A COMPARATIVE STUDY OF ARTISTS:

PAINTERS AND SCULPTORS

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ABSTRACT

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- PAINTERS AND SOULPTORS -

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The goal of the present research was to compare sculptors and painters with relation to modes of thinking and attitudes toward their work and life experiences. Seven hypotheses were selected for this purpose. To evaluate these, thirty subjects selected for this Study were given the Eysenck Personality Inventory to assess neuroticism and extroversion, and the California Psychological Inventory to assess femininity and dominance as personality traits. No statistically significant differences between painters and sculptors were found. To assess differences in modes of thinking a questionnaire was given, which tried to assess the following hypotheses: a) that painters visualize reality in abstract terms whereas sculptors are more concrete; b) that painters are primarily sensitive to colour, and sculptors to mass, in their daily life experiences; c) that painters manifest a centrifugal, and sculptors a centripetal, type of vision. The results of chi-square analysis showed that there were no statistically significant differences. The clinical impression, however, is that these hypotheses tend to receive support when a purely qualitative evaluation of the interview material is made.

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CHAPTER I

THE THEORETICAL FRAMEWORK FOR THE STUDY

The Statement of Purpose

Artists, as they are defined for this study, generally tend to be primarily preoccupied with exploring two-dimensional or three-dimension space. The former refers to painting, graphic works and printmaking; the latter to sculpture, objects in space.

The artist makes a choice somewhere in his career as to whether he will express himself in a two-dimensional or three-dimensional form. Sometimes the choice is not effected by the artist; the alternatives are of no concern. At other times artists may begin their professional careers as painters and their expression envolves into a sculptural form. It has been observed that the reverse tends to be exceptional. Some artists are equally creative both as painters and as sculptors. These individuals are rare. The present research takes the form of a comparative study between painters and sculptors. The objective was to understand why some artists are painters and other are sculptors. It may be possible to demonstrate that there is a relevant or even signiffcant

relationship between the psychological characteristics and/or the visionary capacities of artists and the medium that they have chosen for their self-expression.

This investigation includes as its subjects only those artists whose works are predominately of the character of either painting or sculpture. Picasso, Matisse, Renoir and many superb painters did some highly accomplished sculptures. Their reputations and acclaim exist mainly because of their paintings. Very few sculptors did significant works as painters.

It would be logical to assume that almost all painters have had some experience with the third-dimension and that every sculptor must have had some occasion to draw and to paint. Certainly this is true especially of sculptors. Early in his aesthetic life, the artist has been polarized into one or the other zone of activity. There he is most likely to remain, mature and develop as an artist. In order to better understand the artist's choice of medium, the researcher studied several aspects of his personality, his childhood and his early artistic experience. Questions considered relevant to a comparison of characteristics of two-dimensional and three-dimensional conception and their relationships to a creator's personality are explored through individual interviews. It appears

that there is no existing background or reference to this research; therefore, this investigation is based on very intuitive notions stemming from first hand experience. The interview was guided by a number of open-ended questions. The analysis was divided into two sections. The first section deals with interview findings which were subjected to a statistical count. The second part makes use of personality tests of the inventory type. These tests compare several aspects of the artists' personalities. These, together with the interview questionnaire provide a profile as the basis for generating some tentative conclusions.

The following propositions are presented for investigation:

Proposition I

Painters are generally more introverted than sculptors.

Proposition II

Painters are generally more neurotic than sculptors.

Proposition III

Sculptors tend to be more agressive and dominant personality types than painters.

Proposition IV

Painters whether they are male or female, have a predominantly feminine component in their psychological composition; whereas, sculptors (male or female) possess

predominantly male components.

Proposition V

Painters are more likely to structure or visualize reality in abstract terms; whereas, sculptors are more likely to do so in concrete terms.

Proposition VI

Painters are primarily sensitive to colour; whereas sculptors are primarily sensitive to mass in daily life experience. These preferences were already present in childhood.

Proposition VII

Painters manifest a centrifugal type of vision. Sculptors manifest a centripetal type of vision.

The rational for the choice of these particular hypotheses will be elaborated in the theoretical section.

The first four factors deal with personality correlates whereas the other three are more concerned with cognitive, visual and perceptual variables.

Significance (for art education)

This study explores whether or not the creative experiences of painting and of sculpture are similar kinds of expression. Differences in the experience and expression

of creativity, would naturally be assumed to come from divergent formative childhood experiences. Other factors might be attitudes and educational instruction in the plastic arts, received in the formative years, that help to decide the artists' choice. The importance of knowing as much as possible about the nature of artists and their relationship to their medium of working is clear to an art teacher. It is invaluable to him in directing the art student toward the medium most appropriate for his expression. Students are often lost and unable to decide in which medium they should be channeling their interests and energies. It is important for them to have experiences in both media but within a reasonably short time a commitment is made. The dilemma then is to decide how this commitment should be made. It is hoped that this study might help to clarify which variables are important in making a choice of medium. If students could be helped early within their artistic activity to find the direction and medium most congenial to them their personality make-up and their cognitive structure, some time might be saved and some of their frustration anf floundering in search of a proper medium might be shortened.

Until recently the impact of prejudices molded attitudes that in turn became a tradition. Sculpture was a male activity of the 'he-man' variety. Painting had been thought of as the refined and feminine art form.

These prejudices were responsible for a separation of the artists. Only some men could have the disposition necessary for sculpture and in general women were directed toward painting. These attitudes are obviously questionable and require investigation.

Background Literature

It appears that to date, there has not been any published research comparing painters and sculptors as separate entities. Since 1940, several studies have been undertaken to explore the personality and the psychology of the creative artist, but "artist" has referred mainly to the painter. Some of these studies have compared art students with students electing other vocations (Baron, 1972); others have compared male and female art students (Baron, 1969) and others have compared artists with non-artists (Roe, 1942) (Eiduson, 1958). These inquiries have not considered that there might indeed exist important differences between artists who are painters and those who are sculptors. It is curious to note that researchers in Psychology generally consider artists to be, painters, and works of art - paintings. Sculptors and sculpture as such seem to have been either excluded from most investigations or grouped as one under the category of painting. Perhaps this reflects the attitude that sculpture was in other times, often associated with the

crafts, or perhaps it is due to the fact that reproductions of paintings are more available than those of sculpture.

Views of Rennaissance Artists About Painting and Sculpture

Cennino Cennini, godson of Giotto and his disciple for twenty-four years, wrote in 1437 the first treatise on painting. He described the evolution of anonymous painters who were preoccupied solely in adorning walls of churches, chapels and convents, and whose subjects were entirely limited to illustrating scripture stories. Little by little, painters and sculptors emerged as artists with their individual identity when they began to introduce into their works portraits of themselves, their patrons and their friends.

The arts were then evolving from a trade to a profession. This evolution seems to have brought about a kind of contention between the painters and sculptors as to whose art form was the more 'noble'.

"NON HA L'OTTIMO ARTISTA . . .

> Nothing the greatest artist can conceive
> That every marble block doth not confine
> Within itself; and only its design
> The hand that follows intellect can achieve.[1]

---

[1]Buonarroti Michelangelo translated by H. W. Longfellow in 1538-44.

In the early 16th century, Michelangelo Buonarroti replied to a referendum on the 'Paragon' with a comparison of painting and sculpture. He stated that he had formerly considered sculpture to be the lantern of painting and that the difference between them was the same as "between the sun and the moon". He withdrew this statement when he had been introduced to the philosophical concepts of Benendetto Varchi who iterated that things which have the same purpose are in themselves the same. Michelangelo changed his position to state that since both arts proceed from the same faculty, painters ought to think no less of sculpture than of painting and vice versa.

Leon Battista Alberti (1404-1472) expressed the attitude that painting is the "mistress of all the arts". In addition he claimed that the "stonemason, the sculptor" and all the workshops and crafts of artificers are guided by the rule and the art of the painter.

"I would venture to assert that whatever beauty there is in things has been derived from painting", (pp. 61). Alberti described the origin of sculpture in the following way, "I believe that the arts of those who attempt to create images and likenesses from bodies produced by nature, originated in the following way. They probably occasionally observed in a tree trunk or clod of earth and similar inanimate objects

certain outlines in which, with slight alterations, something very similar to the real faces of Nature was represented. They began therefore, by diligently observing and studying such things, to try to see whether they could not add, take away or otherwise supply whatever seemed lacking to effect and complete the true likeness. So by correcting and refining the lines and surfaces as the particular object required, they achieved their intention and at the same time experienced pleasure in doing so. Not surprisingly Man's studies in creating likenesses eventually arrived at the stage where, even when they found no assistance of half-formed images in the material to hand, they were still able to make the likeness they wished." (pp. 121)

Leonardo da Vinci's approach to this subject was curiously arbitrary. In his Treatise On Painting (1651) he found that the only difference was that sculptors do their work with more physical effort and that painters do theirs' with more intellectual effort. He concluded that based on his experience in both arts, painting is more intellectual and more difficult and the more perfect art form. The following are a series of extended quotations from Leonardo da Vinci, his commentary on this subject:

"The Difference Between Painting and Sculpture. [2]

I do not find any other difference between painting and sculpture than that

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[2]Da Vinci, Leonard, Paragone: A Comparison of the Arts, Introd. and English translation by Irma A. Richter, Oxford University Press, London, 1949), pp. 94-95.

> the sculptor's work entails greater physical effort and the painter's greater mental effort. The truth of this can be proved; for the sculptor in carving his statue out of marble or other stone wherein it is potentially contained has to take off the superfluous and excessive parts with the strength of his arms and the strokes of the hammer - a very mechanical exercise causing much perspiration which mingling with the grit turns into mud. His face is pasted and smeared all over with marble powder, making him look like a baker, and he is covered with minute chips as if emerging from a snowstorm, and his dwelling is dirty and filled with dust and chips of stone.
>
> How different the painter's lot - we are speaking of first-rate painters and sculptors - for the painter sits in front of his work at perfect ease. He is well dressed and handles a light brush dipped in delightful colour. He is arrayed in the garments he fancies, and his home is clean and filled with delightful pictures, and he often enjoys the accompaniment of music or the company of men of letters who read to him from various beautiful works to which he can listen with great pleasure without the interference of hammering and other noise."

"Paragone" is a comparison, a rivalry of the Liberal Arts among themselves and with other arts that were excluded from their number.

Painting and sculpture were classed among the Mechanical Arts, which required manual labour and craftsmanship. Painting was, however, often thought of in connection with the Liberal Arts but sculpture was not.

Leonardo claimed a place for painting among the Liberal Arts. In fact, all the tests in the "Paragone" share in one theme - "The superiority of painting over all the other arts".

Benvenuto Cellini[3] expressed his views in praise of sculpture.

> "I also maintain that one cannot practice this marvelous art of sculpture if the sculptor has not a good knowledge of all the noble arts. Because if he wishes to represent a soldier with those qualities and the gallant vigor that pertain to him, it is necessary that he be very brave and have a knowledge of arms; and if he wishes to represent an orator, it is necessary that he be very eloquent and have a knowledge of the good science of letters; if he wishes to represent a musician, it is necessary that he have ample musical knowledge so that he may know how to place correctly an instrument in the hand of the person playing it."

He continues:

> "I am convinced, and I repeat, that sculpture is the mother of all the arts that are based on design (the Fine Arts) and he who would be an able sculptor with a good style will more easily be good in perspective, a good architect, and a better painter than those who do not possess a good knowledge of sculpture.
>
> Painting is none other than a tree, or man, or another object mirrored

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[3]Letter addressed to Benedetto Varchi from Benvenuto Cellini. Translated from the text given in 'Due Lezzioni' di M. Benedetto Varchi, Florence, 1549.

in a fountain. The difference between sculpture and painting is as great as that between the shadow and the object which casts the shadow."

This brief historical exposé illustrates that painters and sculptors views on art were interpreted and debated in much the same way and with the same vigor in the 15th century as other issues on art that preoccupy us today. The controversies which concern us today deal with such issues as representational versus abstractionism and conceptual art. There have been many theories on art which have divided artists among themselves; but the antagonism between painters and sculptors seems to have endured and persists to this day.

Even as recent as the middle of the 1960's sculptors have been regarded as the 'brutes' among artists. They were definitely masculine, aggressive types, twisting and cutting metal, hacking at stone, labouring at their art. Painters on the other hand, have been represented as their female counterpart. Selecting, blending, creating colour to spread upon their stark white canvasses in order to bring forth their splendid images. Sometimes within minutes, their graceful gestures have captured the spirit of the image they wish to create. This description is, in fact, a caricature; however, it does not represent the differences that are

seen to exist between these two types of artists, that have been carried throughout art history and live with us today.

Michelangelo, cited earlier in this text, compared the difference between painting and sculpture as that "between the sun and the moon". What might not have been consciously perceived in that statement was the relationship of the sun, as the male element dominating in sculpture and the moon as the spirit of the female expression dominating in painting. It might also be said that painting has the capacity to express space and infinity. The character and the medium of painting lends itself more readily to a larger area of experience. Painting can express an environment, an object, an abstract idea, or an atmosphere, whereas, sculpture exists as an object, within an already existing space. Painting goes beyond space, giving illusion to further dimensions. In other words, sculpture is an object amongst objects within an interior or exterior; painting is like a window opening to something beyond.

It would be a serious oversight to ignore the penetrating studies made by Suzanne K. Langer (1953), particularly in the volume entitled Feeling and Form. In philosophic terms, she states that the artists' ultimate aim is for significance or logical expression within a "living form".

Whether an artist chooses to work in a two or three-dimensional art form his goal and its success depends on the quality of his mind and his talent. All artistic forms have a content: their 'import'. Langer (1953) declared: "The are logically expressive, or significant forms. They are symbols for the articulation of feeling, and convey the elusive and yet familiar pattern of sentience. And as essentially symbolic forms they lie in a different dimension from physical objects as such. They belong to the same category as language, though their logical form is a different one, and as myth and dream, though their function is not the same." (pp. 52) To this we can add the statement of Thomas Mann (1939): "Art is entire and complete in each of its forms and manifestations; we do not need to add up the different species to make a whole." (pp. 60)

In the chapter, "The Modes of Virtual Space", Langer (1953) speaks of the "primary illusion, virtual space', which are quite different in painting and in sculpture. Painting is 'scene', 'the field of direct vision', whereas sculpture is essentially 'volume' and not 'scene', even in relief sculpture. (This might be sighted as support for the author's hypothesis that painters have a more panoramic vision than sculptors.) "Only its form is the form of life". "Sculpture is

literally the image of kinetic volume in sensory space. Painting creates planes of vision, or 'scene' confronting our eyes, on an actual two-dimension surface." (pp. 89) Essentially Langer (1953) believes that the symbolic function is the same in every kind of artistic expression; that they meet on the grounds of their logic - the logic of non-discursive form. This does not preclude important differences to which Langer (1953) has drawn our attention (e.g. 'scene' versus 'kinetic volume').

Psychological Studies of the Artist

Some psychological studies have helped to formulate the goals of the present research in terms of choice of a specific artistic activity. These studies have dealt with the "artist" without distinguishing between sculptors and painters. They will be summarized here in order to give a resumé of existing data on the personality of the artist as such.

Kaplan (1965, pp. 239) states that "Identification is a process of deriving personal satisfaction through the activities of an agent external to oneself". By the "external agent" we could understand "a person", a "group", or "an idea". One could apply this definition and its consequences to the choice of painting or sculpture. Then we might ask whether artists, through this process of

identification with activities resembling more closely sculpture or painting might not have been moved to the world of art as a lifetime occupation for purposes of self-actualization. For example, exposure to artists' work or to artists generally, or identifying with creative individuals might lead to the choice of art as a lifelong occupation because others, whom one admires, have made this choice. On the other hand, occupational choice may be guided by personality characteristics. This area has been investigated by Anne Roe (1956). She made studies of numerous professions and occupations including the Arts and Entertainment. Roe suggests that there is some evidence to indicate that some specialized occupations do attract persons who resemble each other in some personality characteristics. At any rate there is at least some basic correspondences in interest. It is obvious that certain kinds of people are genuinely unsuited to some kinds of occupations. She has also demonstrated that tests as well as observation have shown that there are sex differences in interests.

Tyler (1971) showed that attitudes which have vocational significance appear very early. Others, (Dudek 1970) suggest that some vocational interests mature very early. It has been found that boys and men are more interested in scientific activities, mechanics, physical

activity, while girls and women appear to have a greater interest in people, literature, art, music, social sciences (Maccoby 1966).

Sex differences might be related to the choice of painting and sculpture as occupations. Thus sculpture is mainly an activity for the masculine sex and painting could be considered as more suitable for men with more feminine components in their personality, or for women.

According to a comparative study of the prestige rankings of women's occupations, two separate studies reveal that artists rank #2 in the Baudler and Paterson table of 1948. Physicians rank #1, registered nurses #3, journalists #4, secretaries #9, professional musicians (dance) #16, sales persons #19, hairdressers #22, waitresses #28, and finally laundry workers #29. The second table of Tuckman, Canada 1950 ranks artists #4, registered nurses #2, journalists #3, and the rest remains very much as found in the former table. Thus, the occupation of artist appears to be quite prestigeous for a woman.

A comparable study was also conducted on male occupations. Thus a study conducted by the National Opinion Center of the University of Denven in March, 1947[4]

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[4] The Psychology of Occupations: chapter on occupations and other aspects of living, pp. 303-305.

reveals that male artists whose paintings are exhibited, rated in the same category as an airline pilot, civil engineer. They were related fractionally more prestigeous than psychologists and fractionally less so than sociologists, biologists and musicians in symphony orchestras. In higher rank to artists we find priests, nuclear physicists, lawyers, dentists, architects, governmental scientists, college professors, physicians and those who rate with state governors and cabinet ministers of federal government and etc. This sampling was taken from ninety selected occupations for men. This opinion survey included 2,920 people.

Csikszentmihalyi and Getzels (1973), Munsterberg and Mussen (1953), Prados (1944), Klopfer (1942), Stringer 1967), Meier (1939), and Eiduson (1958), have done various research studies pertaining to art students and artists compared with groups of students and professionals in other vocations. Unfortunately there is nothing in these studies that differentiate painters from sculptors. All of these studies worked with artists as a group, composed of painters alone, or painters and some sculptors, but the proportion of each is unknown and had no importance for their findings.

Projective Test Studies of Artists

Prados (1944) studied 20 painters, 15 men and 5 women. He found them to be a rather homogeneous group

with certain characteristic features. They were of superior intelligence which is believed to demonstrate the emphasis on abstract forms of thinking and also on logical and constructive types of activities. They held a certain fear of mediocrity and an obvious disregard for the routine problems of everyday life. They showed themselves as having a strong drive for achievement and having a considerable richness of inner interests as well as spontaneous creative thought. He found them to be not very adaptable but very sensitive and responsive.

Two years later Anne Roe (1946), repeated this study using alcoholic painters. This group comprised painters of high renown. The mean age of the group, however was 51. That is, they were artists who were not necessarily highly productive at the time of the study. The primary basis for her research was to investigate the relation between drinking and creativity in painting. She discovered that the backgrounds of these men represented socio-economic extremes, but were of a generally high cultural value orientation. She interviewed them at considerable length and also did Rorschach and TAT tests. The most flagrant Rorchach finding was that they did not give the "creative ability" indices as expected in these tests. However the factor of chronic alcoholism and "middle age" might explain artists Prados (1944) tested, her group was also of somewhat superior intelligence and

tended toward abstract thinking. She noted that, "Both tests indicated a non-aggressive and rather immature type of social and sexual adaptation. There are many indications of insufficient freeing of emotional ties with parents, particularly mothers, and they revealed considerable confusion over their own sexual and personal roles."

S. Z. Dudek (1971) also found considerable sexual confusion in the artist which she attempted to explain in her paper "The Portrait of the Artist as a Rorschach Reader". She states, "as a result of strong identification with the mother, the artist assumes a passive life-role and often a submissive sexual one vis-à-vis the sexual partner. It is possible that for the artist the creative act of writing or painting is psychologically equivalent to the act of childbearing. His assertive masculine impulses find their outlet in acts of artistic creation, which frequently are drenched in sexual reference. Thus, at a deeper level of consciousness, the artist combines agression and submisiveness, thereby becoming a psychological man-woman, or symbolically complete." She relates this problem with the legend of Hermaphroditus: "Hermaphroditus <u>is</u> art, <u>is</u> the artist, and means much more to the serious artist than a problem with sex."

She also mentioned the artist's compulsive urge to"create": he is completely absorbed by his need to create

and sacrifices much to be able to pursue this goal. Part and parcel of this "urgency" to create is a strong agressive drive which is sublimated in creativity - in the "making" of art. The access to primary process thinking is easy and the artist "regresses in the serive of the ego", thus using energy which the non-artist represses.

The sublimation of agressive and sexual drives is one of the important tenets of the psychoanalytic theory of creativity. Kris (1953) and Kubie (1958) have both written comprehensive theories of how the artist sublimates both these drives in order to "create". In so doing aggressive and self-assertive impulses are not lost; they express themselves through the work, and they are also available to the artist as personality characteristics that achieve some expression. The artist is therefore not necessarily meek and mild; he may and generally does remain an agressive person but this agression is not used in relationships, but is either discharged as the situation demands it, or transformed into a work of art.

Anne Roe (1946) stressed the fact that so far as psychological investigations could go at that time there was nothing in the personality or intellectual structure of those painters which could be considered a unique determinant of their choice of painting as a vocation or for

their success in it. In addition it was found as mentioned previously that their social and economic backgrounds covered all levels, and their early family experiences were equally varied. This would seem to indicate that there were no environmental factors common to this group of twenty painters. Many of the difficulties, stresses and emotional factors of their environments may have been common to several in the group but these same factors could have existed in the environments of non-artists, as well. Roe found that the parents' attitudes were not always favourable. Mothers tended to be more accepting than fathers. A suggestion was made that perhaps the lack of approval expressed by fathers was in part related to the image of artists as ill-adapted members of society.

In the summary of the dissertation presented by Bernice T. Eiduson, at the University of California in 1958, she suggested that early recognition of artistic talents and subsequent encouragement that might be given through gratifying experiences and relationships tended to place a premium on artistic capabilities which became crystallized in her subjects in their later work and performance. This would seem to imply that praise and encouragement are important stimuli in the ingredients of the making of an artist. The purpose of her dissertation on "Artist and Non-artist" was to determine whether artists could be differentiated from non-artists by factors other

than the tools they use or skills that they have developed. The psychological structure of artists was studied. It was her intention to demonstrate which motivational factors seemed to be significant for these artists selecting their vocation. One of the hypotheses presented was that artists in various fields of the arts, are significantly different in characteristics of thinking and perception, in personality make-up and motivational components, from non-artists. The artists demonstrated 'novelty in their thinking', and were more abstract than realistic and practical, in the breath of their interests. Sensitive to his own needs and to those of others, the artist tends to channel his aggression into intellectualized and sublimated activities and thus to communicate his feelings.

The contemporary research of Frank Barron (1972) describes talks with students of the San Francisco Art Institute. He observed that the approval of others brought for the students a sense of satisfaction. Even though the parents of the students approved of their work, the more encouraging sources were considered to be their peers and their teachers. The students expressed the view that art was a solitary experience and approval brought them a sense of satisfaction and community. This relates with the findings of Eiduson, as reported previously. However, Frank Barron added that the students did not feel that this makes the experience a social one.

The research of Barron (1968) found that "creative women have fewer 'feminine' traits and more 'masculine' interests than non-creative control groups". He mentions too that when creative people are examined the masculinity-femininity traits are of little relevance. Both male and female artists score higher on both scales.

Objective Test Studies of Artists

A study carried out by Csikszentmihalyi and Getzels (1964), at the School of the Art Institute of Chicago used Cattell's 16 Personality Factor Questionnaire (Cattell 1958 and Cattell & Stice 1962). The study revealed that female subjects scored significantly higher on Dominance than their norms. The male subjects did not differ significantly however from other males on Dominance. Their study made in 1964, is more specific. It suggests "a reversal in culturally defined sex-appropriate personality characteristics among artists." They found male artists are "more timid, more sensitive, more feminine in their feelings than they should be according to social expectations, while female artists are more dominant or masculine than they should be". This section is summarized as follows:

> "Apparently artists have either been 'improperly' socialized as to sex-related attitudes, or they have learned to transcend the limitations imposed upon their range of admissible feelings." (pp. 94)

> "Creative people will also exhibit more of the characteristic traits of the opposite sex than is usually considered 'normal' by the definition of a given culture. This can be explained in terms of a taste requirement for artists to use a full range of cognitive and emotion responses regardless of sex-linked socio-cultural expectations." (pp. 102)

Csikazentmihalyi and Getzels explored at great length the personality differences among artists in different fields of specialization. The different fields of specialization were Fine Arts, Art Education, Advertising Arts, and Industrial Arts. Again, the Fine Arts are not separated into painting and sculpture. Their results are defined in the following summary of their findings:

> "Comparison of the personality of successful young artists with that of eminent researchers.
>
> The results have shown that a specific personality configuration tends to distinguish art students in general from college students, future fine artists from art students in general, and the successful from the unsuccessful young fine artist. The configuration includes the six 'core personality' factors, namely low Cyclothymia Surgency, Superego strength, high Autia, Radicalism and Self-sufficiency. To these one might add, at least for male fine artists, high Premsia and low Self-sentiment; finally, to round out the picture, one should remember that high Aesthetic Values and low Economic Values are also always present in the pattern."

> "Both successful art students and successful scientists tend to be aloof, non-gregarious, unconcerned with moral standards, sensitive, radical and self-sufficient. On five of the six 'core artistic personality' factors art students and scientists score alike, suggesting that these factors are relevant to creativity in general, not just to an artistic vocation. On the other hand, relative to successful scientists, successful art students have much lower ego strength (C) - the difference in means is of the order of two standard deviations - are less adventurous (H), more suspicious (L), more subjective (M), more insecure (O), and significantly lower on self-sentiment (Q_3)." (pp. 95)

An interesting work was carried out by Eysenck in 1940. He tried to correlate the artist's personal style of expression and his preferences. Four factors in the personality were distinguished, (1) the unstable introvert, (2) the stable introvert, (3) the unstable extrovert, (4) the stable extrovert. (Cyril Burt, 1930) Eysenck's studies found a significant correlation between extroversion-introversion and radicalism-conservatism. "Subjects who preferred the modern, impressionistic painting were extroverted and radical, whereas those who preferred the older, more conventional paintings were introverted and conservative."

SUMMARY

A review of the relevant research literature indicated that the artist (not distinguishing now between

painting and sculpture) has been repeatedly described as: introverted, inner-directed, and possessing a more feminine rather than more masculine identification; he has been described as possessing flexible ego boundaries and an easy regression in the service of the ego. More specifically the sexual and aggressive energy so readily evident in projective tests has been described as readily available and is used for purposes of sublimation rather than direct expression. He has also been described as more individualistic, eccentric and oppositional (a rebel) than the average professional person, or average "man in the street".. To what extent this applies equally well to painters as to sculptors is not at all clear. It is one of the goals of this study to evaluate a few of these personality traits - namely, introversion, dominance, (i.e. aggressiveness), femininity, and neuroticism.

The Sculpture-Painting Dichotomy

Psychologists have been quick to uncover personality characteristics which apply to the profession of "artists". However, nothing in the research summarized related directly to the two groups that are investigated here, that is, painters and sculptors. Our main data if it can be regarded as such, is the contribution of the 15th century artists: Michelangelo, Leonardo da Vinci,

etc. Contemporary views on painting and sculpture can be found mainly in the writings of the philosophers.

A very exciting volume, is Herbert Read's, The Art of Sculpture. The table of contents conveys the essentials of the sculptors existence: 'The Discovery of Space', 'The Realization of Mass', and 'The Illusion of Movement'. 'The Discovery of Space' describes the evolution of the third dimensional concept from the Egyptians and Greeks to the forms which contemporary sculptors use. 'The Realization of Mass', pertains to the sculptured object, in its 'palpable' entity. Herbert Read (1956) stresses,

> "My intention is to show that sculpture owes its individuality as an art to unique plastic qualities, to the possession and exploitation of a special kind of sensibility." . . . "the sensibility required for this effort of realization has nothing in common with visual perception, i.e. with the visual impression of a three-dimensional form on a two-dimensional plane."

Few sculptors have written about their art form in a logical and discursive form. The contribution of Henry Moore to contemporary sculpture is evident and his essays greatly advance the understanding of sculpture today.

The following quotation by Henry Moore (1946) is perhaps one of the most significant statements concerning the attitude of the sculptor toward his work.

> "This is what the sculptor must do. He must strive continually to think of, and use, form in its full spatial completeness. He gets the solid shape, as it were, inside his head - he thinks of it, whatever its size, as if he were holding it completely enclosed in the hollow of his hand. He mentally visualizes a complex form from all round itself; he knows while he looks at one side what the other side is like; he identifies himself with its center of gravity, its mass, its weight; he realizes its volume, as the space that the shape displaces in the air." (Read 1946)

Thus differences between painting and sculpture are noted to this day, and this warrants study. This research cannot reveal the different origins of the motive to sculpt or paint on a profound level. However, it explores the possibility that significant differences between painters and sculptors exist and that these were probably already present in early childhood. As such they would be expected to manifest themselves in personality structure and in the artist's cognitive and visual perception of his world. The variables chosen for study relate both to personality and to cognitive and visual attitudes. The formulation of these problems is in terms of findings already established for "artists" as a whole: that is in terms of the characteristics of masculinity-femininity, (Dudek 1971), dominance-submission, (Dudek 1971, Barron 1978), introversion-extroversion, (Eysenck), concrete vs abstract thinking, (Michelangelo, Leonardo da Vinci).

In the area of personality research data already exists justifying the above conclusions for artists as a whole. To what extent are these findings true for both painters and sculptors? In the area of thinking and or characteristics of the mind, what is known comes mainly from the artist's personal speculation (e.g. Leonardo da Vinci, Michelangelo, Herbert Read and Henry Moore). By using open-ended semi-structured questions focusing on these variables it was posited that information might be obtained which would lend support to the speculations made by these artists.

CHAPTER II

METHODOLOGY

Procedures for the Interview and for Psychological Testing

Subjects

The sample consists of thirty artists (white Caucasians), all presently living in or around the island of Montréal in the province of Québec, Canada. They ranged in age from 31 to 64 years. The majority of the subjects were in an age bracket from 34 to 50 years. Group Number I was composed of 15 painters and Group Number II was composed of 15 sculptors. A control group was not employed. It was felt that since this study is concerned with differentiating between the characteristics of artists, a control group of non-artists was not required. In both groups, the artists are currently actively engaged in their respective fields of painting or sculpture, and they are considered professionals in their field. They have all been engaged in their artistic activities for at least the past eight years, with an average of fifteen years of art experience.

TABLE I

DISTRIBUTION OF SUBJECTS' AGES

30 to 35 years	6
36 to 40 years	4
41 to 45 years	9
46 to 50 years	6
51 to 60 years.	4
Over 60 years	1

Test Material

An open ended interview questionnaire, called the Biographical Inventory, was constructed in order to gather life history material thought to be relevant to the artist's development. Both French and English versions were available. (See Appendix A)

The objective tests were not translated. All French-speaking subjects had a sufficient comprehension of written English in order to participate in the testing. Occasionally, they had some difficulty in translating a word or two. Sometimes they asked to have a clarification of the sense of a phrase. The researcher was present and available to translate orally for their benefit. Of the thirty artists participating, sixteen were unilingual French, eight were unilingual English and six were fluently

bilingual. In the group of painters, nine out of the sixteen spoke only French, as compared with seven out of the sixteen for the group of sculptors.

The interviews and testing were carried out in either the artist's home or studio; or in the researchers office or home. Ten of the painters chose to be interviewed in their homes or studios as opposed to five sculptors. Seven sculptors and three painters preferred to visit in the researcher's office.

Both groups, Number I, the painters; and II, the sculptors, consisted of fifteen male and five female subjects in each group.

The Biographical Inventory

The Biographical Inventory consists of 66 questions (see Appendix A). This inventory makes inquiries about factors such as:

- the country of origin of the artist and that of his (her) parents
- the occupations of the artist's parents, and of his siblings
- the artist's position in his family and in general terms his relationships with his family

- the cultural context of his childhood
- the attitude of his parents toward his profession
- the age at which he began to draw and paint
- his age when he decided on his profession
- is he generally curious, is he interested in people
- does he tend to be depressive
- is he self-confident and agressive
- his general appreciation of school (high school), his involvement, interest, grades and relationship with classmates and friends
- which activities interested him outside of school. (hobbies, etc.)
- his evaluation of the parental home climate, relationship with and description of communication with parents
- the values instilled by parents
- his desire for and friendship with opposite sex, and physical contact
- his sensitivity to people generally
- his appraisal of his capacity to communicate successfully with others
- his capacity for experiencing 'dejà vue' or precognition type of encounters
- his work habits
- etc.

The following are four propositions which were evaluated by means of established psychological inventory tests.

Proposition I: Painters are generally more introverted than sculptors.

Proposition II: Painters are generally more neurotic than sculptors, (the latter being generally more stable).

These propositions were investigated by means of the Eysenck Personality Inventory Test. This test was administered to all thirty artists.

The E.P.I. or Eysenck Personality Inventory was administered according to the instructions on each copy of the test. The subject answered the "true" or "false" questionnaire.

These E.P.I. scales were constructed on the basis of The Maudsley Medical Questionnaire (Eysenck 1953) and the Maudsley Personality Inventory (Eysenck 1960a).

An 8-item Lie scale has been included in the E.P.I. Studies have shown this scale to be valid, reliable, and useful in detecting individuals "faking good"; accordingly, it was included in this inventory. In general, it may be said that there is considerable evidence to show that a score of 4 or 5 or above on the scale shows that "faking good" is likely to have occurred and that "E" and particularly the "N" scores should be regarded with skepticism.

Tendency to have a high "L" score may in itself be an interesting personality trait.

The two other propositions (III and IV) were tested by means of the California Personality Inventory.

Proposition III: Sculptors tend to be more agressive and/or more dominant personalities than painters.

Proposition IV: Painters, whether they are male or female, have a predominantly feminine component in their psychological composition; whereas, sculptors (male or female) possess dominantly male components.

The California Psychological Inventory was administered to all subjects. The results were compiled for Dominance (do) and Femininity (fe), only. The C.P.I. is a self-administered test. The questions are printed and the answers are recorded on a specially designed hand-scorable answer sheet. This inventory has been used in research testing with groups of ages 12 and 13 through 65 and 70. The manual claims that no rigorous conditions need be established in order to achieve valid and useful test results.

Both the California Personality Inventory and the Eysenck Personality Inventory were selected over other similar types of inventories. The reason was that these tests require of their subjects simple true or false responses. Some other tests required a selection of multiple choice answers. In practical terms this often means choosing a reply that is much less than the truth or one which is little closer to the truth. Perhaps neither response really corresponds to the subject's true feelings or attitudes; nonetheless, he is obliged to choose one of these given answers. Compromises of this nature can be exceedingly frustrating. The 'true or false' type responses are more direct, require less compromise and were therefore selected for this investigation.

Data Analysis

All psychological inventory tests, the biographical inventory, and the questionnaires for three of the propositions were scored by the researcher. An example of the scoring sheets for Propositions V, VI, VII, and the Biographical Inventory is included in the Appendix. All the scores mentioned above, were submitted to Chi-square tests for significance. The E.P.I. and C.P.I. tests were also submitted to T-Tests for significance.

It has been established earlier in this text that structured interviews were employed as the instruments for investigating Proposition V, VI, VII. Each questionnaire prepared for the interview relates to a proposition. (See Appendix A) They will be briefly examined here.

Proposition V: Painters are more likely to structure or visualize reality in abstract terms; whereas sculptors are more likely to be concrete.

Proposition VI: Painters are primarily sensitive to colour. Sculptors are primarily sensitive to mass in their daily life experiences

Proposition VII: Painters manifest a centrifugal vision. Sculptors manifest a centripetal type of vision.

Proposition V

"To visualize or structure reality in abstract terms", refers to the domaine of the painter. The conception of the sculptor is more concrete. These are the alternatives which this hypothesis offers.

The questions in the Biographical Inventory inquire whether the artist has a comprehension or insight

into his own psychological experience and his development. The value that an artist places upon the significance of his form, his themes and the dimensionality of his creation, may give us a penetrating view of this issue. The questions were posed in such a way as to draw from the artist the essentials of his understanding, his experience and his artistic evolution. The questions are concerned with the sensory experiences of the creative process, the personality of the artist, the rhythms of his functioning, and his approaches to his work. It was anticipated that his responses would give an insight into the tendencies of the artists toward abstract or concrete quality of his imagination.

Proposition VI

This hypothesis poses the fundamental question as to whether painters are primarily sensitive to colour and whether sculptors are primarily sensitive to mass, in terms of daily life experience.

It seemed most logical to the researcher that the living patterns and working characteristics of these artists ought to coincide. The questions which they tried to answer about themselves in these terms related to their preferences for colour or mass for objects of daily significance.

It is assumed that the experiences of the artists' childhood would have been instrumental in forming their adult inclinations toward tactile or visual preferences.

Another factor that was investigated was the effect of the reinforcement of their parents positive encouragement toward their childhood painting and sculpture experiences.

Proposition VII

This hypothesis is much more difficult to investigate. It states that, "painters manifest a panoramic type of vision, open-field focus, whereas sculptors manifest a convergent, focusing-in, type of vision". This question was posed directly to the artists; it was placed at the end of a a brief questionnaire which inquired about the artist's feelings toward open and closed spaces, their prefenences for living spaces. Following which, each artist was asked how he felt about himself in terms of this hypothesis.

RESULTS

Biographical Inventory Data

The Biographical Inventory Data produced a few statistically significant results. Therefore only those items that are of a particular interest in themselves or those which tend to separate the two groups of artists, to

some extent, will be discussed. All of the data pertaining to this Inventory is listed in the Appendix. There were a total of 66 questions in the Inventory. Since they did not help differentiate between the two groups they will not be discussed. There are a few traits, however, which are interesting in themselves. There are also a small number of items which either show significant differences in themselves or which tend to significance and these will be discussed in detail.

Unless otherwise mentioned there are no specific or statistical differences between the numbers of sculptors or painters falling into each category. Description will therefore be in terms of "artists" raither than sculptors or painters.

The groups as a whole were very homogeneous as already described in the section on 'subjects', and therefore little comment will be made here. Thirteen out of the thirty artists (43%), come from professional background, and seven (23%) come from "unskilled labourers".

Two-thirds of the artists were not only children and the occupations of the majority of other children in their families were either "professional", or "executive".

Early Background

In terms of early background and what degree of

encouragement they received to determine what they chose to be, namely artists, there were twelve out of thirty (40%) who had been encouraged by their parents to cultural-type activities.

To the question: "What was yc mother's/father's attitude toward your profession?", twenty-four artists (40%) were encouraged positively by their mothers, whereas only fifteen out of thirty (50%) received approval from their fathers. In terms of sculpture versus painting, ten fathers (33 1/3%) approved of sculpture compared with only five (17%) fathers who approved of painting.

These results would seem to suggest that the sculptors' fathers are more approving than the painters' fathers. Perhaps their attitudes might reflect the opinion that sculpture is a more masculine activity than painting.

The majority of artists, nineteen out of thirty (63%) began to draw and paint on their own between the ages of five and fifteen years old. Most of them, twelve in each group (80%) said that they were described as having talent and received praise for their artistic involvement.

While only seventeen (57%) described themselves as high in curosity in their 'childhood', twenty-five (83%) out of thirty now describe themselves as 'high' in curosity.

Thirteen (43%) of the artists did not describe themselves as depressive either as children or now. They were similarly divided in their responses to 'agressive'. The sculptors seemed to feel that they are more self-confident now than they were as children. About two-thirds of both groups said that they had manic moods as children and also now.

Slightly over fifty percent of the artists claimed to have had excellent school grades. However, nine painters (60%) and only two sculptors (13%) out of each group of fifteen, said that they were "bored". Only four (13%) of the artists had close friendships with their classmates while eighteen (60%) said they had "indifferent" relations. The majority, twenty-three (77%) considered that they had only a few friends and only three (10%) said that they had many friends. Twelve artists (40%) belonged to "a gang of friends" whereas eighteen (60%) described themselves as "loners".

Half of each group described their home climate as, liberal. Nine artists in each group (60%) professed that they were closer to their mothers than to their fathers. In addition, two-thirds of the artists came from homes described as happy marriages. On the other hand, tensions within the home were reported by two-thirds. Thirteen of the painters and sculptors (43%) were close

and could talk easily with their mothers as compared with two painters (13%) and four sculptors (26%) who felt that way with their fathers. In fact, one-half of each group (50%) felt that they had learned to hide their feelings from their parents. In general, nineteen out of the thirty artists (63%) described their childhood in terms of "happiness and good times".

The results of the question which asks how as a child the artists spent their free time indicates that the sculptors were involved in 'making things' to a much greater degree than the painters. Eleven of the sculptors (73%) and only three (20%) of the painters were involved in constructing things.

Two-thirds of the artists admitted that they spent a lot of time daydreaming as children. Eighteen artists (60%) could recall their earliest memories which date to the age of three or earlier.

Contemporary Preferences

Two-thirds of each group prefer to be physically close to the person they love, and they prefer the company and friendship of their own sex.

The painters tended to be somewhat more sensitive to physical appearance generally (eleven painters (73%),

seven sculptors (47%)). The sculptors tend to be less open or interested in other peoples' ideas and situated themselves under the heading of finding people "banal". The score was one painter (6½%) compared with seven sculptors (41%).

Asked about their abilities to communicate successfully, "do you feel that people can understand you?", fifteen or all of the painters replied, "always, or most of the time", whereas, four (26%) of the sculptors replied to "seldom or almost never". These results tend to indicate a possible interpretation that painters are generally verbally fluent and therefore can communicate and with greater ease than some of the sculptors for whom words seem to be more abstract and elusive.

Results of Propositions I, II, III and IV

There are no statistically significant differences except for the Lie Scale. The painters are not more introverted, or neurotic, or aggressive, or feminine than the sculptors. They have given test scores which are much the same except where the Lie Scale is concerned. The sculptors are more prone to lie, (i.e., see themselves otherwise than as they are). When the painters were examined in comparison to the "normal" population, some

results approaching significance were noted; whereas, the sculptors compared with the normal population did not achieve results approaching significance. Thus it has been found that the sculptors do not differ from the normal population; but, the painters do. It is questionable, however, whether a matched control group would give the same results.

In terms of the normal population, the painters are more introverted, (significant at the ($p < .05$ level). The painters are more neurotic than the normal population ($p < .06$ level), and the painters are less dominant, ($p < .06$ level). The painters have a predominantly feminine component in their psychological composition compared to the normal population ($p < .008$). The sculptors appear to be somewhat more extroverted than the normal population ($p < .09$).

Thus sculptors are not different from the normal population in terms of the hypotheses which have been examined here. The painters, on the other hand, do exhibit some differences from the normal population. The sculptors and the painters do not differ from one another. Since comparison with the "normal" population is not made on a matched group, the validity is questionable. It is offered here mainly as a provocative item, raised as a question for further study.

The following table summarizes the results for Propositions I, II, III and IV.

TABLE II

Variable	Groups	Means	T-Value	P. Level
Extroversion[1]	Painters	9.4	-.32	.75
	Sculptors	9.9		
Neurosis[1]	Painters	11.6	1.57	.12
	Sculptors	8.9		
Dominance[2]	Painters	44.5	-1.31	.20
	Sculptors	49.2		
Femininity[2]	Painters	57.4	1.01	.32
	Sculptors	53.9		
Lie Scale[1]	Painters	2.8	-2.20	.03
	Sculptors	4.5		

1. Eysenck Personality Inventory
2. California Psychological Inventory

Differences of the E.P.I., between painters and sculptors are not statistically significant (t-test analysis) for the traits of extroversion and neuroticism. Comparison of painters and sculptors with a "normal" group (as given by

Eysenck's table of norms (1964) shows that painters are significantly less extroverted and more feminine than "normals" but sculptors are not significantly less extroverted or more femine than "normals".

In support of Propositions III and IV, the C.P.I. tests have clearly shown that these hypotheses were not supported. The t-test analysis indicates that there are no statistically significant differences between painters and sculptors for extroversion, for neurosis, for dominance, or for femininity. There is however statistically significant differences on the Eysenck Lie Scale on which the sculptors scored twice as high as the painters. It is clear that Propositions I, II, III and IV are not supported. The data in terms of the normal population shows that there are some statistically significant differences between the "normal" population and the painters, but none between the "normal" population and the sculptors.

The painters achieved significance at the .05 level or better for the traits of extroversion ($p<.05$) and femininity ($p<.008$). However, for the traits of dominance and neurosis thelevel of significance was only at $p<.06$. It would appear, therefore, that painters tend to be significantly different from "normals" if we use Eysenck's population norms. As already pointed out it is questionable whether these two groups are genuinely comparable.

Discussion of the Responses to Proposition V

Painters are more likely to structure or visualize reality in abstract terms; whereas sculptors are likely to be more concrete.

The first question posed in this section of the investigation was, "Can you recognize certain factors that might have been instrumental in making you decide to become either a painter rather than a sculptor or a sculptor rather than a painter?"

The justifications that painters gave for the fact that they are painters rather than sculptors was very varied. Some declared that it was the result of the praise and attention they received which in turn encouraged them. Others mentioned their great delight in colour and being able to work with it. Several painters considered painting mostly in terms of the graphic expression and the direct instinctive quality, "like writing". One of the painters who is also a printmaker remarked that the spontaneous graphic aspect of painting enables the artist to have a greater number of different kinds of experiences. This he called the "time element" in painting which corresponded to his interior timing. Several of these painters, seven of them, did not seem to have ever concerned themselves with the question of sculpture. One painter said, "Sculpture never even existed for me". This writer

had the impression that for many it was simply a lack of initative that they did not ever venture into problems of the third dimension. However, it might reflect a personality difference which is as yet little understood.

This would be the case if the sources of fashioning form are the result of innermost urges which seek their satisfaction in ways compatible to their expression. Only two of the painters said that their pre-occupations were more with 3-D concerns than painterly concerns. In actual fact neither of these men have been involved with the actual experience of sculpture and their observation is therefore naive and innocent of the reality of what 3-D implies. If one analysis their painting, the space illusion and form of their paintings is the transpositions of typically painterly concepts.

The sculptors mentioned that they were not much concerned with colour; however, one of them felt that there was colour expressed through texture in his bronze sculptures. He felt that colour was denoted by the changing light of the day. He believes that, "colour, even if it is not painted on the sculpture is very important and must be considered".

Painting seemed to just happen for painters. Several drew and painted in their childhood and their adult

life was just the logical continuation of this. One painter took up painting at the age of eighteen. He had written poetry for which he had even won a prize and had some work published. One day motivated by the film about Gauguin, (which he saw four times, consecutively) he gave up writing entirely and decided to paint. He had had no previous experience of painting but he was so inspired that he pursured it with a vigour that soon brought him acceptance by the Salon de Printemps of the Montreal Museum of Fine Arts. From then on, he continued a brilliant career as an internationally renown painter.

A general observation which is significant is that nine of the fifteen sculptors had experiences of "making things" in their childhood. This was stated very aptly by one eminant sculptor, "I was a fabricator of objects as a child". These men and women were introduced early in their youth to construction-type activities. They developed a respect and admiration for tools and for the manipulation of materials, fashioning objects either under the encouragement and guidance of an adult or by themselves in a crude, instinctive way. They were obviously pleased and proud when discussing the accomplishments of their childhood.

It was also interesting to note that nine of the fifteen sculptors (although not necessarily the same

individuals as mentioned above) were previously involved in their artistic career as painters. What makes this information significant is that none of the painters had begun their careers as sculptors. The author's personal opinion is that sculpture is a logical development of thought and form from the two-dimensional expression to the thre-dimensional object.

The palpable quality of the three-dimensional form was mentioned by almost all the sculptors as the most significant difference existing between painting and sculpture. They talked of the "act of manipulating material ... having particular affinity for all things palpable ... the physical action involved ... the tangible presense of tactile surfaces ... the object which really exists in front of you ... the concrete nature of sculpture (this was referred to often) ... forms being objects which have weight ...".

The painters described the significance of painting mostly in terms of colour and line. They said, "painting is closer to the intellect ... it is the wonderment of painting ... drawing is the most intimate extension of myself ... it is closer to daydreaming and more immaterial ... one can express very abstract emotions ... you can portray a climate, a space feeling - an atmosphere".

The author notes that in general the painters seem to express the feelings that their art form is closer to the unconscious levels and this works together with their perceptive and intellectual faculties. The hidden recesses of their minds appear to be more easily accessible resources for their art, as far as they can describe this.

The sculptors seem to reflect more direct communication with the material and concret pre-occupations close to the intellect. Their involvement in the act of creating appears to be more sensual and physical. Their expression is much more somatic expressing perhaps their need for this kind of experience.

Both the painters and the sculptors seem to be very much aware of profound differences in their art forms. A sculptor of metal described the following, "Painting is the mental side or let us say the spiritual side of the white paper. The existance of the three-dimensional piece is in its tangible presence". A woman painter said that she could, "lose myself in it (painting) much easier". One sculptor expounded the following, "I have insecure feelings in front oi things that are suggested as compared to things that are actually present, that we can entirely possess with our bodies. I believe that sculptors are more sensual and that painters are definitely in possession of a form of

castration. It is castration, because they have desires but they suggest their desires: let us say, where as a sculptor takes a real and complete possession of the object which he creates. Finally a young sculptor stated simply, "The difference between painting and sculpture is the difference between dreams and reality".

The following is a continuation of the responses received for questions related to Proposition V:

The total score for the answers relating to the "Pleasure of Artistic Activity" was as follows: eight (53%) of the painters agreed to 'fantasy gratification' compared with only two(13%) of the sculptors. All (100%) the painters said that their activity required mental stimulation; whereas, only ten (66%) of the sculptors thought the same. Of the painters, four (26%) noted that 'tactile stimulation' featured in their artistic activity, compared to ten (66%) of the sculptors; whereas fourteen (93%) of the painters and eleven (73%) of the sculptors mentioned "visual stimulation". Seven of the painters (46%) said that the themes of their art are unconscious, compared to only three (20%) of the sculptors.

Nine, (60%) of the painters and twelve (80%) of the sculptors felt that their art form satisfied them; however, six painters (40%) and two sculptors (13%) wished

that they could "go beyond it". Only three (20%) artists in each group said that they get their ideas to work "intellectually". Thirteen (86½%) painters and only seven (46%) sculptors thought of themselves as "intuitive" types. Seven (46%) of the sculptors and five (33%) of the painters considered that they are more "rational, logical" types.

Summary of the Results of Proposition V

It appears that the evidence for this proposition is entirely qualitative and impossible to verify statistically. The answers fell into many categories and could not be united or fitted into abstract - concrete categories in order to demonstrate significant differences. However, the impression gained was that painters express and see themselves and their work in more abstract terms, while sculptors express and see themselves in more concrete terms.

In general, the image acquired from these artists was that the painters see themselves as more intuitive, spontaneous, visual, and fantasy-oriented than the sculptors. The sculptors view themselves as more physical, tactile, and are more satisfied with their art form. The artists identified themselves with a particular image and in turn their image became the medium of their choice; that is, the medium has particular characteristics, with which the

artists have associated themselves. Painters visualize reality in abstract terms and this approach requires of the painters certain inherent characteristics. These they appear to share in common with other painters. Sculptors are more concrete in the visualizing of their images. It is evident that this is a characteristic of sculptors and it is experienced and understood by them in these terms.

The artists expressed these views more often than not and they expressed them in many different ways which cannot be put to a count. However, it seems evident from their statements that there is a difference between them. It is, therefore, the researcher's impression, that this hypothesis tends to be supported even though we do not have statistical evidence to this effect.

Discussion of the Responses to Proposition VI

There were no statistically significant differences between the responses of the painters and those of the sculptors for Proposition VI. Therefore, it might be simply concluded that Proposition VI which states that, "painters are primarily sensitive to colour and sculptors primarily sensitive to mass in their daily life experience" (the objects around them and their environment) was not supported by the answers to the questionnaire that was used. This does not mean that colour is not more important to painters

nor mass to sculptors, when they are creatively engaged in producing their art form. What this does mean is that in terms of the objects of their life and their surroundings, the sculptors are not more sensitive to mass than are the painters and the painters are not more sensitive to colour than are the sculptors. It is possible that the questionnaire did not ask the right questions.

There were, however, some differences between them that are worthy of note. (Details of the responses for this proposition are in Appendix B.)

The artists were asked to denote their preferences for colour, texture or form, as they pertain to the objects and space of their everyday existence. In order to appraise an object, twelve (80%) of the sculptors said that it was necessary for them to hold the object. Nine (60%) of the painters reacted in the same way; but seven (46%) of the painters said that it sufficed them just to look at it.

The colour of the objects and their form is of primary importance to ten (66%) of the group of painters. All of the sculptors affirmed that the form or shape of an object was of primary importance to them and seven (46%) included colour as well.

Ten (66%) of the painters and eight (53%) of the sculptors are most sensitive to the texture of fabric. Nine

(60%) of the sculptors also indicated that the weight of the fabric and its capacity to match something else as being necessary for their selection of a fabric (for wearing apparel). Only one painter was interested in the weight of the fabric.

In general the artists did not seem to recall colours or experiences of two or three-dimensional nature that they might have enjoyed in their childhood. Perhaps this can be explained in the following way. The majority of the subjects did not have art activities available in their schools. Any motivation in that direction was entirely their own initative.

It appears that the sculptors do recall having a definite preference for hard materials, (eleven 73% soulptors vs four 26⅔% painters). Painters preferred fluid substances and mixing substances.

The artists were asked to list their most prized possession and the one next in importance to it. Two of the painters had no preferences at all; seven sculptors also had no preferences. Eight painters chose their own work and eight chose antique or historic works of art; two preferred their books; one, his plants, another his beetles. Three sculptors chose their work and another three their equipment or tools. Two sculptors mentioned important

papers or documents and only one selected his books and records. These particular results would tend to indicate that the sculptor is more practical and less idealistic. It would almost seem as if the sculptor were less concerned with material things, including his own work. It must be noted, however, that when presented with this question, some of the artists did not know how to relate to it. The researcher encouraged them by asking what they would save if there was a fire in their home or studio. Perhaps the sculptors knowing that their work is generally too large and/or heavy to move did not think of replying to this question, their "own work".

One of the most remarkable findings in this inquiry, although only indirectly related to it, was the response given by the artists to recall certain experiences in their childhood in which they "made things", or paintings: thirteen (86%) compared to five (33%) of the sculptors replied positively; in which they "did construction projects", (building around or with a prized material, etc.) Ten (66%) of the sculptors compared to only four (26%) of the painters replied positively. Seven sculptors (46½%) compared with only two (13%) painters used a prized or 'special' tool.

In addition, the painters substantiated their involvement as having been passive; they claimed that these

activities were initated by other children whom they assisted. These findings suggest that perhaps childhood experiences may have had some small importance in the choice of painting or sculpture.

Summary of the Results of Proposition VI

In summary, the results (tested by the CHI-SQ) seem to indicate that the painters and sculptors do not appraise and appreciate objects and colours differently, as judged by answers to the questionnaire. The painters sometimes preferred colour to other choices of responses and the sculptors often showed their preferences for form, mass, and density; but, these differences were not statistically significant.

The findings of this questionnaire did reveal, however, that the childhood interests and experiences of sculptors were directed toward three-dimensional type of activities, whereas, the painters were involved with two-dimensional types of projects, almost exclusively.

Discussion of the Responses to Proposition VII

The purpose of this inquiry was to establish whether the artists demonstrated through their preferences different forms of cognitive and visual perception. It

was posited that painters have a centrifugal type of vision and sculptors a centripetal type of vision. It is possible that the artistic formation of the painter and sculptor have developed these types of perceptive abilities differently. It is equally possible that these characteristics are innate and are a factor in assisting the artist to develop his art form in one-dimension rather than in another.

This inquiry began investigating the artists' preferences for expansive or contained, open or enclosed spaces. It inquired whether the climate or atmosphere was more important than the colours and objects of their surroundings. The results show that there were no significant differences whatsoever between the painters and the sculptors.

Finally the proposition itself was put to the artists. They were asked whether they agreed with it and how they could relate themselves in terms of this question. In both groups, the majority of artists agreed with the proposition (65% agreed in all).

One of the sculptors, who was previously a painter, said, "In general, even if a sculptor does a spatial type of structure composed in space there is, none the less,

a concentration on his part for the structure of the composition in articulations. The object may be enlarged or multiplied but there is still a concentration on the object". Several of the artists mentioned that they did not feel that their perception of space necessarily had any determinating effects on the type of sculpture or painting that they did.

On young painter said that he believed that painters and sculptors feel space in the same way but that they use it differently; that, as creators they transpose it in a different way. A sculptor insisted that it is all a question of the personality of each artist as to how he perceives. A female painter said, "I am definitely very sensitive to space to the quality of the environment and to the emotional atmosphere or climate around me. So I would agree, because it seems to me that a painter would be more likely to tend to the above considerations and a sculptor would be interested in objects".

On painter discussed an observation which she made, as an art teacher of both children and adults. She noticed that there are two very different approaches that people take to working out a drawing. Some work from a central focus or object outwards toward the outer limits of

their sheet of paper or engraving plaque. Others work from the outside or peripheral areas in toward the focal point; or else for them, there is no particular focal point but the entire sheet is important. She observed that this is obvious from the very first movements which one places on a sheet, even in a doodle. She was unable to assess whether there might be any connection with this kind of approach to work and the hypothesis of this research.

Summary of the Results of Proposition VII

The questions for Proposition VII did not show any statistically significant differences. It is possible that the questions were too ambiguous and did not evoke the kind of replies that were anticipated. It is also possible that the artists do know what type of vision they do have; but again, perhaps they were trying to comply with the researcher by giving the kind of response that they thought they should be giving. When asked about their kind of vision, they tended to agree with terms of the proposition; but, this was purely a cognitive agreement and there was no support for it in terms of the kinds of responses which they gave to the questions asked to elicit support for the proposition.

Methodological Limitations

1. This test was administered to thirty artists.

They were a fairly homogeneous group in terms of age, nationality, language and professional involvement. This total group of thirty subjects constituted the minimum requirement of the number of subjects for this type of testing. As such it cannot be considered a representative group. A larger group of an additional thirty artists could possibly give more valid results.

2. It has been very difficult to test and evaluate the results of the 'subjective' portions of this investigation (namely Propositions V, VI, VII). It could be that the types of questions used were defective in their ability to elicit from the artists the genuine differences which may likely be there.

3. It is also possible that a non-directive type of ~~interviewing~~ might have revealed other aspects to the problem, other than those which were very specifically mentioned here. The direct questionnaire administered as an interview, with multiple choice answers, set up a closed framework. However, it permitted a more statistical analysis.

4. Both groups investigated (the fifteen painters and the fifteen sculptors) were each composed of ten male artists and five female artists. It would be very interesting to pursue this research with a larger and more representative sample of male and female artists.

CHAPTER III

GENERAL SUMMARY AND CONCLUSIONS

The research of this thesis attempted to compare the psychological attitudes of painters and sculptors. It further hoped to explore the prevailing conscious and unconscious tendencies guiding the artist's choice of medium. It was felt that the information obtained from this Study would serve as an insight toward our further understanding of the creative experience, and that it might also be of value to art educators.

The subjects were thirty artists, fifteen painters and fifteen sculptors (ten males and five females in each group), all white Caucasians, who are presently living in the area of Montreal, Québec, Canada. The majority of the subjects were from 34 to 50 years old. The age span was between 31 to 64 years.

The Eysenck Personality Inventory and the California Psychological Inventory were used in order to determine whether the painters are more introverted and neurotic (E.P.I.) and less dominant and more feminine (C.P.I.) than sculptors. The results were submitted to T-Test for analysis of differences. (Propositions I to IV inclusive)

An interview questionnaire was used in order to assess whether: (1) painters are more likely to structure or visualize reality in abstract terms whereas sculptors are more concrete, (2) painters are primarily sensitive to colour and sculptors to mass in their daily life experience, (3) painters manifest a centrifugal and sculptors a centripetal type of vision. The results of these questionnaires were submitted to chi-square analysis for Propositions V to VII included.

The following is a resumé of the results:

Proposition I

Painters are not more introverted than sculptors.

Proposition II

Painters are generally not more neurotic than sculptors.

Proposition III

Sculptors do not tend to be more agressive and dominant types.

Proposition IV

Painters, whether they are male or female, do not have a predominantly feminine component in their psychological composition; whereas, sculptors (male or female) do not possess dominant male components.

Proposition V

Painters are not more likely to structure or visualize reality in abstract terms; whereas, sculptors are not more likely to be concrete.

Proposition VI

Painters are not primarily sensitive to colour in their daily life experience and sculptors are not primarily sensitive to mass. Moreover, these preferences were not evident in childhood as far as can be judged by questionnaire responses.

Proposition VII

Painters do not manifest a centrifugal type of vision. Sculptors do not manifest a centripetal vision.

Additional Findings

I. In terms of the "normal" population, painters scored as more introverted. This was found to be statistically significant at the .05 level.

II. Painters tend to be more neurotic than the normal population. ($p<.06$ level).

III. Painters tend to be less dominant and agressive than the normal population. ($p<.06$ level) In addition, it is interesting to note that the sculptors appear to be somewhat more extroverted than the normal population at the .09 level of significance.

IV. Painters have a predominantly feminine component in their psychological composition, as compared with the normal population. ($p<.008$ level)

Additional Findings Based on Qualitative Data

I. The painters see themselves as more intuitive, spontaneous, visual and fantasy-oriented than the sculptors. The sculptors view themselves as more physical, tactile, and more satisfied with their art form.

II. The clinical impression, although it is not supported by statistical evidence, is that the painters do visualize reality in more abstract terms and that the sculptors are more concrete.

III. The childhood interests and experiences of sculptors were directed toward three-dimensional type of activities compared to the painters whose involvements were exclusively with two-dimensional type of projects.

While there are many other interesting differences between painters and sculptors, none were statistically significant or remarkable enough to note further.

Implications for Art Education

It was anticipated that the information obtained from this research would be able to assist art educators to evaluate, on the basis of personality differences and cognitive preferences, which students would be more ideally suited by temperament for painting or sculpture. The results of the

present research seem to indicate that such a hope is without foundation. However, although there is no statistically significant evidence for the impression, it is this writer's feeling that subtle differences in perceiving, feeling and apprehending reality do exist between painters and sculptors. These differences may be measurable on other levels and in other areas than those assessed by the present research. It is possible that the questions asked were not relevant to essential differences between painting and sculpture, and that a more thorough analysis of each medium might elicit better questions to ask in a future study.

An interesting finding that would appear to have a direct implication for art education was the fact that the sculptors were directed to three-dimensional type of activities early in their youth; whereas, the painters were not exposed to these kinds of activities and did not initiate them as the sculptors did. This finding would suggest that if children were exposed early to activities involving the third dimension, construction and assembly of form in addition to modeling form, there might be a greater tendency to choose sculpture as a medium for self-expression.

Today there seems to be an increased enrollment in sculpture courses in both junior colleges and universities. This is perhaps the result of an early introduction to

three-dimensional activities that youth today have for construction, woodwork, and other similar experiences. The artists who were the subjects for this research were in general a generation older and did not have the same opportunities or facilities available to them in this area. On the other hand, if personality factors are important, early exposure to the third dimension would be only one of the determining factors in choice of art medium.

APPENDIX A

ENGLISH VERSIONS OF:

Biographical Inventory Questionnaires

Proposition V: Questionnaires

Proposition VI: Questionnaires

Proposition VII: Questionnaires

FRENCH VERSIONS OF:

Iventaire Biographique

Proposition V: Questionnaire

Proposition VI: Questionnaire

Proposition VII: Questionnaire

BIOGRAPHICAL INVENTORY

SUBJECT'S NUMBER:

1. Age:
2. Sex:
3. Occupation: Painter:
4. Sculptor:
5. Other: (specify)
6. Where were you born? Canada:
7. North or South America:
8. Europe:
9. Other: (specify)
10. Where was your father born?
Canada:
11. North or South America:
12. Europe:
13. Other: (specify)
14. Where was your mother born?
Canada:
15. North or South America:
16. Europe:
17. Other: (specify)
18. Where did you spend the greater part of your childhood?
Canada:
19. North or South America:
20. Europe:
21. Other: (specify)
22. What is/was your father's occupation?
23. What is/was your mother's occupation?

24. How many brothers and sisters do you have?

25. What is your position in your family? (1st, 2nd, 3rd child etc.)

26. List the occupation(s) of your brother(s):

27. List the occupation(s) of your sister(s):

28. Did you get along well with them? (close family ties)

a) yes:

29. b) no:

30. What situation best describes your family's economic situation?

rich (afforded luxuries)

31. middle-high income (comfortable)

32. middle (comfortable, but anxious)

33. middle-low (only basic needs)

34. poor (barely basics, insufficient)

35. Are you bilingual? yes

36. no

37. Did your family take you to museums, art galleries, or other cultural activities? yes

38. no

39. Were you encouraged to take art lessons?

yes

40. no

41. What was your mother's attitude to your profession?

approval:

42. disapproval:

43. What was your father's attitude to your profession?

approval:

44. disapproval:

45. How old were you when you started to draw and paint, on your own?

age:

46. Were you described as having talent in this area?

yes:

47. no:

48. Did your parents praise you for your artistic interests?

yes:

49. no:

50. How old were you when you decided to become an artist?

age:

51. Would you describe yourself as High (H), Medium (M), or Low (L) in curiosity? (pertaining to nature, the world, things etc.)

as a child: High:

52. Medium:

53. Low:

54. and now: High:

55. Medium:

56. Low:

57. Did you have depressive moods as a child?

Yes:

58. No:

59. and Now? Yes:

60. No:

61. Were you self-confident as a child?

Yes:

62. No:

63. Now? Yes:

64. No:

65. Were you agressive or self-assertive as a child?

Yes:

66. No:

67. Did you have excited or manic moods as a child?

Yes:

68. No:

69. Now? Yes:

70. No:

71. What kind of a relationship did you have with your classmates?

Close:

72. Friendly:

73. Indifferent:

74. Did you have many friends?-Many:

75. A few:

76. Only one:

77. No One:

78. Describe what kind of a student you were: Your grades were:

Excellent:

79. Medium-average:

80. Poor,weak:

Describe what kind of a student you were: (con't)

81. Your interest in school work:

stimulated:

82. average:

83. bored:

84. Your involvement in school life:

involved:

85. not involved:

86. In what areas did you excel?

art:

87. other: (specify)

88. Would you best describe your home background as having been:

liberal, with freedom of expression:

89. autocratic, strict conformist:

90. no particular distinguishing traits:

91. Did you feel closer to your father than your mother?

92. Did you feel closer to your mother than your father?

93. What was the nature of communication with your mother and father?

You may check one item, or more. MOTHER : FATHER

94. - close could talk easily

95. - close but only on certain topics

96. - close but no verbal communication

97. - learned to hide feelings

98. - not open - put on a facade so he(she) felt I was doing what they wanted

99. - distant and detached

100. - distant but felt their warmth

101. - hostility, open or covert

102. - other, specify -

103. Would you estimate that your parents had a happy marriage?

yes:

104. no:

105. Were their tensions in the home?

yes:

106. no:

107. Were you instilled with which of the followings attitudes toward life:

romantic and idealistic:

108. practical and materialistic:

109. eccentric:

110. frugal:

111. generous:

112. Who were your heros? contemporary personalities:

113. people from the past:

114. Did you belong to a "gang of friends?

yes:

115. no:

116. Were you a loner? (only answer if yes):

117. Do you think of your childhood in terms of happiness and good times?

yes:

118. no:

119. In high school,age 13-16 yrs,,were your closest friends:

mostly,male

120. mostly female

121. As a child,before 15 yrs old, did you spend your free time:

reading:

122. constructing things:

123. writing:

124. doing art work:

125. other activities:

126. As a child,did you daydream alot? (only answer if yes)

127. The earliest memory that you have of your childhood is when you were:

6yrs. 5yrs.

128. 4yrs. 3yrs.

129. 2yrs. or earlier

131. Do you prefer the company and true friendship of:

your own sex:

132. the opposite sex:

133. Is physical closeness important to you?

being physically close to the person you love:

134. Do you prefer a relationship which does not have too much cuddling,

touching, being close:

135. Are you irritated by how people look, clothes they wear, expression

on their faces?

136. Do you ignore physical appearance:

137. Are you fussy about how your sexual partner dresses?

yes:

138. no:

139. Are you interested in hearing peoples' ideas:

140. Or do you find most people banal:

141. Are you sensitive to expressions on peoples faces?

142. Or do you not look at then too closely:

143. Do you feel people can understand you:

Always or most of the time:

144. Seldom or almost never

145. How often have you entered a strange place and felt that you had been there before, or felt that you knew something was going to happen before it actually occurred?

Never

146. Seldom

147. Occasionally

148. Frequently

149. How often have you had an event or object vividly pictured in your mind after it was no longer present to your senses?

Never:

150. Seldom:

151. Occasionally:

152. Frequently:

153. How often have you had a complete memory lapse for a very familiar person, place, or thing?

Never:

154. Seldom:

155. Occasionally:

156. Frequently:

157. How often have you become so absorbed in a project that you skipped a meal or stayed up very late?

Never:

158. Seldom:

159. Occasionally:

160. Frequently:

Total questions: 66

QUESTIONS FOR PROPOSITION V

1. Can you recognize certain factors that might have been instrumental in making you decide to become:
   - a painter rather than a sculptor.
   - a sculptor rather than a painter.

2. To painters:
   You must have had some experience in sculpture, what is the significance that painting has over sculpture for you?

   To sculptors:
   You must have had some experience in drawing and painting, what is the significance that sculpture has over painting for you?

3. When did you first discover the emergence of a continuity in the evolution of your images?

4. Did you ever have to struggle against preconceived notions or or prejudices concerning painting or sculpture?

5. What kind of pleasure does this artistic activity give to you?

   - fantasy gratification
6. - feelings of adventure
7. - physical exhilaration
8. - mental stimulation
9. - feelings of conquest
10. - superiority
11. - exhilaration of communication
12. - feelings of belonging
13. - mystical feelings
14. - other (specify)

15. Check which of the following experiences feature during your artistic activity? (c.g. -during your professional activity)

- tactile stimulation

16. - visual stimulation

17. - olfactory stimulation

18. - kinesthetic stimulation

19. What are the favourite themes in your work?

20. When you are deeply involved in your work, you can feel the excitement of discovery described best in the following way:

- excitement of uncovering, getting within, getting to the source of.

21. - excitement of adventure, coming forth, bringing out, revealing.

22. - other: describe

23. Do you make decisions quickly, spontaneously?

	yes:	no:
- in your life:		
24. - in your work:		

25. Do you trust yourself in the decisions that you make?

	yes:	no:
- in your life:		
26. - in your work:		

27. Are you a compulsive anxious person?

- yes

28. - no

29. Do you need time to function? use a slow pace?

	yes:	no:
- in your life		
30. - in your work		

31. Are you capable of functioning under pressure?

- yes

32. Would you describe your creative capacity, in terms of:

- fluid rhythm, outpouring, with ease.

33. - controlled, stingy, slow, inconstant, with difficulty.

34. Do you agree that the act of creating also implies a measure of destruction?

- yes

35. - no

36. Do you have a need for this kind of destruction?

- yes

37. - no

38. Do you daydream alot?

- yes

39. - no

40. Do you think that daydreaming is constructive, helps you in your work?

- yes

41. - no

42. Do you think that the content of your dreams relates directly with the content of your art work? (c.g. -with your professional work?)

- yes

43. - no

44. When did you first discover that: (which first)

- you have a creative imagination

45. - you are a sensitive artist

46. - you are capable of expressing something in your art

47. Does painting or sculpture completely satisfy you?

- yes

48. Or, do you seek a dimension beyond it?

- yes

49. Do you desire or need to be physically involved or exhilarated, during your working?

- yes

50. - no

51. How do you get the ideas to work?

- intitutively (from feelings)

52. - intellectually

53. - inspirationally (imagination, from stimuli-concrete)

54. - other (specify)

55. Are you a more:

- rational, logical type

56. - intuitive

57. - sensate

58. - imaginative, prone to phantasy

59. Do you work in an organized and controlled manner, with an idea in mind?

- yes

60. Or, spontaneously and freely, the organisation coming later?

- yes

61. Do you work and destroy?

- yes

62. Or, do you keep building up on the initial project? ____

- yes

QUESTIONS FOR PROPOSITION # VI

1. When you are appraising an object:

- is it enough for you to look at it
- yes:

2. - or,is it necessary for you to hold it or touch it:
- yes:

3. What do you think is of primary importance to you:

- the colour of objects

4. - the form of the objects,shapes

5. When you are selecting a fabric (as an item of wearing apparel) for a suit, what is more important to you:

- the texture,the feelof the weave

6. - the pattern,design,printed or woven

7. - the weight of the material,the body

8. - that it match with something else

9. Consider for a moment the room which you prefer in your home:

Are you more sensitive to the - colours,therein:

10. - objects,therein:

11. If you own a car,what colour is your car?

12. If you own a car,what model is it? (sports, stationwagon,truck etc.)

13. What colour or colours predominate in your home?

- primary colours

14. - secondary colours

15. - neutral colours

16. Did you select your favourite armchair or sofa because of its:

- colour

17. - comfort

18. - shape

19. - style

20. Do you prefer your everyday outfit because of:

- colour

21. - the way it fits;comfort

22. - style

23. - feel,quality of the material

Questions for proposition # VI (con't)

24. Do you prefer your favourite 'dress-up' outfit because of its:

- colour
25. - fit
26. - style
27. - its feel, the quality of the material

28. Trying not to be too sentimental, what is your most prized possession?

- describe, why:

29. What is your second most prized possession?

- describe, why:

30. Do you often change your preferences?

CHILDHOOD EXPERIENCES:

31. Do you remember the colours of your favourite childhood cloths

32. Did you have a favourite colour in your childhood? Describe:

33. Did you have a favourite object, as a child? Describe:

34. Did you enjoy painting for? (List in order of priority)

- the pleasure of the colours
36. - The sensation of spreading the paint
37. - mixing the colours together
38. - making the images
39. - fantasying with your gestures

40. Did you enjoy playing with mud?

41. Do you recall if you played with your feces?

42. Did you enjoy making things in clay or plasticine?

43. What do you recall was the most exciting about working clay?

- squishing the clay
44. - banging the clay
45. - spreading it about
46. - putting lots of water on it

47. Did you prefer the clay when it was gooie or firm?

- gooie
48. - firm

49. Did you prefer to: - make things with it?

50. - to play or just feel it?

51. - or just avoid it?

Questions for proposition #VI (con't):

52. As a child were you particularly sensitive to:

- substances that were fluid

53. - mixing substances together

54. - hard materials having texture

55. Did you prefer certain foods because of their colour?

56. Did you refuse certain foods because of their colour?

57. Did you prefer certain foods because of their texture?

58. Can you recall certain experiences in your childhood in which you:

- made things:
  a) objects, ceramics, jewelry
  b) paintings or collages, etc.

59. - reconstructed things:
  a) repaired
  b) rearranged

60. - construction projects:
  a) build around or on with a a specially prized material
  b) build with a special tool made by you

61. - other: describe

62. How did your parents react to the paintings you made:

- did not take particular notice

63. - praised you, encouraged you (for the sake of being nice to you)

64. - reprimanded you

65. - praised you highly, sincerely

66. - you don't remember

67. How did your parents react to the sculptures or constructions you made:

- did not take particular notice

68. - praised you, encouraged you (for the sake of being nice to you)

69. - reprimanded you

70. - praised you highly, sincerely

71. - you don't remember

QUESTIONS TO PROPOSITION VII

1. Would you rather have a living room that has a wide open space?
2. Or, would you rather have a living room that has a more enclosed space?
3. Which would you imagine to be most appealing:
   If you could have a house situated on the top of a hill, with an open view all around:
4. If you could have a house situated in a valley, with a view of mountains all around:
5. When you enter a strange room, do you feel:
   The space relationships, the atmosphere of that room?
6. - or, do you focus on the objects or colours of that room?
7. Have you ever observed which tends to be more important to you?
   - the quality of space (its panoramic aspect)
8. - or, the objects within a given space
9. How do you feel about the world in which we live? The city in particular. In looking at your physical environment: sights, sounds, advertising, etc.
   - are you neutral to what you see everywhere?
10. - does it affect you pleasantly?
11. - does it affect you unpleasantly?
12. My own feeling is that painters have a panoramic type of vision, open-field focus, where as sculptors have a convergent, focusing in on type of vision
    Do you agree?
    How can you relate yourself in these terms?

INVENTAIRE BIOGRAPHIQUE

1. Age:
2. Sexe:
3. Occupation: - peintre
4. - sculpteur:
5. - autre: spécifiez
6. Où êtes-vous né(e):
   - Canada
7. - Amérique du nord ou sud
8. - Europe
9. - ailleurs
10. Lieu de naissance de votre père:
    - Canada
11. - Amérique de nord ou sud
12. - Europe
13. - ailleurs
14. Lieu de naissance de votre mère:
    - Canada
15. - Amérique du nord ou sud
16. - Europe
17. - ailleurs
18. Où avez-vous passé votre enfance?
    - Canada
19. - Amérique du nord ou sud
20. - Europe
21. - ailleurs
22. Quel est ou était le métier ou la profession de votre père?
23. Quel est ou était le métier ou la profession de votre mère?

24. Combien de frères et de soeurs, avez-vous?

25. Dans votre famille, quel rang occupez-vous? (1ier, 2ième, etc.)

26. Quelles sont les occupations de vos frères?

27. Quelles sont les occupations de vos soeurs?

28. Est-ce que vous vous entendez bien avec eux? Oui:

29. Non:

30. Comment peut-on décrire la situation économique de votre famille:

- revenus élevés

31. - au dessus de la moyenne

32. - revenus moyens (confortable mais inquiétant)

33. - en dessous de la moyenne (essentiel seulement)

34. - pauvre (à peine, insuffisient)

35. Etes-vous bilingue? Oui:

36. Non:

37. Est-ce que vos parents vous ont amené aux musées et galleries d'art, ou à d'autre manifestations culturelles? Oui:

38. Non:

39. Est-ce que on vous a encouragé à prendre des cours d'arts? Oui:

40. Non:

41. Quelle attitude avait votre mère vis-à vis votre profession? Accord.

42. Désaccord.

43. Quelle attitude avait votre père vis-à vis votre profession? Accord.

44. Désaccord.

45. A quelle âge, avez-vous commencé à dessiner et à faire de la peinture? (par vous-même) âge:

46. Vous a-t-on dit que vous aviez du talent dans ce domaine?

- oui

47. - non

48. Est-ce que vos parents ont alors fait l'éloge de vos activités artistiques?

- oui

49. - non

50. A quelle âge avez-vous decidé de devenir artiste ou d'exercer votre profession ou votre métier? âge:

51. A quel niveau situeriez-vous votre curiosité?

- comme enfant -

- aigue

52. - moyenne

53. - basse

- maintenant -

54. - aigue

55. - moyenne

56. - basse

57. Avez-vous eu des phases dépressives? (dans votre enfance)

- oui

58. - non

59. - maintenant - - oui

60. - non

61. Aviez-vous confiance en vous-même lorsque vous étiez enfant?

oui:

62. non:

63. maintenant: oui:

64. non:

65. Etiez-vous alors un enfant autoritaire ou agressif?

oui:

66. Non:

67. Avez-vous connu des états d'euphorie et d'exaltation?

oui:

68. non:

69. maintenant: oui:

70. non:

71. Quel genre de rapports aviez-vous avec vos compagnons de classe?

étroits:

72. amicaux:

73. indifférents

74. Aviez-vous beaucoup d'amis? beaucoup:

75. quelques uns

76. un seul

77. aucun

78. Généralement, quelles était vos notes:

excellentes

79. moyennes

80. faibles

81. Comme étudiant vous étiez: intéressé

82. moyennement intéressé

83. ennuyé

84. Votre engagement dans la vie de l'école:

satisfaisant

85. non satisfaisant

86. Dans quel domaines excelliez-vous?

arts plastiques:

87. autres:

88. Comment décririez-vous le climat dans votre famille:

libre et ouvert

89. rigide et conformiste

90. rien de particulier

91. Etiez-vous plus proche de votre père que de votre mère?

92. Etiez-vous plus proche de votre mère que de votre père?

93. Quel genre de communication aviez-vous avec votre mère et votre père?

		Mère:	Père:
94.	- intime, communication facile.		
95.	- intime, mais seulement sur certains sujets.		
96.	- intime, mais pas de communication verbale.		
97.	- j'ai appris à cacher mes sentiments		
98.	- pas ouverte, je faisais semblant afin qu'il pensent que je faisait ce qu'ils voulaient.		
99.	- distante et détachée.		
100.	- distante quant à moi, mais je sentais leur affection.		
101.	- hostilité, ouverte ou cachée		
102.	- autre (spécifiez)		

103. Pensez-vous que vos parents étaient heureux ensemble?

oui
104. non

105. Est-ce que vous avez vécu dans un état de tension dans votre famille?

oui
106. non

107. Lesquelles des attitudes suivantes, vos parents vous ont-ils inculquées

- romantique et idéaliste
108. - pratique et matérialiste.
109. - fantaisiste
110. - frugale
111. - généreuse

112. Qui étaient vos héros? - personnalités contemporaines

113. - personnalités de l'historique

114. Faisiez-vous parti d'un "gang" d'amis?

oui
115. non

116. Etiez-vous un enfant solitaire? oui

117. Vos images d'enfance, sont-elles heureuses?

oui
118. non

119. A l'école secondaire, de 13-16 ans, vos amis intimes étaient;

plutôt des garçons

120. plutôt des filles

121. Dans votre enfance, avant 15 ans, passiez-vous votre temps libre:

à lire
122. à fabriquer des objets
123. à écrire
124. à faire des oeuvres d'art
125. à faire d'autres activités

126. Durant votre enfance, étiez-vous porté(e) à rêvasser beaucoup?

127. Votre plus ancien souvenir d'enfance remonte à:

6 ans 5 ans
128. 4 ans 3 ans
129. 2 ans ou moins

131. Préférez-vous l'amitié de gens:

- de votre propre sexe
132. - du sexe opposé

133. Est-ce que l'intimité physique est importante pour vous?

134. Ou préférez-vous en genre de relation incluant moins de contacts physiques, de caresses et d'étreintes?

135. Etes-vous sensible à l'apparence des gens, à leur façon de se vêtir, à leur expression faciale: - oui

136. Est-ce que vous ne tenez aucun compte de l'apparence physique des gens?

137. Etes-vous éxigeant vis à-vis la façon de se vêtir de votre partenaire?

- oui
138. - non

139. Etes-vous ouvert aux idées des autres?

140. Ou trouvez-vous la plupart des gens banals?

141. Etes-vous sensible à l'expression faciale des gens?

142. Ou vous ne les regardez pas de si près.

143. Avez-vous le sentiment que les gens vous comprennent?

- la plupart du temps
144. - rarement, presque jamais

145. Combien de fois vous est-il arrivé d'entrer dans un endroit inconnu en ayant l'impression d'y avoir déjà été, ou avez-vous ressenti que quelque chose allait se produire avant que celle-ci ne se produisit?

- jamais
146. - rarement
147. - occasionellement
148. - souvent

149. Combien de fois vous est-il arrivé qu'un objet ou événement vous soit apparu clairement à l'esprit, après qu'il ne fût plus là?

- jamais
150. - rarement
151. - occasionellement
152. - souvent

153. Combien de fois vous est-il arrivé d'avoir un blanc complet de mémoire, devant une personne, un endroit, ou un objet bien connu.

154. - jamais
155. - rarement
156. - occasionellement
- souvent

157. Combien de fois vous est-il arrivé d'être si absorbé dans un travail que vous avez sauté un repas ou passé une nuit blanche?

158. - jamais
159. - rarement
160. - occasionellement
- souvent

QUESTIONNAIRE A PROPOSITION V

1. Quels sont les facteurs qui ont influés sur votre décision de devenir un peintre plutôt qu'un sculpteur ou un sculpteur plutôt qu'un peintre?

2. Aux peintres:

Vous avez sans doute eu quelques expériences de la sculpture; comment interprétez-vous alors que vous lui préférez la peinture?

Aux sculpteurs:

Vous avez sans doute eu quelques expériences de la peinture et du dessin; comment interprétez-vous alors que vous leur préférez la sculpture?

3. Quand avez-vous découvert l'existence d'une continuité dans l'évolution de vos images?

4. Avez-vous eu à combattre certaines notions préconçues ou préjugés au sujet de la peinture ou de la sculpture?

5. Quelle sorte de satisfaction retirez-vous de votre activité artistique?

- gratification de fantaisie
6. - sensations d'aventure
7. - stimulation physique
8. - stimulation mentale
9. - sensations de conquête
10. - superiorité
11. - communication
12. - faire parti de
13. - sentiment mystique
14. - autre: spécifiez

15. Laquelle des sensations suivantes domine dans votre activité créatrice?

- stimulation tactile

16. - stimulation visuelle

17. - stimulation olfactive

18. - stimulation kinesthésique

19. Quels sont les thèmes qui dominent votre expression?

20. Quand vous êtes très engagé dans votre travail et que vous éprouvez l'excitation de la découverte cela se décrirait en termes suivants:

- l'excitation de mise à découvert, remonter aux sources.

21. - l'excitation de l'aventure, d'avancer, de dévoiler, de réveler

22. - autre, décrivez

23. Prenez-vous des décisions rapidement, spontannément?

	oui:	non:
- dans votre vie		
24. - dans votre travail		

25. Avez-vous confiance dans vos décisions?

	oui:	non:
- dans votre vie		
26. - dans votre travail		

27. Etes-vous une personne anxieuse et compulsive?

- oui

28. - non

29. Prenez-vous beaucoup de temps à accomplir ce que vous faites?

	oui:	non:
- dans votre vie		
30. - dans votre travail		

31. Pouvez-vous agir sous pression?

- oui

32. Dans quels termes suivants décrirez-vous votre débit créateur :

- rhythme fluide, effusion aisée.

33. - contrôlé , frugal, lent, inconsistant avec difficulté.

34. Etes-vous en accord avec l'idée que l'acte créateur implique unepart de destruction?

- oui:

35. - non:

36. Avez-vous besoin de ce genre de destruction?

- oui:

37. - non:

38. Etes-vous porté à rêvasser beaucoup?

- oui:

39. - non:

40. Croyez-vous qu'il est constructif de rêvasser?

- oui

41. - non

42. Pensez-vous que le contenu de vos rêves correspond au contenu de votre art?

- oui

43. - non

44. Quand avez-vous découvert que:

- vous avez une imagination créatrice.

45. - vous êtes un artiste sensible.

46. - vous êtes capable d'exprimer quelque chose par votre art.

47. La peinture ou la sculpture, vous donne-t-elle une satisfaction complète en tant que forme d'expression?

- oui

48. Cherchez-vous au delà de celle-ci?

- oui

49. Désirez-vous ou avez-vous besoin d'être engagé physiquement dans votre travail?

- oui

50. - non

51. Comment trouvez-vous les idées qui animent votre travail?

- intuitivement (sensations)

52. - intellectuellement

53. - imagination

54. - autre: spécifiez

55. Etes-vous une personne plus

- rationelle, logique

56. - intuitive

57. - sensorielle

58. - imaginative

59. Travaillez-vous d'une façon méthodique, controlée avec une idée en tête?

- oui

60. Ou, libre et spontannée, l'organisation apparaissant en cours de route?

- oui

61. Travaillez-vous par destructions successives?

- oui

62. Ou, par une suite continue d'additions.

- oui

QUESTIONNAIRE A PROPOSITION VI

1. Quand vous êtes en train d'observer un objet:
   - vous suffit-il de le regarder?
2. - ou, sentez-vous le besoin de le prendre et de le toucher?
3. Lequel de ses attributs vous semble de première importance dans l'appréciation d'un objet.
   - sa couleur.
4. - sa forme.
5. Quand vous choisissez le tissu d'un vêtement, laquelle des qualités suivantes a le plus d'importance?
   - la texture.
6. - le dessin imprimé.
7. - l'épaisseur du tissu.
8. - s'il va bien avec d'autres vêtements.
9. Etes-vous plus sensible:
   - aux couleurs
10. - aux objets.
11. Si vous possédez une voiture, quelle en est la couleur?
12. Si vous possédez une voiture, de quel type est-elle? (sedan, sport, camion etc.)
13. Quelle couleur domine le décor de votre maison?
   - couleur primaire.
14. - couleur secondaire.
15. - ton neutre.
16. Pourquoi avez-vous choisi votre fauteuil ou sofa favori? A cause de:
   - sa couleur.
17. - son confort.
18. - sa forme.
19. - son style.
20. Préférez-vous vos vêtements de tous les jours, à cause de:
   - leurs couleurs
21. - leur comfort.
22. - leur style.
23. - la qualité du tissu.

24. Préférez-vous vos vêtements "habillés", à cause de:

- leur couleur.

25. - leur confort.

26. - leur style.

27. - la qualité du tissu.

28. Sans être trop sentimental, quelle est votre plus précieuse possession? (un objet)

- et décrire pourquoi.

29. Votre deuxième plus précieuse possession?

- et décrivez pourquoi.

30. Combien de fois avez-vous changé vos préférences?

Quand vous étiez enfant:

31. Vous souvenez-vous de la couleur d'un vêtement favori?

32. Aviez-vous alors une couleur favorite?

33. Aviez-vous alors un objet favori?

34. Peigniez-vous alors pour: (par ordre de priorité)

- le plaisir de la couleur.

35. - la sensation d'étaler de la peinture.

36. - le plaisir de mélanger des couleurs ensemble.

37. - de produire des images.

38. - pour la fantaisie découlant du geste

40. Jouissiez-vous à jouer dans la boue?

41. Avez-vous le souvenir préçis d'avoir joué avec vos selles.

42. Trouviez-vous plaisir à faire du modelage en glaise ou en plasticine?

43. Vous souvenez-vous de ce qui primait dans votre plaisir de faire du modelage?

- tripatouiller la glaise.

44. - la frapper ou la battre.

45. - l'amincir en l'écrasant.

46. - la mouiller pour la rendre visqueuse.

47. Préfériez-vous la glaise lorsqu'elle était ferme ou molle? Molle:

48. Ferme:

49. Préfériez vous: - faire quelque chose avec.

50. - jouer avec pour la sensation

51. ou - avez-vous évité l'expérience.

52. Lorsque vous étiez enfant, étiez-vous particulièrement sensible:

- aux substances fluides.

53. - aux substances qui se mélangent bien ensemble.

54. - aux substances dures et texturées.

55. Préfériez-vous certaines nourritures à cause de leur couleur?

56. Avez-vous rejeté certaines nourritures à cause de leur couleur?

57. Préfériez-vous certaines nourritures à cause de leur texture?

58. Vous rappelez-vous certaines expériences de votre jeunesse où vous avez:

- fabriqué des objets: i) céramique, bijoux, etc.
  ii) peintures ou collages, etc.

59. - reconstruit des choses: i) en les réparant
  ii) en les réarrangeant ou modifiant

60. - construit des choses: i) avec un matériau qui vous était particulièrement précieux.
  ii) avec un outil qui vous était particulièrement précieux.

61. - autre

62. Comment vos parents ont-ils réagi devant vos peintures:

- ils ne les ont pas tellement remarquées.

63. - vous louangeaient, pour être gentils.

64. - étaient portés, plutôt, à vous réprimander.

65. - vous louangeaient, chaleureusement et sincèrement.

66. - vous ne vous souvenez pas.

67. Comment vos parents ont-ils réagi devant les sculptures et constructions que vous faisiez?

- ils ne les ont pas tellement remarquées.

68. - vous louangeaient, pour être gentils.

69. - étaient plutôt porté à vous réprimander

70. - vous louangeaient, chaleureusement et sincèrement.

71. - vous ne vous souvenez pas.

QUESTIONNAIRE A PROPOSITION VII

1. Préférez-vous avoir un salon à plan ouvert?
2. Ou, un salon à plan fermé?
3. Qu'est-ce qui vous semblerait le plus agréable?
   - si vous pouviez avoir une maison située en haut d'une montagne, ayant une belle vue?
4. - si vous pouviez avoir une maison située dans une vallée, avec une vue de montagnes autour?
5. Quand vous entrez dans une pièce inconnue, sentez-vous:
   - les plans de l'espace, l'ambiance de cette pièce?
6. - ou, concentrez-vous votre regard sur les objets ou couleurs dans cette pièce?
7. Avez-vous déjà observé que votre regard tend prioritairement vers:
   - la qualité spatiale d'un environnement (l'aspect panoramique)
8. - ou, concentrez-vous votre regard sur les objets à l'intérieur d'un espace.
9. Comment vous sentez-vous dans le mode où nous vivons, surtout dans la ville? (les sons, la publicité, etc.)
   - Etes-vous neutre devant ce que vous voyez?
10. - Cela vous touche agréablement?
11. - Cela ne vous touche pas agréablement?
12. J'ai le sentiment que les peintres ont un type à champ ouvert, alors que les sculpteurs auraient plutôt un type de vision convergente, ayant tendance à se concentrer sur un noyau central.
    - Etes-vous d'accord?
    - Comment rattachez-vous votre vision aux termes de cette proposition?

APPENDIX B

BIOGRAPHICAL INVENTORY

SCORE SHEET

Subject's number:

age:

sex:

Occupation:

Painter:

Sculptor:

Other:

Origins:

6. (subject) 10. (father) 14. (mother) 18.

7. 11. 15. 19.

8. 12. 16. 20.

9. 13. 17. 21.

Parents' occupations:

22. (father) 23. (mother)

PAGE 2.

Family situation:

24. (number) 26. (occupations) 28. (relations)

25. 27. 29.

Economic situation:

30. Bilingual: Cultural: Professional:

31. 35: 37: 41:

32. 36: 38: 42:

33. 39: 43:

34. 40: 44:

PAGE 3.

45. dessiner seule, age:

(yes) (no) 50. decision made, age:

(high) (med.) (low)

46. 47. 51. 52. 53.

48. 49. 54. 55. 56.

(depressive)

57. (yes) 58. (no)

59. 60.

PAGE 4

self-confident:

child: 61.(yes) 62.(no)

now: 63. 64.

aggressive child:

65.(yes) 66.(no)

manic moods:

67.(yes) 68.(no)

69. 70.

relation-classmates:

71. (close)

72. (friendly)

73. (indifferent)

number of friends:

74.(many)

75.(a few)

76.(only one)

77.(no one)

school grades:

78. (ex.)

79. (medium)

80. (poor)

PAGE: 5

interest in school:

81. (stimul)

82. (average)

83. (bored)

involvement:

84. (invol)

85. (not invol)

areas excelled:

86.(art)

87.(other)

home background:

88. (liberal)

89. (strict)

90. (-)

91.(closer to father)

92.(closer to mother)

communication: mother : father

94. 94.

95. 95.

96. 96.

97. 97.

98. 98.

99. 99.

100. 100.

101. 101.

102. 102.

PAGE: 6

103.(marriage)yes
104.(no)
105.(tensions)yes
106.(no)

attitudes toward life:

107.(romantic)
108.(practical)
109.(eccentric)
110.(frugal)
111.(generous)

your heros:

112.(contemp.)
113.(historic)

friends-gang:

114.(yes)
115.(no)
116.(loner)

childhood,happy:

117.(yes)
118.(no)

yes:

friends,sex:

119.(male)
120.(female)

free time spent:

121.(read)
122.(construct)
123.(write)
124.(art)
125.other:
126.(daydream)yes:
127.6yrs.
128.4yrs.
129.2 yrs or earlier
5yrs.
3yrs.

PAGE: 7

friendship:

131.(own sex)
132.(opposite)
133.(closeness)
134.(not close)

physical appearance:

135.(sensitive)
136.(ignore)
137.(partner)yes
138.(no)
139.(ideas)yes
140.(no)
141.(faces)yes
142.(no)
143(understood)yes
144.(no)

mystical exp:

145.(never)
146.(seldom)
147.(occasionally)
148.(frequently)

PAGE: 8

149.
150.
151.
152.
153.
154.
155.
156.
157.
158.
159.
160.

PROPOSITION V SCORE SHEET

Subject's Number:

1. stimulations - impressions - motivations - identification

2. The significance of painting over sculpture:

of sculpture over painting:

3. age:

4. prejudices: historical/comtemporary or principles or doctrines, or techniques.

5. 6. 7. 8. 9. 10. 11. 12. 13. 14.

PAGE:2

15. 16. 17. 18.

19. themes

20. 21. 22.

	yes:	no:
23. - in your life		
24. - in your work		

	yes:	no:
25. - in your life		
26. - in your work		

27. yes:

28. no:

	yes:	no:
29. - in your life		
30. - in your work		

31. yes:(only)

PROPOSITION V SCORE SHEET (con't)

PAGE 3

32. 33. or other

34. yes: 35. no:

36. yes: 37. no:

38. yes: 39. no:

40. yes: 41. no:

42. yes: 43. no:

44. 45. 46.

47. yes 48. yes:

PAGE 4

49. yes: 50. no:

51. 52. 53. 54. specify:

55. 56. 57. 58.

59. yes: 60. yes:

61. yes: 62. yes:

PROPOSITION VI. SCORE SHEET

Subject's #

1.(yes) 2.(yes)

3.(colour) 4.(form)

5.(texture) 6.(pattern) 7.(weight) 8.(match)

room: car:

9.(colours) 10.(objects) 11.(colour) 12.(model)

colors in home:

13.(primary) 14.(secondary) 15.(neutral)

sofa:

16.(colour) 17.(comfort) 18.(shape) 19.(style)

everyday outfit:

20.(colour) 21.(comfort) 22.(style) 23.(feel)

PAGE : 2

dress-up outfit:

24.(colour) 25.(fit) 26.(style) 27.(feel)

prized possessions:

28.

29.

30. Do you change preferences often?

CHILDHOOD/EXP:

31.(cloths) 32.(colour) 33.(object)

painting for:

34.(colours) 35.(sensation) 36.(mixing) 37.(images) 38.(fant.)

40.(mud) 41.(feces) 42.(clay)

clay for:

43.(squish) 44.(banging) 45.(spread) 46.(viscose)

clay consistancy:

47. (goole) 48.(firm)

prefer to

49.(make) 50.(feel) 51.(avoid)

PAGE: 3 (childhood con't)

substances:

52.(fluid) 53.(mix) 54.(hard & texture)

foods:

55.(pref.col.) 56.(ref.col.) 57.(prefer texture)

important experiences: (next page)

PROP. VI SCORE SHEET (con't)

important childhood experiences:

58.(made things,objects)

59.(re-constructions)

60.(construction)

a) special material)

b) special tool)

61.(other)

parent's reaction to painting:

62. 63. 64. 65. 66.

parent's reaction to sculpture:

67. 68. 69. 70. 71.

PROPOSITION VII SCORE SHEET

Subjects Number:

1. yes: no:
2. yes: no:
3. yes: no:
4. yes: no:
5. yes: no:
6. yes: no:
7. yes: no:
8. yes: no:
9. yes 10. yes: 11. yes:
12. how many? * quality of description:
13. how many? * quality of description:
14. yes: elaborate:

* eliminated

COMPILATION SHEET

Biographical Inventory

N.B. # represents painters
* represents sculptors.

ORIGINS

6. #15 *12	10. #12 *10	14. #13 *11	18. #15 *14
7.	11.	15.	19.
8. #0 *2	12. #2 *4	16. #2 *3	20. #0 *2
9. #0 *1	13. #1 *1	17. #) *1	21.

22. PARENT'S OCCUPATIONS

	Father	Mother	
Professional	#6 *7	#1 *1	
Exec. (self-employed)	#4 *6	#2	
Unskilled Labour	#5 *2	*1	DF = 2
Housewife		#12 *13	CHISQ=1.76

24. FAMILY SITUATION

No. of Children in Family
only: #3 *0 2. #1 *2 3. #2 *4 4. #2 *1 5. #1 *2 6. #4 *1
more: #10,9, *14, 10, 11, 8

25. Position in your Family

1. #6 *4 2. #1 *3 3. #0 *5 4. #4 *0 5. #0 *0 6. #1 *1
more: #9,7, *13, 12, 8

26. Occupations	Brother's	Sister's
Professional	#13 *15	#3 *5
Executive	# 5 *13	#5 *5
Labour	# 3 * 6	
Housewife		#4 *21

30. Economic Situation		Bilingual		Cultural Intro.	
30.	#1 *1	35. yes	#13 *10	37. yes	# 5 *7
31.	#3 *1	36. no	#2 *5	38. no	#10 *8
32.	#6 *3			39. yes	# 5 *7
33.	#5 *8			40. no	#10 *8
34.	#0 *2				

Parents' Attitude Toward Profession

	Mother				Father			
41.	yes	#11 *13	DF=1		43. #5 *10		DF=1	
42.	no	# 2 * 1	CHISQ=.46		44. #7 * 2		CHISQ=4.44	

45. Started to Draw Alone

Age:			
	Under 5 years	#3	*3
	5 to 10	#5	*4
	11 to 15	#5	*5
	16 to 20	#2	*2
	Over 20	#0	*1

Talent

46.	yes	#12 *12	DF=1		47.	no	#2	*1	DF=1
48.	yes	#10 *10	CHISQ=0.00		49.	no	#4	*3	CHISQ=.08

50. Decision to Become an Artist

Age:			
	Under 10 years	#1	*1
	10 to 15 years	#6	*1
	16 to 20 years	#6	*7
	21 to 25 years	#1	*4
	Over 25 years	#1	*1

CURIOSITY

	High				Med.			Low	
51.	child	#7 *10	DF=1	52.	#6 *3	DF=1	53.	#2	*1
54.	now	#13 *12	CHISQ=.48	55.	#2 *3	CHISQ=.93	56.	#0	*0

	DEPRESSIVE	(yes)		(no)	
57.	child	#6	*9	58. #8	*6
59.	now	#9	*8	60. #8	*7

	SELF-CONFIDENT	(yes)		(no)	
61.	child	#6	*7 DF=1	62. #8	*8 DF=1
63.	now	#9	*13 CHISQ=.09	64. #4	*1 CHISQ=1.40

AGRESSIVE

65.	yes	#6	*9
66.	no	#9	*6

	MANIC MOODS	(yes)		(no)	
67.	child	#10	*8	68. #6	*5
69.	now	#10	*9	70. #6	*4

Relationship With Classmates:

71.	Close:	#3	*1	
72.	Friendly:	#8	*7	DF=2
73.	Indifferent:	#1	*7	CHISQ=.65

Number of Friends:

74.	Many:	#2	*1	
75.	A few:	#13	*10	DF=3
76.	Only one:	#1	*4	CHISQ=3.52
77.	No one:	#0	*1	

School Grades:

78.	Excellent:	#8	*9	
79.	Medium:	#6	*4	DF=2
80.	Poor:	#4	*3	CHISQ=.49

Interest in School:

81.	Stimulated:	#3	*7	
82.	Average:	#3	*6	DF=2
83.	Bored:	#9	*2	CHISQ=7.05

Involvement in Extra-Activities:

84.	Yes:	#6	*6	
85.	No:	#9	*8	

Areas Excelled:

86.	Art:	#9	*12	
87.	Other:	#0	*1	
	sports:	#2	*4	
	literat:	#5	*1	
	math:	#5	*4	
	theater:	#3	*0	
	music:	#1	*2	
	nat. sc:	#1	*2	

Home Climate:

88. Liberal: #8 *8
89. Conformist: #3 *4 DF=2
90. Nothing: #5 *4 CHISQ=.25

91. Closer to Father: #4 *4
92. Closer to Mother: #9 *9

Communication:

	Mother:	Father:	
94.	#7 *6	#2 *4	DF=1; CHISQ=.69
95.	#2 *2	#5 *5	
96.	#2 *4	#6 *2	
97.	#6 *8	#5 *8	DF=1; CHISQ=.05
98.	#4 *2	#4 *2	
99.	#2 *3	#4 *3	
100.	#5 *7	#5 *6	DF=1; CHISQ=.03
101.	#0 *3	#1 *3	
102.	#0 *0	#0 *0	

103. Marriage good: #12 *8
104. Marriage unhappy: #3 *6
105. Tensions: #10 *10
106. No tensions: #5 *5

Attitude Toward Life:

107. Romantic: #10 *8
108. Practical: #6 *7
109. Eccentric: #3 *1 DF=4
110. Frugal: #3 *5 CHISQ=1.82
111. Generous: #6 *5

Heros:

112. Contemporary: #8 *7
Historical: #0 *4
Artists: #8 *8
Poets: #4 *5
Fiction: #6 *4
Comics: #4 *0

Friends (gang):

114. Yes: #8 *4
115. No: #6 *10 DF=2
116. Loner: #8 *10 CHISQ=2.47

Happy Childhood:

117. Yes: #10 *9 DF=1
118. No: #5 *8 CHISQ=.62

Free Time:

121. Read: #11 *7
122. Constructions: #3 *11
123. Write: #3 *2
124. Art: #12 *10
125. Other: sports #4 *4 theatre: #3 *0 DF=9 CHISQ=10.00
126. Daydream: #10 *11
127. 6 Years: #1 *2 5 years: #4 *1 4 years: #2 *2
3 years: #3 *5 2 years: #5 *5

Friendship:

131. Own sex: #9 *11
132. Opposite sex: #8 *6

Physical Contact:

133. Close: #10 *10
134. Not close: #5 *5

Physical Appearance:

135. Sensitive: #11 *7 136. #4 *8
137. Partner: #10 *8 138. #5 *7
139. Ideas: #15 *9 140. #1 *7
141. Feces: #14 *13 142. #1 *2
143. Understood: #15 *11 144. #0 *4

Mystical Experiences:

145. #1 *1 149. #1 *2 153. #3 *5 157. #0 *2
146. #4 *4 150. #1 *3 154. #7 *2 158. #7 *2
147. #6 *7 151. #4 *5 155. #4 *6 159. #1 *4
148. #4 *4 152. #9 *5 156. #1 *2 160. #7 *7

COMPILATION SHEET

Proposition V

N.B. # represents painters
* represents sculptors

3. emergence of continuity of images:

under 20	20-25	26-30	31-35	36 plus
#4	#6	#1	#2	#2
*0	*3	*4	*2	*4

4. Prejudices:

Pleasure of Artistic Activity:

5.	fantasy gratification:	#8	*2
6.	adventure:	#10	*9
7.	physical:	#8	*7
8.	mental stimulation:	#15	*10
9.	conquest:	#8	*6
10.	superiority:	#4	*2
11.	communication:	#9	*9
12.	feeling of belonging:	#6	*3
13.	mystical feelings:	#7	*8
14.	other:		

DF=8
CHISQ=4.07

Stimulation:

15.	tactile:	#4	*10
16.	visual:	#14	*11
17.	olfactory:	#5	*1
18.	kinesthetic	#2	*2

19. Themes:

	mostly unconscious:	#7	*3
20.	(getting into):	#7	#5
21.	(coming forth):	#10	*8
22.	other:		

Decisions Quickly:

		(yes)		(no)	
23.	in life:	#9	*9	#7	*6
24.	in work:	#7	*9	#9	*6

Trust Decisions:

	(yes)	(no)
25. in life:	#10 *14	#5 *1
26. in work:	#11 *14	#4 *2

Anxious Compulsive:

27. yes: #7 *7
28. no: #8. *7.

Time to Function:

	(yes.)	(no.)
29. in your life:	#10 *7	#5 *9
30. in your work:	#10 *9	#5 *7

Can Function Under Pressure:

31. yes: #10 *10

Creative Capacity:

32. (fluid rhythm,ease): #8 *7
33. (controlled,difficult): #8 *6

Destruction:

		(need it)
34. yes:	#6 *3	36. #6 *2
35. no:	#9 *6	37. #9 *12

Daydream Alot:

38. yes: #10 *8.
39. no: #4 *6

DF=1
CHISQ=.45

40. daydream constructive: #11 *10
41. not constructive: #4 *4
42. dreams relate to work: #7 *5
43. not relate to work: #6 *7

Qualities First Discovered:

44. Creative Imagination: #4 *6
45. Sensitive Artist: #6 *3
46. Express Yourself: #5 *6

47. Art form satisfies you: #9 *12
48. Or, do you wish to go beyond it: #6 *2

DF=1
CHISQ=2.40

Need Physical Exhileration:

49. yes: #11 *11 DF=1
50. no: #4 *3 CHISQ=.11

Ideas to Work:

51. intuitively: #11 *8
52. intellectually: #3 *3 DF=2
53. inspirationally: #5 *6 CHISQ=.45
54. other:

Are You:

55. rational, logical: #5 *7
56. intuitive: #13 *7 DF=3
57. sensate: #3 *4 CHISQ=2.08
58. imaginative: #2 *2

Work In:

59. Organized, controlled manner: (idea in mind): yes: #6 *7
60. Spontaneously: #9 *6 DF=3
61. Work & Destroy: #5 *2 CHISQ=1.54
62. Building up: #11 *11

COMPILATION SHEET
Proposition VI

N.B. # represents painters
* represents sculptors

Appraising an Object:

1. To Look: (yes)	#7	*3	DF=1
2. To Touch: (yes)	#9	*12	CHISQ=2.0

Primary Importance of Objects:

3. The Colour:	#10	*7
4. The Form:	#10	*15

Selecting a Fabric:

5. Texture:	#10	*8	
6. Pattern:	#6	*5	DF=3
7. Weight:	#1	*5	CHISQ=6.44
8. Match:	#0	*4	

Prefered Room:

9. Colours:	#10	*4
10. Objects:	#8	*12

Predominant Colours in Home:

13. Primary:	#5	*3
14. Secondary:	#2	*3
15. Neutral:	#9	*9

Armchair or Sofa:

16. Colour:	#6	*2
17. Comfort:	#6	*4
18. Shape:	#9	*6
19. Style:	#2	*3

Everyday Cloths:

20. Colour: #13 *1
21. Comfort: #14 *10
22. Style: #0 *4
23. Feel: #1 *3

DF=3
CHISQ=14.46

Dress-up Cloths:

24. Colour: #5 *2
25. Fit: #9 *5
26. Style: #5 *8
27. Feel: #2 *5

28. Prized Possession:

My Work: #6 *3
Objects: #9 *0
Tools: #0 *6
Antiques,furniture: *1
Antiques,art works: #6 *1
Papers: *2
Photographs: *1

31. Childhood Experiences:

Cloths (colours): red: #1 *3 white: #0 *2
pink: #1 *0 green: #1 *1 yellow: #1 *0
browb: #1 *0 blue: #4 *3

32. Favourite colour: red: #2 blue:#4

Enjoyed Painting(as a child)for:

34. Colours: #3 *1
35. Spreading Paint: #1 *1
36. Mixing Colours: #3 *2
37. Making Images: #10 *8
38. Fantasying Gestures: #0 *1
40. Enjoyed Mud (yes): #8 *5
41. Feces (yes): #1 *0
42. Clay,Plasticine (yes): #7 *10

Working Clay:

43. Squishing: #4 *8
44. Banging: #0 *1
45. Spreading: #1 *2
46. Watering: #1 *1
47. Prefer gooie clay: #1 *2
48. Prefer firm clay: #4 *7
49. Prefer to make things: #5 *7
50. Prefer to play with it: #1 *3
51. Prefer to avoid it: #0 *0
52. Fluid substances: #2 *1
53. Mixing substances: #5 *2
54. Hard materials: #4 *11

- DF=2
- CHISQ=4.59

55. Prefer food,colour: #6 *4
56. Refuse food,colour: #1 *5
57. Prefer food,texture: #11 *10

Making Things:

58. Objects: #4 *5
    Paintings: #13 *5

Reconstructing Things:

59. Repair: #3 *2
    Rearrang: #1 *3

Construction:

60. Build around or on: #4 *10
    Special tool or material: #2 *7

Parents' Reaction to Paintings: - Sculptures:

62. No particular notice: #1 *3 — 67. #3 *1
63. Praised to be nice: #2 *1 — 68. #0 *2
64. Reprimanded: #0 *0 — 69. #1 *1
65. Sincere praise: #11 *9 — 70. #5 *9
66. Don't remember: #0 *0 — 71. #1 *0

DF=4
CHISQ=4.83

COMPILATION SHEET

Proposition VII

N.B. # represents painters
* represents sculptors

1.	Living room, open space (yes):	#9	*10	DF=1
2.	Living room, closed space (yes):	#4	*4	CHISQ=.02
3.	Top of the hill (yes):	#9	*11	DF=1
4.	Valley (yes):	#4	*3	CHISQ=.31
5.	Room, space relationships (yes):	#9	*10	DF=1
6.	Room, focus on objects (yes):	#5	*4	CHISQ=.16
7.	Quality of space:	#11	*11	DF=1
8.	Objects within space:	#5	*4	CHISQ=.08
9.	Neutral to the city:	#1	*2	
10.	City pleasantly:	#6	*4	
11.	City unpleasantly:	#6	*9	

TABLE 3

Comparison Scores of Painters with Normal Population on Personality Traits

Variable	Groups	Means	T-Value*	P Level
Extroversion	Painters	9.4	-2.14	.05
	Normals**	12.0		
Neurosis	Painters	11.6	2.03	.06
	Normals	9.0		
Dominance	Painters	44.5	-2.01	.06
	Normals	50.0		
Femininity	Painters	57.4	3.09	.008
	Normals	50.0		

* T-Test

** Normals = Normal population according to Eysenck's Table of Norms and C.P.I. standard score of 50

TABLE 4

Comparison Scores of Sculptors with Normal Population on Personality Traits

Variable	Groups	Means	T-Value	P Level
Extroversion	Sculptors	9.9	-1.77	.09
	Normals**	12.0		
Neurosis	Sculptors	8.9	- .06	.95
	Normals	9.0		
Dominance	Sculptors	49.2	- .35	.73
	Normals	50.0		
Femininity	Sculptors	53.9	1.55	.14
	Normals	50.0		

* T-Test

** Normals = Normal population according to Eysenck's Table of Norms and C.P.I. standard score of 50

TABLE 5 - INDIVIDUAL SCORES OF PAINTERS FOR PSYCHOLOGICAL TESTINGS

Subject's Number Males	Age	Extroversion Raw Score	Neurosis Raw Score	Lie Scale Raw Score	Dominance Standard Score	Femininity Standard Score
2	38	6	2	4	44	78
3	57	4	15	5	28	57
4	35	13	11	0	58	55
5	50	13	16	0	65	51
9	46	0	13	2	30	55
10	31	19	10	2	50	49
15	45	12	5	9	44	60
12	34	7	12	3	39	55
16	50	9	20	0	39	66
19	43	11	8	3	60	44
Subject's (con't as above) Females						
1	44	14	19	1	33	59
6	51	12	8	2	45	62
8	45	8	7	5	45	50
11	44	6	14	3	43	48
13	47	7	15	3	45	73
Mean Score (normal population)		12.07	9.06	-	50	50
Standard		4.37	4.78	-	10	10

Psychological Inventory Test by Eysenck (Form A) for:
Extroversion, Neuroticism, and Lie Scale

California Psychological Inventory for:
Dominance and Feminity

TABLE 6 - INDIVIDUAL SCORES OF SCULPTORS FOR PSYCHOLOGICAL TESTING

Subject's Number Males	Age	Extroversion Raw Score	Neurosis Raw Score	Lie Scale Raw Score	Dominance Standard Score	Femininity Standard Score
2	38	12	3	5	58	42
3	59	3	6	8	40	68
4	40	8	13	3	56	65
5	53	8	15	4	45	57
9	43	15	8	4	59	47
12	34	18	8	2	52	44
15	44	1	18	4	35	75
16	47	11	11	2	58	60
20	34	12	9	8	60	55
1	44	9	12	3	45	55
Subject's Females	(con't as above)					
7	64	11	7	4	53	52
13	38	16	8	3	37	41
6	47	10	5	6	55	48
11	43	8	1	6	49	53
8	31	7	10	6	36	47
Mean Score (normal population)		12.07	9.06	-	50	50
Standard Deviation		4.37	4.78	-	10	10

Psychological Inventory Test by Eysenck (Form A) for:
Extroversion, Neuroticism, and Lie Scale

California Psychological Inventory for:
Dominance and Femininity

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