combinations of parries and blows
   b) Forty different projections
   c) Defence against weapons
   d) Competition

28) In China "energy" is called
   a) Do
   b) Ki
   c) Chi
   d) Prana

29) The practice of Go-kyo consists in
   a) Competition
   b) Defence against weapons
   c) Forty different projections
   d) Combinations of parries and blows

30) "The Way of Suppleness" is roughly the translation of
   a) Tae Kwon Do
   b) T'Ai Chi
   c) Aikido
   d) Judo
APPENDIX II

POSTTEST QUESTIONNAIRE
N.B. All information gathered by means of this questionnaire is strictly confidential, and will be used only for the evaluation of the film.

NAME.

Have you practiced any of the following disciplines? If yes, check the corresponding item and indicate on the same line for how many years and/or months.

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Years</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>T‘Ai Chi</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>Tae Kwan Do</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>Judo</td>
<td>( ?)</td>
<td></td>
</tr>
<tr>
<td>Aikido</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>( )</td>
<td></td>
</tr>
</tbody>
</table>

Please reply to the following questions by encircling the letter preceding the answer of your choice.

1) Tae Kwan Do was developed in
   a) Japan
   b) India
   c) Korea
   d) China

2) Judo originated from
   a) Aikido
   b) Kampo
   c) Kung Fu
   d) Ju-jitsu
3) "The Way of Suppleness" is roughly the translation of
   a) Tae Kwan Do
   b) Judo
   c) Aikido
   d) T'Ai Chi

4) Kempo is a Martial Art that was developed in
   a) Korea
   b) China
   c) Japan
   d) India

5) Karma can be defined as
   a) The absence of desire
   b) The law of cause and effect
   c) The principle of non-resistance
   d) The state of ultimate consciousness

6) Jigoro Kano is the founder of
   a) Tae Kwan Do
   b) T'Ai Chi
   c) Aikido
   d) Judo

7) In Yoga "energy" is called
   a) Prana
   b) Chi
   c) Do
   d) Ki

8) The practice of Go-kyo consists in
   a) Combinations of parries and blows
   b) Forty different projections
   c) Defence against weapons
   d) Competition
9) Gautama Siddharta, The Buddha, enunciated that all life is
   a) Indifference
   b) Happiness
   c) Violence
   d) Sorrow

10) In Tae Kwan Do competition is
    a) Practiced only by experts
    b) Secretly practiced
    c) Currently practiced
    d) Never practiced

11) Yoga postures are called
    a) Hatha
    b) Asana
    c) Nirvana
    d) Pranayama

12) Buddhism, upon reaching China, was
    a) Persecuted
    b) Ignored
    c) Rejected
    d) Modified

13) Morihei Ueshiba is the founder of
    a) Karate
    b) Aikido
    c) Judo
    d) Tae Kwan Do

14) The Martial Art included in the Olympic Games is
    a) Karate
    b) Aikido
    c) Judo
    d) Tae Kwan Do
15) Yoga means
   a) Desire
   b) Yoke
   c) Illusion
   d) Discipline

16) In the practice of T'AI Chi the adept mobilizes his energy
   a) Despite the environment
   b) Against the environment
   c) In harmony with the environment
   d) With no concern about the environment

17) According to Aikido violence is the product of
   a) Fear and frustration
   b) The environment
   c) Human nature
   d) Desire

18) In Judo competition is
   a) Never practiced
   b) Secretly practiced
   c) Generally practiced
   d) Practiced only by experts

19) Maya means
   a) Desire
   b) Sorrow
   c) Illusion
   d) Ignorance

20) Karate was developed in
   a) India
   b) Japan
   c) China
   d) Korea
21) In Taekwondo the practice of "kata" consists in
   a) Competition
   b) Defence against weapons
   c) Forty different projections
   d) Combinations of parries and blows

22) Aikido was developed
   a) Many centuries ago
   b) In the 18th century
   c) In the 19th century
   d) In the 20th century

23) Yin and Yang are
   a) Opposite
   b) The same
   c) Different
   d) Similar

24) Aikido was developed in
   a) China
   b) Japan
   c) India
   d) Korea

25) Kempo and Karate aim to
   a) Avoid the opponent
   b) Control the opponent
   c) Destroy the opponent
   d) Reconcile the opponent

26) In China "energy" is called
   a) Prana
   b) Chi
   c) Ki
   d) Do
27) In Aikido competition is
   a) Never practiced
   b) Secretly practiced
   c) Currently practiced
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28) As a fighting technique T'AI Chi applies
   a) It is not concerned with fighting
   b) The principle of non-resistance
   c) Superior physical strength
   d) Supernatural powers

29) In Aikido an attack is perceived as
   a) A consequence of human nature
   b) A manifestation of disorder
   c) The best defence
   d) A challenge

30) When Buddhism reached China, Chinese culture was essentially
   a) Humanistic
   b) Idealistic
   c) Monotheistic
   d) Materialistic
FILM EVALUATION

N.B. All information gathered by means of this questionnaire is strictly confidential, and will be used only for the evaluation of the film.

Please answer the questions by checking the item of your choice

1) How entertaining did you find the film?
   ( ) Very entertaining
   ( ) Entertaining
   ( ) Fair
   ( ) Boring
   Comments: ________________________________

2) How would you evaluate the educational value of the film?
   (From the point of view of the amount of information it clearly conveys about Oriental Disciplines.)
   ( ) Excellent
   ( ) Good
   ( ) Fair
   ( ) Poor
   Comments: ________________________________

3) After viewing the film, do you think you will try to find out more about Oriental Disciplines?
   ( ) No, I think I know enough
   ( ) Yes, if I have the opportunity
   ( ) Yes, if I can find the time
   ( ) Yes, I certainly will
   Comments: ________________________________
4) Please rank from 1 to 5 the sections of the film in order of preference (Rank as 1 the one you liked most)
   ( ) Yoga
   ( ) T'ai Chi
   ( ) Tae Kwon Do
   ( ) Judo
   ( ) Aikido

Please explain the reasons for your first choice.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5) If you would have time to practice one of the disciplines introduced by the film, besides the one(s) you already practice, if any, which one would you choose?
   ( ) Yoga
   ( ) T'ai Chi
   ( ) Tae Kwon Do
   ( ) Judo
   ( ) Aikido
   ( ) None of them
   ( ) I do not know

Why? ____________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Please use the next page for additional comments and suggestions